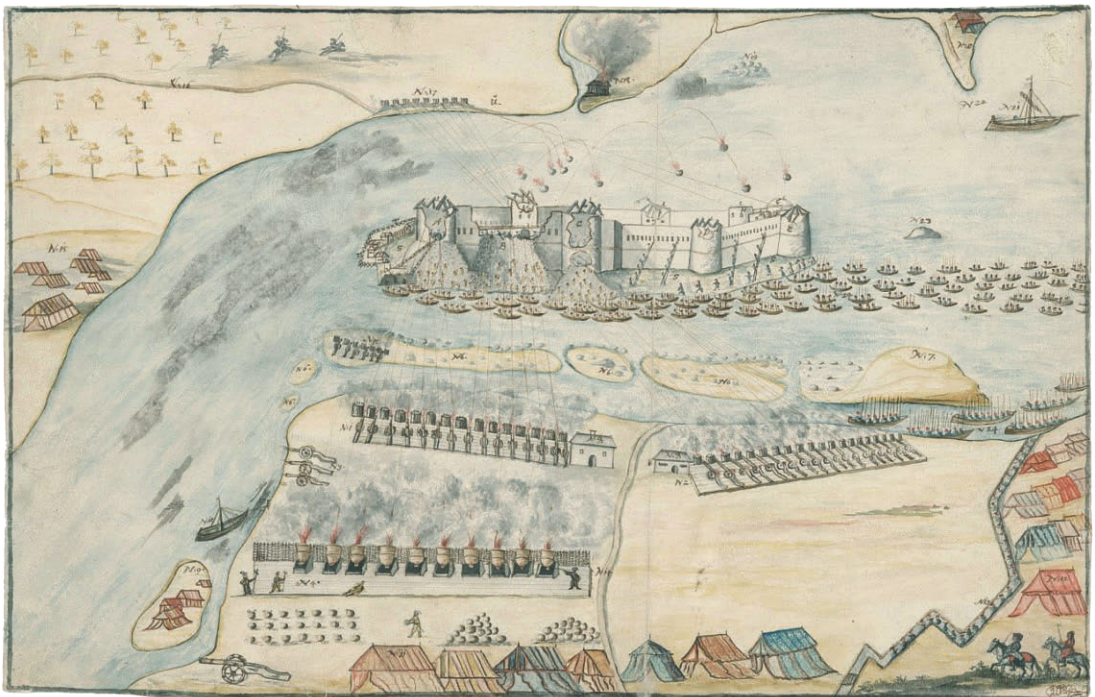


Ulf Sundberg

# Swedish defensive fortress warfare in the Great Northern War 1702-1710





## Ulf Sundberg

Born 1956

Masters degree in history, Åbo Akademi University, 2014.

Cover image: The siege of Nöteborg 1702. Courtesy of the Swedish National Archives.

Åbo Akademis förlag | Åbo Akademi University Press  
Tavastgatan 13, FI-20500 Åbo, Finland  
Phone: +358 (0) 2 215 3478  
E-mail: [forlaget@abo.fi](mailto:forlaget@abo.fi)

Sales and distribution:  
Åbo Akademis bibliotek | Åbo Akademi University Library  
Domkyrkogatan 2-4, FI-20500 Åbo, Finland  
Phone: +358 (0) 2 215 4190  
E-mail: [publikationer@abo.fi](mailto:publikationer@abo.fi)

SWEDISH DEFENSIVE FORTRESS WARFARE IN  
THE GREAT NORTHERN WAR 1702-1710







Swedish defensive fortress warfare in  
the Great Northern War

1702-1710

Ulf Sundberg

Åbo Akademis förlag | Åbo Akademi University Press  
Åbo, Finland, 2018

### **CIP Cataloguing in Publication**

**Sundberg, Ulf.**

Swedish defensive fortress warfare in  
the Great Northern War 1702-1710 /  
Ulf Sundberg. - Åbo : Åbo Akademi  
University Press, 2018.

Diss.: Åbo Akademi University.

ISBN 978-951-765-897-3

ISBN 978-951-765-897-3  
ISBN 978-951-765-898-0 (digital)  
Painosalama Oy  
Åbo 2018

# TABLE OF CONTENTS

<b>TRANSLATIONS.....</b>	<b>xii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>xiv</b>
<b>FOREWORD.....</b>	<b>xvi</b>
<b>1. INTRODUCTION .....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Purpose .....	3
1.3 Method.....	4
1.4 Delimitations.....	7
1.5 Earlier research .....	8
1.6 Sources .....	18
1.7 Note On Dates.....	25
<b>2. THE SWEDISH EMPIRE .....</b>	<b>26</b>
2.1 Introduction .....	26
2.2 The creation of the Swedish empire.....	26
2.3 Command organization.....	31
2.4 The defense of the Swedish empire .....	33
2.5 The Great Northern War .....	43
2.6 Opinions on the fall of the Swedish Empire .....	53
<b>3. FORTRESS WARFARE.....</b>	<b>58</b>
3.1 Introduction .....	58
3.2 Fortresses .....	61
Introduction .....	61
The purpose of a fortress.....	61
Fortress construction .....	64
Fortress location .....	74
A structure for fortress location .....	76
Opposing forces.....	86
3.3 Resolving siege battles.....	89

Introduction .....	89
Examples of siege army tactics.....	89
Structures for siege army tactics .....	93
Resolutions and siege countertactics .....	102
A note on siege duration.....	109
Summary.....	109
<b>3.4 THREE LONG SIEGES IN EARLY MODERN TIMES .....</b>	<b>110</b>
INTRODUCTION .....	110
Candia 1648–1669 .....	111
Gibraltar 1779–1783.....	116
Cadiz 1810–1812 .....	121
Conclusions .....	127
<b>4. SIEGES 1702–1710 .....</b>	<b>129</b>
4.1 Introduction .....	129
4.2 Menzen 1702 .....	132
4.3 Marienburg 1702 .....	138
4.4 Nöteborg 1702.....	143
4.5 Nyenskans 1703 .....	151
4.6 Jama 1703 .....	157
4.7 Koprivje 1703 .....	163
4.8 Narva and Ivangorod 1704 .....	166
Introduction .....	166
Prior to the siege .....	174
The siege .....	180
After the siege .....	205
Narva and Ivangorod - conclusions .....	207
4.9 Dorpat 1704.....	209
4.10 Viborg 1706 .....	219
4.11 Riga 1709–1710 .....	229
Introduction .....	229
Prior to the siege .....	237
The siege .....	240
After the siege .....	264
Riga – conclusion .....	264

4.12	Neumünde 1710 .....	266
4.13	Pernau 1710 .....	271
4.14	Arensburg 1710.....	277
4.15	Reval 1710 .....	285
4.16	Viborg 1710 .....	297
	Introduction .....	297
	Prior to the siege .....	302
	The siege .....	308
	After the siege .....	327
	Viborg - conclusions .....	329
4.17	Kexholm 1710 .....	330
4.18	Landskrona 1709–1710 .....	338
4.19	Malmö 1709–1710 .....	347
4.20	Karlshamn’s redoubt 1710 .....	354
4.21	Conclusion.....	360
<b>5.</b>	<b>CONCLUSIONS.....</b>	<b>361</b>
5.1	Introduction .....	361
5.2	The Swedish fortification system.....	361
5.3	Flaws and the loss of men, materiel and land .....	368
5.4	Why were the flaws built into the fortification system? .....	373
5.5	Conclusion .....	375
	<b>EPILOGUE.....</b>	<b>384</b>
	<b>SWEDISH SUMMARY – SAMMANFATTNING.....</b>	<b>386</b>
	<b>BIBLIOGRAPHY.....</b>	<b>393</b>

# TABLES

Table 2.1.	The Strength of the Swedish and Danish navies in 1700.....	36
Table 2.2.	The Swedish fortification system in 1695.....	38
Table 3.1	A basic structure for accessibility.....	77
Table 3.2	Structure for siege army tactics suggested by J. Ostwald.....	93
Table 3.3	A suggested structure for siege army tactics.....	94
Table 3.4	A Vauban siege.....	100
Table 3.5	Factors contributing to loss of fortress.....	110
Table 3.6	Candia accessibility.....	115
Table 3.7	Gibraltar accessibility.....	120
Table 3.8	Cadiz accessibility.....	126
Table 3.9	Fortress properties.....	127
Table 3.10	Accessibilities.....	127
Table 4.1	The garrisons in Livonia in 1699.....	131
Table 4.2	Menzen accessibility.....	137
Table 4.3	Marienburg accessibility.....	142
Table 4.4	Nöteborg accessibility.....	150
Table 4.5	Nyenskans accessibility.....	156
Table 4.6	Jama accessibility.....	162
Table 4.7	Koporie accessibility.....	165
Table 4.8	The Narva garrison in 1704.....	173
Table 4.9	The Army of Dorpat on April 30, 1704.....	178
Table 4.10	Narva and Ivangorod general accessibility.....	208
Table 4.11	Narva and Ivangorod local accessibility.....	208
Table 4.12	The Dorpat garrison on April 30, 1704.....	212
Table 4.13	Dorpat accessibility.....	218
Table 4.14	The Swedish Army in Finland in 1708.....	223
Table 4.15	Viborg accessibility.....	228
Table 4.16	Number of Council and Defense Commission minutes from the siege period.....	235
Table 4.17	The Riga garrison according to an anonymous writer of a diary.....	236
Table 4.18	Swedish ships involved in Riga support operations.....	263
Table 4.19	Riga accessibility.....	265
Table 4.20	Neumünde accessibility.....	270

Table 4.21	Pernau accessibility .....	276
Table 4.22	Arensburg accessibility .....	284
Table 4.23	The Reval garrison according to various sources.....	290
Table 4.24	Reinforcements from Sweden to going to Reval .....	292
Table 4.25	Strength of the Swedish Army units in Reval on September 30, 1710.....	295
Table 4.26	Reval accessibility.....	296
Table 4.27	The Finnish Field Army in 1710, with 1710 spending.....	303
Table 4.28	Lybecker's statement on armed forces April 18, 1710.....	304
Table 4.29	Viborg accessibility .....	329
Table 4.30	Kexholm accessibility .....	337
Table 4.31	The regional military commands in the Sweden of today in 1709.....	342
Table 4.32	The Danish Army in Skåne on November 10/20, 1710 .....	344
Table 4.33	Landskrona accessibility .....	347
Table 4.34	Malmö accessibility .....	353
Table 4.35	Karlshamn accessibility .....	359
Table 5.1	General access to Swedish fortresses defended 1702–1710 – Stockholm perspective .....	362
Table 5.2	Defender's local access to generally accessible Swedish fortresses defended in 1702–1710 .....	363
Table 5.3	General access to Swedish fortresses defended 1702–1710 – attacker's perspective .....	364
Table 5.4	General characteristics of Swedish fortresses defended in 1702–1710 .....	366
Table 5.5	Results of siege battles 1702–1710 regarding Swedish small fortifications .....	369
Table 5.6	Results of siege battles 1702–1710 regarding Swedish medium size fortifications .....	370
Table 5.7	Results of siege battles 1702–1710 regarding Swedish large fortifications .....	372
Table 5.8	Major consequences of a Swedish fortress lost .....	372

## MAPS AND PICTURES

Picture 1.1	Strugs.....	xiv
Picture 2.1	Swedish fortifications coming under siege in 1702–1710 .....	39
Picture 3.1	The main principles for the fortifications existing by 1700 .....	66
Picture 3.2	The defender’s access to a fortress.....	80
Picture 3.3	A fortress with a sail-in function and protected discharge places .....	85
Picture 3.4	Principles for the siege force approaching a fortification by trenches .....	91
Picture 3.5	The Vauban siege model.....	100
Picture 3.6	Candia (Heraclion) .....	112
Picture 3.7	Gibraltar .....	117
Picture 3.8	Cadiz.....	122
Picture 4.1	The manor house Cawalecht in Livonia.....	132
Picture 4.2	The location of the fortified Menzen (“Menzenhof”) .....	133
Picture 4.3	Marienburg from the northwest in 1661.....	138
Picture 4.4	The location of Marienburg.....	139
Picture 4.5	Nöteborg by the end of the siege.....	144
Picture 4.6	The location of Nöteborg .....	145
Picture 4.7	Nyenska .....	152
Picture 4.8	The location of Nyenskans .....	152
Picture 4.9	Jama.....	157
Picture 4.10	The locations of Jama and Koporie.....	159
Picture 4.11	Koporie.....	163
Picture 4.12	Narva and Ivangorod.....	167
Picture 4.13	The locations of Narva and Ivangorod.....	170
Picture 4.14	Dorpat.....	209
Picture 4.15	The location of Dorpat .....	211
Picture 4.16	The siege of Dorpat.....	216
Picture 4.17	Viborg in the seventeenth century .....	219
Picture 4.18	The location of Viborg.....	220
Picture 4.19	Viborg and the siege of 1706.....	226
Picture 4.20	Riga .....	230
Picture 4.21	The location of Riga.....	231
Picture 4.22	Neumünde .....	267



Picture 4.23 Pernau.....	272
Picture 4.24 The location of Pernau .....	273
Picture 4.25 Arensburg Castle .....	278
Picture 4.26 The location of Arensburg Castle.....	279
Picture 4.27 The geography around Ösel .....	280
Picture 4.28 The medieval western part of the Reval defenses .....	286
Picture 4.29 Reval and the Bay of Reval in 1710.....	288
Picture 4.30 Viborg in 1710.....	298
Picture 4.31 The siege of Kexholm .....	331
Picture 4.32 The location of Kexholm.....	332
Picture 4.33 Kexholm with a sail-in function.....	333
Picture 4.34 The Landskrona fortress.....	339
Picture 4.35 The theatre of operations in and around Skåne 1709 to 1710.	343
Picture 4.36 Malmö in 1580 .....	348
Picture 4.37 The Malmö fortifications in 1697 .....	350
Picture 4.38 Karlshamn .....	355

# TRANSLATIONS

In the references, various Swedish institutions are normally given by their Swedish names. “Kungl. Maj:t”, Riksrådet/Senaten”, “Defensionskommissionen” and “Excellenserna” are exceptions here.

SWEDISH	ENGLISH
Kungl. Maj:t (or K. M:t)	The King
Riksrådet/Senaten	The Council/The Senate
Defensionskommissionen	The Defense Commission
Ers Excellenser	Your Excellencies (In this study assumed to be the Council or the Defense Commission.)
Kanslikollegium	The Chancellery
Krigskollegium	The War College
Amiralitetskollegium	The Admiralty
Statskontoret	The State Office
Artilleridepartementet	The Artillery Office
Landshövding	Provincial governor
Generalguvernör	Governor general
Guvernör	Governor
Ståthållare	Lord lieutenant
Lodja	Strug

Below, months are given in English if, not part of a title or someone else’s reference. English and Swedish names for months translate as follows: January – januari, February – februari, March – mars, April – april, May – maj, June – juni, July – juli, August – augusti, September – september, October – oktober, November – november and December – december.

Regarding Swedish ship types, the term “frigate” is used when relevant, although the word is not found in Swedish sources of the time. The old Swedish navy rank of “scoutbynacht” has been translated to rear admiral.

Sources are rendered as originally spelled, with the exception that the old Swedish letter “ÿ” is replaced by an “ij” or a “y”.

Geographic names are given as in Swedish or as in the source used. Gothenburg (Göteborg) is the only exception. Note that Helsingfors is Helsinki in Finnish and Åbo is Turku.



**Picture 1.1** Small ships, called strugs, are frequently mentioned in the following text. The picture above shows Russian strugs. (Source: Otto Sjögren, *Karl XII och hans män: Livsbilder från vår sjunkande storhetstid* (Stockholm 1925), referring to G. de Veps, p. 181.).

## ACKNOWLEDGEMENTS

First, I want to thank my supervisors, Professor Lars Ericson Wolke at the Swedish Defence University [“Försvarshögskolan”] and Professor Nils Erik Villstrand at Åbo Akademi University [“Åbo Akademi”], for their guidance in my work. My discussions with them have kept the work moving, and their advice has been of the highest value.

Second, I want to thank the members of the research seminars at Åbo Akademi University. The seminars have been most productive, and after several of them, seemingly insurmountable problems have been solved.

Third, I want to thank the staff of the Swedish National Archives [“Riksarkivet”], the Swedish Military Archives [“Krigsarkivet”] and the Swedish Army Museum Library and Archives [“Armémuseums bibliotek och arkiv”] in Stockholm, Sweden. Their most helpful, efficient and pedagogic ways have been of great assistance in my work.

Fourth, I want to thank Brigadier Einar Lyth, who got me involved in Stephen L. Kling, Jr.’s work on the *Great Northern War Compendium* (Volumes One and Two, St. Louis, Missouri 2015), where I had the pleasure of writing the chapter on Swedish fortifications prior to the Great Northern War. My involvement in that project paved the way for several more contacts on the subject of fortification and the Great Northern War. An important milestone for me was a seminar in New Orleans in 2015, arranged by the Society for the Advancement of Scandinavian Studies, where some of the Swedish authors of the *Great Northern War Compendium* presented their chapters. A seminar then followed in Copenhagen the same year, arranged by the Royal Danish Defence College [“Forsvarsakademiet”] and the Swedish Defence University, where I met others interested in the Great Northern War. Doctor Magnus Perlestam at the Mid Sweden University [“Mittuniversitetet”] was instrumental in getting me to these seminars, for which I am most grateful. I also want to thank Doctor Margus Laidre for valuable comments on the original manuscript. I am also indebted to Ragnar Nurk, an Estonian doctoral student, for invaluable points regarding Swedish fortifications in Estonia and Latvia.

Ellen W. English and Stephen L. Kling, Jr. in St. Louis, Missouri, U. S. A. have offered advice on American English and edited the text. Jacob Truedson Demitz has also reviewed and improved the language. I am deeply indebted to all three of them for their efforts. I am also indebted to Anders Ehrnborn who

made a final proof-reading and Igors Scavlev who commented on Russian and Latvian spelling.

I would also like to thank the Swedish Council for Research in Military History [“Delegationen för militärhistorisk forskning”] for a generous contribution toward covering the cost of the production of this dissertation.

Finally, I want to thank my relatives and friends who have been generally supportive in my work. Bengt Göransson, Sweden, deserves special thanks for his invaluable comments and advocacy of structure. Göransson, as far as I know, has invented the concept “structured history writing”, which he felt applied to my work.

## FOREWORD

Work on this study began some fifteen years ago. When completing a book on Swedish wars from 1521 to 1814, I noticed that fortress warfare was little observed in literature at hand. I was especially puzzled by the slight attention paid to fortress warfare in the Great Northern War. I then decided to write a book on the struggle over Swedish fortresses in that conflict.

Having completed a first manuscript, I had noticed the alarming rate of Swedish losses of fortresses in the period 1702–1710, which should have been detrimental to the Swedish war effort. I also saw a pattern in Swedish defensive fortress warfare which had not yet been analyzed: the fortresses seemed to have been located in the wrong places for resupply operations to succeed. These observations made me think that they might be a foundation for a dissertation. I presented my idea to Professor Lars Ericson Wolke, at the Swedish Defence University [“Försvarshögskolan”], who believed that my observations could be developed into a dissertation. Professor Nils Erik Villstrand at Åbo Akademi University agreed with Lars Ericson Wolke, and I was admitted to Åbo Akademi University.

When I began working on the dissertation, I realized I needed structure and definitions, both for fortresses, as such, and for the process of fortress warfare. These were not readily available, although Doctor Jamel Ostwald had made important strides in the direction in his dissertation *Vauban Under Siege: Engineering Efficiency and Martial Vigor in the War of the Spanish Succession* (Leiden and Boston 2007). Discussing the need for improved structures and definitions with Nils Erik Villstrand, he pointed out that if the tool is not there, one has to create it. Thus, work on definitions and structure began, which was later to be used when analyzing the accounts of the individual sieges.

Nils Erik Villstrand also pointed out the importance of synthesizing the results and comparing them to other syntheses regarding the outcome of the Great Northern War. Thus, I decided to include an overview of existing explanations of the outcome of the conflict and compare them to findings on defensive fortress warfare in 1702–1710. This is the final result of my work.

Finally: why study the Great Northern War? The war changed history in several ways:

- It fundamentally changed Swedish society. From a conglomerate state with considerable resources, it became a national state with limited resources. The matter is little studied, but the change would have affected Swedish outlook and the way Swedes perceived themselves. Any Swede, Finn, Ingrian, Estonian or Latvian living after 1721 would, to some extent, be a mental product of the Swedish defeat in the Great Northern War.
- It fundamentally changed the history of Europe, more than the parallel War of the Spanish Succession, one could say. Russia began to expand in the northwest and the west instead of in the south, which was the track that Russia had been on prior to the Great Northern War.
- It fundamentally changed living conditions for millions of people, all generations included. For most of them, changes were for the worse. The high nobility came away as winners in territories conquered from Sweden; the burghers came out about even. The vast majority of the populations did not benefit from Russian rule.
- The conquest of the Baltic States provided Russia with human resources which would impact world history.

In my opinion, an event having consequences as far-reaching as the Great Northern War is worth studying, in trying to understand the development of our history.

Stockholm in November 2017

Ulf Sundberg





# 1. INTRODUCTION

## 1.1 INTRODUCTION

In August of 1721, Sweden and Russia concluded the last peace treaty of the Great Northern War. In the treaty, a substantial part of the Swedish Empire was ceded to Russia. Sweden lost Ingria, Estonia, Ösel, Livonia and the southeastern parts of Finland. In peace treaties prior to the treaty with Russia, Sweden had ceded the German province of Bremen-Verden to Hanover and parts of the German province of Pomerania to Brandenburg/Prussia. After more than twenty-two years of defensive warfare, which at times had been turned into offensives, Sweden had lost much of its most valuable territory. Some of the territory had been of the highest strategic value, since it had kept Russia barred from the shores of the Baltic Sea. The losses were the result of concerted attacks, first by Saxony, Denmark and Russia, with Brandenburg/Prussia and Hanover joining later. Poland-Lithuania also became involved in the war against Sweden. The Great Northern War became one of the more traumatic experiences in Swedish collective memory. The status as a power in Europe was lost, never to be recovered. Among disasters in Swedish early modern history, the Great Northern War compares only to the loss of Finland in 1808–1809.

The Great Northern War has not gone unnoticed by historians, quite the opposite. Literature on the war counts well over a thousand titles, and the stream of it goes on. Warfare can be studied on a number of levels, for example, foreign policy and diplomatic levels, levels of domestic politics and leadership, the economic level, the geographical level and the military level. The geographical level dictated the circumstances under which the other levels had to operate. Of the various levels, the military level tends to be decisive, once a war is a fact; other factors will act in support of, or as constraints to, the military level. The military level could be subdivided into the field-army level, the fortress level and the navy level.

A large number of works on the Great Northern War have focused on the leadership level, represented by Swedish King Karl XII and Russian Tsar Peter I. There has also been focus on the field-army level and, in particular, the Battle of Poltava in 1709, where Sweden lost some twenty-five to thirty percent of available army personnel. A trickle of everything published thereafter has dealt with the naval aspect of the war – very little has concerned fortress warfare.

In the difficult question of why the Great Northern War turned into a major defeat for Sweden, the Battle of Poltava often is presented as the main cause. In his work *Rysshärjningar och sjöslag* [Russian Ravaging and Naval Battles], Lars Ericson Wolke pointed out that research on the Great Northern War was focused on land battles<sup>1</sup>. He himself expounded on the importance of the naval aspects of the war. This study is an attempt to add fortifications to the aspects considered.

The scope of this study runs from 1702, a year when the Swedish Empire began to lose fortresses which could not be recovered, up to the latter part of 1710, when the major Swedish fortresses in the east had fallen. By the end of 1710, almost eleven years of war were left, and there was still fortress warfare after 1710. The decision to end the study in 1710 is based on the fact that by that year, Sweden has lost its core fortifications in Finland and the present Baltic States. The Swedish State, fighting for the last eleven years, by 1721 was thus strongly reduced. Sweden was no longer fighting a war with imperial resources, but with the resources of a minor power. The period of 1702 to 1710 also marks a time when Swedish fortresses had to fight without the support of a main army.

This study is structured in five chapters. The first chapter covers the purpose of the dissertation, the method used and delimitations. Here, earlier research and sources are also presented.

In the second chapter, the Swedish Empire, and the forces defending the empire, are introduced. The chapter also gives an overview of the Great Northern War and, finally, a presentation of more commonly expressed explanations as to why the conflict ended in Swedish defeat. That presentation is of central interest to the study, since the outcome of Swedish defensive fortress warfare during the conflict, one could dare to say, normally is never mentioned. Broader reasons for the outcome of the siege battles have not been expressly discussed either. The chapter has been written to contextualize Swedish defensive fortress warfare, and to give a reader not familiar with Swedish history an overview of the development of the Swedish Empire and the Great Northern War.

In the third chapter, a theoretical background of fortress warfare is outlined. Definitions are suggested; so is a structure for analyzing fortress warfare. The chapter ends with a description of three long sieges in world history. These descriptions serve as practical illustration of theoretical discussions earlier in

---

<sup>1</sup> Lars Ericson Wolke, *Sjöslag och rysshärjningar* (Stockholm 2012), pp. 14–17. (Further on, "Ericson Wolke, *Rysshärjningar*".)

the chapter, and as examples of what could have been achieved by successful defensive fortress warfare.

The fourth chapter, the empirical part in this study, deals with the Swedish defensive siege battles in the period of 1702 to 1710. The purpose of that chapter is to analyze the individual sieges, describe the sieges, establish the outcome of the various siege battles, and provide an idea of why each siege battle ended the way it did. The chapters were written to allow separate reading of each siege, which results in some repeated analyzes.

In the fifth and final chapter, the siege battles from chapter four are compared, using structures from chapter three. The results of the comparison are used to test the hypotheses stated in Chapter 1. The chapter ends with reflections on Swedish defensive warfare in the Great Northern War, and how the status of the fortification system at the beginning of the war might have affected the total outcome of the conflict.

In this study, the concept of “fortification system” is often used. It refers to the totality of all Swedish constructions which met the qualification of a “fortress”, set up in Chapter 3.2 Fortresses.

## 1.2 PURPOSE

The general aim of this dissertation is to shed new light on the Great Northern War, by analyzing the hitherto little studied Swedish defensive fortress warfare in the crucial years of 1702–1710.

A fortification system could be well suited to fulfill its purpose and, thus, contribute to a positive outcome for the defending side in a war. A fortification system could also be flawed and, thus, detrimental for the defending side to a war effort.

*A priori*, it could be assumed that a fortification system, fulfilling its purpose, consisted of fortresses which would not easily fall into enemy hands and, thus, would allow for their garrisons to successfully defend their fortresses for a long time. Fortresses would be of different types and have different properties, such as size and location. Some of these properties would provide for successful defense, some would be detrimental to defense. If a fortification system consisted of several fortresses with properties which were detrimental to long-term defense, it would be flawed. The question of which properties provided for a successful defense, and which were detrimental, is discussed in Chapter 3.

The standing of the Swedish fortification system in this respect has never been evaluated, and it is the first purpose of this study to do so. In an evaluation of the Swedish fortification system, the following hypothesis will be tested:

*“At the beginning of the Great Northern War, the Swedish fortification system suffered from serious inherent flaws.”*

If the hypothesis above cannot be rejected, a second hypothesis, concerning the consequences of flaws in the Swedish fortification system, will be tested:

*“The flaws in the Swedish fortification system contributed to a serious loss of men, materiel and land.”*

If the second hypothesis cannot be rejected, it seems likely that flaws in the Swedish fortification system were detrimental to the Swedish war effort and contributed to a negative outcome, for the defending side, of the conflict.

If the first hypothesis, regarding flaws in the Swedish fortification system, cannot be rejected, it also seems reasonable to ask: Why were the flaws there? An attempt to answer that question will be made.

The final part of the study aims to summarize Swedish defensive fortress warfare in 1702–1710 and provide thoughts on alternatives at hand, discuss the effect on the war in general of Swedish defensive fortress warfare, consider the possibility of the Swedish Empire surviving the Great Northern War, and look back on how the conclusions in this study might affect a discussion on reasons for the resulting fall of the Swedish Empire. At the end, the general picture of Swedish conduct in the Great Northern War, how history writing has presented the conflict, and the role of fortifications in war will be reflected upon.

The overall objective of this work is to add to the discussion on whether the outcome of the Great Northern War was obvious from the beginning, and then to suggest that there could be several angles of the Great Northern War which have not yet been studied.

### 1.3 METHOD

#### *Introduction*

The first methodological question would be to define the fortresses to be studied. Here, the choice has been to study all fortifications in the Swedish Empire

that were prepared for defense and came under siege during the period defined, 1702–1710. This concept calls for a definition of “siege”, as suggested in Chapter 3. Empirical research will reveal which fortifications came under siege during the period. Here, there were grey zones. The most complicated was that of fortifications which had been partly razed during the period of peace before the Great Northern War. An example of remnants is the remaining tower in the Swedish city of Helsingborg, manned by a handful of soldiers in 1709. Receiving news of an approaching Danish army, these men rapidly left Helsingborg. Another example is from 1710. Previously strong fortifications in the Swedish city of Kristianstad were, to a large extent, razed when the Danish army arrived, and entered without resistance. Several more examples could probably be found around medieval fortification in the Swedish Baltic Provinces. Here, the rule has been only to include instances where a Swedish garrison was present on the arrival of enemy forces. It can be noted that several of the strongest Swedish fortifications, such as Gothenburg for example, did not come under attack in the period studied.

#### *Evaluating inherent flaws*

Having established which fortifications to include, the next methodological matter would be to define “serious inherent flaws”. These would be flaws built into the fortress before the war, and which the garrison commander, or any other decision maker, could not remedy in the short run. The choice here is to define inherent flaws using a set of criteria established from seventeenth-century military theory (see Chapter 3).

The next step in the process would be to evaluate each of the fortifications studied, according to the established criteria. In the empirical part (see Chapter 4), each fortification is described according to the criteria set forth. The results are then compiled in a table that creates a foundation for testing whether or not the Swedish fortification system was flawed (see Chapter 5).

#### *Evaluating the consequences of inherent flaws*

The next hypothesis concerns the consequences of flaws in the fortification system. The individual fortress will, thus, be analyzed according to the outcome of the siege, in relation to the properties of the fortress as relative to the attacker’s tactics. This analysis will show which shortcomings made fortifications susceptible to various tactics. The result will support a test of the hypothesis that flaws in the fortification system contributed to a serious loss of men, materiel

and land. This analysis will require a structure for siege force tactics, to evaluate each siege battle. Such a structure is suggested in Chapter 3.3 Resolving siege warfare. The creation of that structure began with the research of Jamel Ostwald mentioned above.

*Why were the flaws there?*

If the first hypothesis cannot be rejected, and it thus can be assumed that there were serious inherent flaws in the Swedish fortification system at the beginning of the war, the question remains as to why they were there. An attempt to answer this question will be made using Swedish sources from the decision makers in the second half of the seventeenth century.

*Discussions on alternative fortification systems  
and consequences for war as a whole*

A summary of Swedish defensive fortress warfare in the Great Northern War is presented in Chapter 5, where the main points are:

- reflections on alternatives for the development of the Swedish prewar fortification system,
- the effect on the war in general,
- a discussion on the possibility of the Swedish Empire surviving the Great Northern War,
- a reflection on the consequences of this study, for an idea of the reasons for the fall of the Swedish Empire and
- a few final words.

These conclusions are derived from what I have observed in work on this study, and no particular analytical tools are used here.

*The hope for relief and the fall of fortresses*

This study is confronted with the problem of defining the cause of the fall of several fortresses. The assumption is that the success of some attackers' tactic led to the fortress commander's decision to surrender. This assumption is probably correct, but there is also the factor of hope for relief.

In several cases, a fortress could probably have held up for a few more days – or even longer – but the fortress commander still chose to surrender. The ultimate decision to surrender was then probably based on an assumption that no relief army was expected soon. The “hope for relief” factor is left out of the scenario here, since it would not have been decisive. No hope for relief could have compensated more than marginally for inherent flaws.

### *Alternative methods*

Swedish defensive fortress warfare in the Great Northern War is studied here from the perspective of the individual fortresses focused on, in order to reveal existing weaknesses in the system. An alternative way of approaching the fortress warfare problem would have been to study the total balance of Swedish forces during the period. Political leadership always has to balance its forces between field army forces, navy forces and fortress forces. The study could then instead have focused on that balance and analyzed the results. However, such a study necessitates knowledge of the defensive properties of the Swedish fortresses, which is what is presented here. Hence, my chosen approach seemed preferable, in a field which is little studied before.

A second alternative would have been to make this study an analysis of concentration of power for each of the actors. A study of concentration of power would reveal which share of the total available forces was employed at which fronts at any given time of the conflict. The side which most successfully concentrated its resources to critical locations would most often win an armed conflict.<sup>2</sup> Such a study would probably have been revealing, but the fortress factor – not normally considered in the calculation of concentration of power – would have to be included. Thus, in the end, that alternative method was not chosen.

## 1.4 DELIMITATIONS

Several limitations are given by the title and the purpose. This study is limited to the time period of 1702 to 1710. Fortress warfare in the opening of the Great Northern War was characterized by Swedish successes – fortresses that were relieved or could be recaptured. Thus, the period 1700 to 1702 does not shed any clear light on the matter of inherent flaws in the fortification system. By

---

<sup>2</sup> Compare for example Ulf Sundberg, *Kraftsamling i Gustav III:s krig 1788–1790*, Magistersuppsats Åbo Akademi 2013 (Karlskoga 2014) [Concentration of Power in Gustav III's War 1788–1790, Master's thesis, Åbo Akademi University 2013].

1710, much of the damage to the Swedish Empire had been done. There was still fortress warfare from 1711 and later on during the war. It would have been interesting to include those sieges, too, but the events would not change the analysis of the sieges from 1702 to 1710.

The limitation made, to include only Swedish fortresses, is a natural consequence of the purpose. Swedish prewar planners could only affect the fortresses in Swedish hands.

No attempt is made to evaluate the ability of the Swedes to send relief armies at any given time. Neither is it attempted to analyze, for example, which resources Swedish society actually had at its disposal at any given time. Thus, this study does not intend to be a key to the war in general, only to evaluate the Swedish fortification system.

## 1.5 EARLIER RESEARCH

### *Introduction*

The literature on Karl XII and the Great Northern War is extensive. A search on “Karl XII” in the Swedish national library database *Libris* gives around 2,400 titles, a search on “stora nordiska kriget” [the Great Northern War] gives around 750.<sup>3</sup> However, most of these titles would hold nothing, or very little, about fortress warfare. Typical of earlier research regarding the Great Northern War is that it only touches on fortress warfare, from a few lines to slightly longer descriptions of the sieges. Comments on, or analysis of, the events are rare.

The literature specifically used for each siege will be commented upon in the actual chapter. In this chapter, more important work and background literature on Swedish fortress warfare in the Great Northern War will be presented.

A number of titles are used often. One is *Nordisk familjebok* [Nordic Family Book], used for basic information on cities and fortresses. This is a Swedish encyclopedia, produced in two editions, one in 1876–1899 and the other in 1904–1926.<sup>4</sup> Several of the relevant articles in the encyclopedia were written by Ludvig W:son Munthe (L. W:son M:), mentioned below. General information on the Great Northern War is also found in the work on Swedish history *Den svenska historien* [Swedish History], primarily in Part 5 *Den Karolinska tiden 1654–1718* [The Carolean Era 1654–1718] (Stockholm 1967) and Part

---

<sup>3</sup> A search on *Libris* carried out on June 6, 2016.

<sup>4</sup> *Nordisk familjebok*, First Edition, Del 1–20 (Stockholm 1876–1899) and Second Edition, Del 1–38 (Stockholm 1904–1926).



4, *Gustav Adolfs och Kristinas tid 1611–1654* (Stockholm 1967)<sup>5</sup>. Another useful encyclopedic work is Adam Lewenhaupt's *Karl XII:s officerare: Biografiska anteckningar* [Karl XII's Officers: Biographical Notes], published in two parts (Facsimile edition, Lund 1977).<sup>6</sup> The volumes contain short biographies of around 20,000 officers in Karl XII's army.

Regarding Swedish and Finnish medieval fortifications, there is a dissertation by Christian Lovén, *Borgar och befästningar i det medeltida Sverige* [Castles and Fortifications in Medieval Sweden] (Stockholm 1996).<sup>7</sup> This work is useful for background on several of the Great Northern War fortifications, and includes a discussion on what made a fortification "strong or weak". The discussion is not relative to the present study, as the development of gunpowder weapons changed the criteria of strong or weak. Another work is Leif Törnquist's (main writer) *Svenska borgar och befästningar: En militärhistorisk reseguide* [Swedish Castles and Fortifications: A Military Historical Travel Guide] (Stockholm 2007)<sup>8</sup>. That book, however, only covers today's Sweden.

#### *Swedish fortress warfare*

There has been very little earlier research on the Swedish fortification system in the Great Northern War. To date, the most important Swedish work on fortress warfare in the Great Northern War is Ludvig W:son Munthe's *Kongl. fortifikationens historia* [The History of the Royal Fortification Corps]. The Great Northern War period is treated in Volume III:2, *Fortifikationsstaten under Dahlberg, Stuart och Palmquist, 1674–1719* [The Government Main Title of Fortification under Dahlberg, Stuart and Palmquist, 1674–1719], published as three books, III.4 in 1909, III.5 in 1910 and III.6 in 1911, with consecutive numbering of the pages<sup>9</sup>. The III.6 book contains description of most of the Swedish sieges during the period. It is obvious that Munthe's attention was focused on the construction of fortresses and biographic information on the

---

<sup>5</sup> Jan Cornell and Gunvor Grenholm (main editor), *Den Svenska historien*, Del 1–10, (Stockholm 1966–1968). (Further on, "Den svenska historien".)

<sup>6</sup> Adam Lewenhaupt, *Karl XII:s officerare: Biografiska anteckningar*, Del 1–2, (Stockholm 1922, Facsimile edition, Lund 1977). (Further on, "Lewenhaupt".)

<sup>7</sup> Christian Lovén *Borgar och befästningar i det medeltida Sverige* (Stockholm 1996). (Further on, "Lovén".)

<sup>8</sup> Leif Törnquist, *Svenska borgar och fästningar: En militärhistorisk reseguide* (Stockholm 2007). (Further on, "Törnquist".)

<sup>9</sup> Ludvig W:son Munthe, *Kongl. Fortifikationens Historia, III. Fortifikationsstaten under Dahlberg, Stuart och Palmquist 1674–1719*, Del III:2, published as Book III.4 (Stockholm 1909), Book III.5 (Stockholm 1910) and Book III.6 (Stockholm 1911). (Further on "Ludvig W:son Munthe".)

men that led the construction work. There are fragments of analytical text and general reflections on fortress warfare, but in no sense did the author aim for synthetic statements. In his work, virtually no criticism is offered of the Swedish fortification system at the time.

A Swedish artillery history has also been published. The part covering the Great Northern War is titled *Kungl. artilleriet: Karl XI:s och Karl XII:s tid* (s. l. 1993) [The Royal Artillery: Karl XI's and Karl XII's Time], with Hans Ulfhielm as editor. The book has several authors, where the editor wrote the article on the Great Northern War period himself, "Artilleriet i krigen under Karl XII:s tid".<sup>10</sup> The work has description of most sieges during the period. It provides detailed information on the artillery staff of the fortresses and on their armament, as well as the operational history. In 2005, the 1993 work was followed by *Kungl. artilleriet: Svenska Artilleriet i Östersjöprovinserna 1561–1721* [The Royal Artillery: The Swedish Artillery in the Baltic Provinces 1561–1721], with Hans Ulfhielm and Eric Granefelt as editors<sup>11</sup>. The book offers a presentation of Swedish fortresses in the Baltic Provinces, the personnel, armament and operational history. Here, there were also several authors. Regarding operational history, the text in the 2005 work does not differ from 1993. Swedish researcher Aleksander Loit should also be mentioned here. (see Chapter 4.15 Reval).

Modern Russian research regarding the Great Northern War tends to focus on the Battle of Poltava, Russian Tsar Peter I and Swedish King Karl XII. There are, however, a few works on fortress warfare. Boris Megorsky has published a number of articles in Russian on siege warfare, available on [www.academia.edu](http://www.academia.edu). Among them, "The Evacuation of towns and fortresses during the Great Northern War" deals with the reverse subject of sieges, where one side disarms or destroys its own fortresses<sup>12</sup> (14 pages). Others are "The relieving of a besieged fortress in theory of XVII–XVIII centuries and in practice of the Great Northern War"<sup>13</sup> (15 pages), "Christian Kelch's chronicle about the siege of Vy-

---

<sup>10</sup> Hans Ulfhielm, "Artilleriet i krigen under Karl XII:s tid", in Hans Ulfhielm (red.), *Kungl. Artilleriet: Karl XI:s och Karl XII:s tid* (s. l. 1993), p. 299–554. (Further on, "Ulfhielm, Karl XII:s tid")

<sup>11</sup> Hans Ulfhielm & Eric Granefelt (red.), *Kungl. artilleriet: Svenska Artilleriet i Östersjöprovinserna 1561–1721* (s. l. 2005).

<sup>12</sup> <[https://www.academia.edu/26651600/The\\_Evacuation\\_of\\_towns\\_and\\_fortresses\\_during\\_Great\\_Northern\\_war](https://www.academia.edu/26651600/The_Evacuation_of_towns_and_fortresses_during_Great_Northern_war)>, read April 7, 2017.

<sup>13</sup> <[https://www.academia.edu/2417153/The\\_relieving\\_of\\_a\\_besieged\\_fortress\\_in\\_theory\\_of\\_XVII\\_-\\_XVIII\\_centuries\\_and\\_in\\_practice\\_of\\_the\\_Great\\_Northern\\_War](https://www.academia.edu/2417153/The_relieving_of_a_besieged_fortress_in_theory_of_XVII_-_XVIII_centuries_and_in_practice_of_the_Great_Northern_War)>, read April 7, 2017.

borg in 1706”<sup>14</sup> (4 pages), “The Russian artillery in sieges of the Great Northern War: theory and practice of its use”<sup>15</sup> (14 pages), “Taking fortresses by storm: the experience of the Great Northern War and baroque military thought”<sup>16</sup> (14 pages), and “The Sieges of the Great Northern War – attempt at typology”<sup>17</sup> (12 pages). The last of these articles includes a typology of sieges. That typology has its merits, but is similar enough to Jamel Ostwald’s that it will not be further analyzed in this study.

Another modern Russian researcher is Alexey Melnov. He published an article on the siege of Viborg in the *Great Northern War Compendium*.<sup>18</sup> Apart from these two authors, there are a few articles written on the Russian sieges of the war, including N. R. Slavnitskij’s “Osada i vzyatie Narvy russkimi vojskami v 1704 g.” in *Mir i novoje vremja* (Saint Petersburg 2005) and V. K. Turusov’s, “Sjurm kreposti Noteburg v 1702 g.” in *Rejtar* number 6/2009. Finally, there is another modern Russian work, Boris Nikolaevic Grigorjev’s and Aleksandr Bespalov’s, which focuses on the Russo-Swedish struggle in Finland and in what today is the Baltic States. It was published in a Swedish translation, *Kampen mot övermakten: Baltikums fall 1700–1710*, [The Struggle against Superior Forces: The Fall of the Baltics 1700–1710]<sup>19</sup>. The book covers warfare in Finland and the Swedish Baltic Provinces from 1700 to 1710, with an emphasis on description of fortress warfare.

Several important works have been produced in the Baltic States. Among the older work, the series *Archiv für die Geschichte Liv-, Est- und Kurlands*, published by Friedrich Georg von Bunge and others has been used in this study, primarily Part IV (Reval 1851), covering the siege of Narva. Regarding the siege of Narva, there is also the important Heinrich Johann Hansen’s *Geschichte der Stadt Narva* (Dorpat 1858). Among later researchers, Estonian historian Mar-

---

<sup>14</sup> <[https://www.academia.edu/31458750/The\\_Christian\\_Kelchs\\_chronicle\\_about\\_the\\_siege\\_of\\_Vyborg\\_In\\_1706](https://www.academia.edu/31458750/The_Christian_Kelchs_chronicle_about_the_siege_of_Vyborg_In_1706)>, read April 7, 2017.

<sup>15</sup> <[https://www.academia.edu/2417202/The\\_Russian\\_artillery\\_in\\_sieges\\_of\\_the\\_Great\\_Northern\\_War\\_theory\\_and\\_practice\\_of\\_its\\_use](https://www.academia.edu/2417202/The_Russian_artillery_in_sieges_of_the_Great_Northern_War_theory_and_practice_of_its_use)>, read April 7, 2017.

<sup>16</sup> <[https://www.academia.edu/2417239/Taking\\_fortresses\\_by\\_storm\\_the\\_experience\\_of\\_Great\\_Northern\\_War\\_and\\_baroque\\_military\\_thought](https://www.academia.edu/2417239/Taking_fortresses_by_storm_the_experience_of_Great_Northern_War_and_baroque_military_thought)>, read April 7, 2017.

<sup>17</sup> <[https://www.academia.edu/5843766/The\\_Sieges\\_of\\_the\\_Great\\_Northern\\_War\\_-\\_attempt\\_at\\_typology](https://www.academia.edu/5843766/The_Sieges_of_the_Great_Northern_War_-_attempt_at_typology)>, read April 7, 2017.

<sup>18</sup> Alexey Melnov, “The Siege of Vyborg and its Swedish Garrison”, in Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium*, Volume Two.

<sup>19</sup> Boris Nikolaevic Grigorjev and Aleksandr Bespalov, *Kampen mot övermakten: Baltikums fall 1700–1710*, Swedish translation Bengt Eriksson (Stockholm 2012). (Further on “Grigorjev and Bespalov”.)

gus Laidre should be mentioned with his two books *Segern vid Narva: Början till en stormakts fall* [The Victory at Narva: The beginning of the Fall of an Empire] (Swedish translation, Stockholm 2001) and *The Great Northern War and Estonia: The trials of Dorpat 1700–1708* (Tallinn 2010). Another Estonian researcher is Haldur Palli. He has published the book *Mezhdru dvumia boiami za Narvu: Estonija v pervye gody Severnoi voiny 1701–1704* (Tallinn 1966), which deals with the city of Narva in 1701–1704. In Estonia today, there are two researchers at work on various aspects of fortress warfare, Ragnar Nurk and Kaur Lillipuu (see Chapter 4.8 Narva/Ivangorod). In Latvia, Margarita Barzdēvica has published a book on maps and plans of Riga from Swedish times; *Rīga zviedru laika kartes un planos, 1621–1710* (Riga 2011).

Although fortress warfare as such has not been given much attention in earlier research, there are works about the leading architect of the Swedish fortification system in the Great Northern War, Erik Dahlbergh. The first was Ernst Ericsson and Erik Vennberg, *Erik Dahlberg: Hans levnad och verksamhet: Till 300-årsminnet 1625–1925* (Uppsala 1925) [Erik Dahlberg: His Life and Work: To the 300-Year Memory 1625–1925], and the next was Margareta Beckman's *Befästningar i stormaktstid: Erik Dahlberg och befästningskonsten* [Fortification in the Times of the Swedish Empire: Erik Dahlberg and the Art of Fortification] (Hallstavik 2009).<sup>20</sup> A third is Inga von Corswant-Naumburg's *Greve Erik Dahlbergh: Kungligt råd, fältmarskalk och generalguvernör: "Hjärtan allra kiäreste herr far"* [Count Erik Dahlbergh: Royal Councillor, Field Marshal and Governor General: "Father, Sir, the Very Dearest to Our Hearts"] (Visby 2008). These works provide good background on Erik Dahlbergh, but have not been extensively used in this study.

Then there are works which cover part of the fortress warfare in detail. Fredrik Arfwidsson's dissertation *Försvaret av Östersjöprovinserna 1708–1710* [The Defense of the Baltic Sea Provinces 1708–1710] (s. l. 1936) is one of the more important<sup>21</sup>. In his dissertation, Arfwidsson focused on the siege of Riga from 1709 to 1710, but also covered other sieges in the eastern part of the Swedish Empire during the same period.

---

<sup>20</sup> Margareta Beckman, *Befästningar i stormaktstid: Erik Dahlberg och befästningskonsten* (Hallstavik 2009). (Further on, "Beckman".)

<sup>21</sup> Fredrik Arfwidsson, *Försvaret av Östersjöprovinserna 1708–1710, Part I-II:1 in one binding*, (s. l. 1936), PhD-dissertation, s. l. (Further on "Arfwidsson, Försvaret".)

*The Great Northern War*

There is no standard work that covers the entire Great Northern War in Swedish. Earlier research on the conflict often ends with the death of Swedish King Karl XII in 1718, leaving the last three years of the war unaddressed. The first major Swedish work, often seen as an “official history” on the war, was Jöran Andersson Nordberg’s *Konung Carl den XII:tes historia* [King Karl XII’s History],<sup>22</sup> published in 1740. It consists of two parts of about 700 large pages each, where the first covers the period from 1682 until June of 1709, and the second from June of 1709 till Karl XII’s death in 1718.

A later work was written by educator and historian Otto Sjögren, *Karl XII och hans män: Bilder från vår sjunkande storhetstid* [Karl XII and his men: Pictures from Our Descent from Greatness] (Stockholm 1925). That is an almost complete history of the war, leading up to the death of Karl XII in 1718. The book is unusually detailed on the struggle in the eastern parts of the Swedish Empire, as Sjögren is one of few to have studied von Schlippenbach’s, commander of Swedish forces in Estonia, records in depth.<sup>23</sup> Those records are kept in Livonica II at the National Archives in Stockholm (see below). The latest author to cover the conflict in general is Nils Erik Villstrand in his *Sveriges historia 1600–1721* (Stockholm 2011).

There are other important works on the Great Northern War. Of these at least the following should be mentioned: Peter Ullgren, *Det stora nordiska kriget 1700–1721: En berättelse om stormakten Sveriges fall* [The Great Northern War 1700–1721: A Tale about the Fall of the Swedish Empire] (Stockholm 2008); Olle Larsson, *Stormaktens sista krig: Sverige och stora nordiska kriget 1700–1721* [The Last War of the Swedish Empire: Sweden and the Great Northern War 1700–1721] (Lund 2009); and Robert I. Frost, *The Northern Wars: War, State and Society in Northeastern Europe, 1558–1721* (Harlow 2000). These works provide excellent background on fortress warfare, but do not, to any greater extent, deal directly with it. In this context, Michael Roberts should also be mentioned, who made a hawk-view analysis of the Swedish Empire in his *The Swedish Imperial Experience 1560–1718* (Cambridge 1979)<sup>24</sup>. Robert

---

<sup>22</sup> Jöran Andersson Nordberg, *Konung Carl den XII:tes historia* (Stockholm 1740). (Further on, “Nordberg”.)

<sup>23</sup> Otto Sjögren, *Karl XII och hans män: Bilder från vår sjunkande storhetstid* (Stockholm 1925). (Further on, “Sjögren, Karl XII”.)

<sup>24</sup> Michael Roberts, *The Swedish Imperial Experience 1560–1718* (Cambridge 1979). (Further on, “Roberts”.)

K. Massie's *Peter the Great: His Life and World* (London 1989) is an often-used reference on the war. There is also Lindsey Hughes's *Russia in the age of Peter the Great* (New Haven, Connecticut 1998). Among the most recent works is Stephen L. Kling, Jr.'s (ed.) *Great Northern War Compendium*, Volumes One and Two (St. Louis, Missouri 2015)<sup>25</sup>. The volumes include several articles from most of the nations participating in the Great Northern War.

Regarding modern Finnish research, Lauri Kujala has presented the dissertation *Pohjanmaan puolustus suuren pohjan sodan aikana* (Helsinki 1953). It has a German summary with the title "Die Verteidigung Ostbottniens während des Grossen Nordische Krieges". The dissertation deals with the siege of Kajaneborg in 1716, which, however, is beyond the scope of this study. In 1974, Onni Korkiakangas presented a dissertation on supplying the Swedish field army in 1700–1701, named *Kaarle XII:n kenttäarmeijan huolto sotaretkillä vuosi 1700–1701 mannereurooppalaisten huoltojärjestelmien näkökulmasta* (Helsinki 1974). Having its focus on the field army, it still provides a connection to the fortresses in their role as supply points for field armies. Korkiakangas's work has a summary in German, "Kriegsversorgung, Unterhaltung und Verpflegung der Feldarmee Karl XII. auf den Feldzügen 1700–1701 vom Gesichtspunkt kontinentaler Versorgungssysteme betrachtet". There is also Christer Kuvaja's dissertation *Försörjningen av en ockupationsarmé: Den ryska arméns underhållssystem i Finland 1713–1721* (Åbo 1999), which deals with supplying the Russian army occupying Finland in 1713–1721. Christer Kuvaja has also published *Karolinska krigare 1660–1721* [Carolean Warriors 1660–1721] (Stockholm 2008). The book offers an efficient overview of Karl XI's and Karl XII's wars.

The latest Finnish work to cover the Great Northern War in Finland is Antti Kujala's *Miekka ei laske leikkiä: Suomi suuressa pohjan sodassa 1700–1714* (Helsinki 2001). It provides good insight into the conditions of the Finnish army and society during the Great Northern War. This work has an English summary with the title "The Sword Jest Not: Finland in the Great Northern War 1700–1714". It can be noted that Finnish research on the Great Northern War tends to focus on the long period of Russian occupation, beginning in 1713. That period is often referred to as the "great discord" ["stora ofreden"].

---

<sup>25</sup> Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium*, Volume One and Two, (St. Louis, Missouri 2015). (Further on, "Great Northern War Compendium".)



Among earlier Danish research, *Bidrag til den store nordiske krigs historie* [Contributions to the History of the Great Northern War] still takes a prominent place. This is a work in ten volumes produced by the Danish General Staff [“Generalstaben”], published from 1899 to 1934. There were several editors of whom A. P. Tuxen was one of the leaders.<sup>26</sup> Regarding later Danish literature on the Great Northern War, there is Jens Johansen’s *Danmark–Norges deltagelse i den store nordiske krig: Sønderjyllands befrielse* [The Participation of Denmark–Norway in the Great Northern War: The Liberation of Sønderjylland] (Copenhagen København 1935). There is also Hans Christian Bjerg’s and Ole L. Frantzen’s, *Danmark i krig* [Denmark at War] (Copenhagen København 2005). That work covers all Danish wars, and the Great Northern War is treated on some fifty pages. Neither of these works proved to add new information for this study.

Earlier German research, not mentioned previously is, for example, D. A. von Drygalski’s, “Nordischer Krieg”, in Bernhard von Poten (Hrsg.), *Handwörterbuch der gesamten Militärwissenschaften*, Part 7, (Bielefeld/Leipzig 1879). In German, various studies of Russian expansion have also been published, such as Andreas Kappeler’s *Russland als Vielvölkerreich. Entstehung, Geschichte, Zerfall* (München 2008). In earlier German research, Reinhard Wittram’s biography of Tsar Peter I, *Peter I: Czar und Kaiser: Zur Geschichte Peters des Grossen in seiner Zeit*, Volume 1 and 2, (Göttingen 1964) should be noted.

Modern Polish research on the Great Northern War is represented, for example, by Doctor Marek Wagner. Among his works are *Kliszow 1702* (Warsaw 1994) and *Stanislaw Jablonowski (1634–1702): Policies and Commander*, volume 1 and 2 (Siedlce 1997). There are also several doctoral students in Poland who study various aspects of the Great Northern War. Here, Zbigniew Chmiel, Damian Plowy and Katarzyna Wagner could be mentioned. In Lithuania, Doctor Gintautas Sliesoriunas has published several works on Lithuanian history in the Great Northern War period.

For detailed information on Swedish army operations in the Great Northern War, J. G. Wikander’s *Översikt over Sveriges krig under 1700-talet* [Overview of the Wars of Sweden during the 1700s] is most useful.<sup>27</sup>

---

<sup>26</sup> A. P. Tuxen and others (ed.), *Bidrag til den store nordiske krigs historie*, Del 1–10 (Copenhagen 1899–1934). (Further on, “Tuxen”.)

<sup>27</sup> J. G. Wikander, *Översikt over Sveriges krig under 1700-talet* (Stockholm 1922). (Further on, “Wikander”.)

Then there are works which deal with specialized aspects of the Great Northern War. One is Arnold Munthe's *Karl XII och den ryska sjömakten*, Volume I–III, [Karl XII and Russian Naval Power] (Stockholm 1924, 1925 and 1927)<sup>28</sup>. Arnold Munthe's main aim was to point out that Karl XII made a serious mistake in letting Russia become a naval power in the Baltic Sea. In that discussion, he touched on the fortification system, however, he did not directly comment on it. Also, Lars Ericson Wolke covered the naval aspect of the Great Northern War in his *Rysshärjningar och sjöslag* [Russian Ravaging and Naval Battles] (Stockholm 2012)<sup>29</sup>. He also touched on fortification, but focused on the importance of sea power in general for the outcome of the conflict, pointing out that the naval element probably played an important role when trying to understand the reasons why the war lasted for more than ten years after the Swedish defeat at Poltava in 1709.

### *Fortress warfare*

Earlier international research on general fortress warfare has been important for Chapter 3 in this study, the chapter dealing with a theoretical framework for siege warfare. Doctor Christopher Duffy (see below), in his introduction to Eugène Viollet-le-Duc's *Annals of a Fortress: Twenty-Two Centuries of Siege Warfare*, pointed out that the study of siege-craft is a neglected subject<sup>30</sup>. That statement seems to hold true. A general observation is that earlier research in the field of fortification, to a large extent, has focused on construction as such, in that "military architecture" has been set at the center of attention, not siege battles leading to the fall or retention of fortresses.

Jamel Ostwald (see below) saw Christopher Duffy as the first modern historian to give full attention to siege-craft in early modern times<sup>31</sup>. Duffy first published *Fire & Stone: The Science of Fortress Warfare, 1660–1860*.<sup>32</sup> The work begins with chapters on the questions of why, where and how fortresses were built. The discussion there is fully recognizable from the work of theorists on early modern fortifications (see Chapter 3). Duffy then presents construction

---

<sup>28</sup> Arnold Munthe, *Karl XII och den ryska sjömakten*, Del I–III, (Stockholm 1924, 1925 and 1927). (Further on, "Arnold Munthe".)

<sup>29</sup> Ericson Wolke, *Rysshärjningar*.

<sup>30</sup> Christopher Duffy, "Introduction", in E. Violet-le-Duc, *Annals of a Fortress: Twenty-Two Centuries of Siege Warfare* (s. l. 2000, new edition, original *Histoire d'une Fortresse*, Paris 1874), p. viii.

<sup>31</sup> Ostwald, p. 5.

<sup>32</sup> Christopher Duffy, *Fire & Stone: The Science of Fortress Warfare, 1660–1860* (London 1996, first edition 1975).



aspects of a fortress, other fortress components such as the garrison, the development of a siege, and he ends with a description of four great sieges. His *Fire & Stone* publication was followed by a more extensive work, *Siege Warfare*, which consists of two volumes. The first is named *Siege Warfare: The Fortress in the Early Modern World 1494–1660* (first edition London 1979, second edition London 1996)<sup>33</sup> and the second is *Siege Warfare: The Fortress in the Age of Vauban and Frederick the Great 1660–1789* (first edition London 1985, second edition London 1996)<sup>34</sup>. Both parts are built up in the same way, with fortress warfare, in some ten of the major conflicts of the period, being presented and commented on.

Another work that also deserves mention is Henning Eichberg's, *Militär und Technik: Schwedenfestungen des 17. Jahrhunderts in den Herzogtümern Bremen und Verden* (Düsseldorf 1976). That work not only deals extensively with Swedish fortification in Bremen and Verden, which is outside the scope of this study, but it is also a good general work on fortification in the sixteenth and seventeenth centuries. Eichberg's *Festung, Zentralmacht und Sozialgeometrie: Kragesingenieurwesen des 17. Jahrhunderts in dem Herzogtümern Bremen und Verden* (Köln 1989) should also be mentioned. Except for fortification, his work focuses on engineers and others around the fortifications. The book also contains an overview of six sieges in Bremen and Verden in early modern times<sup>35</sup>. Another is Geoffrey Parker's *The military revolution: Military innovation and the rise of the West. 1500–1800* (Cambridge 1988), which covers military development in early modern times, with fortress warfare being observed.

One noteworthy work on siege warfare published in recent times is Jamel Ostwald's book on siege warfare during the War of the Spanish Succession, named *Vauban Under Siege: Engineering Efficiency and Martial Vigor in the War of the Spanish Succession*, published in 2007<sup>36</sup>. Apart from analyzing fortress warfare during the War of the Spanish Succession, Ostwald also suggested

---

<sup>33</sup> Christopher Duffy, *Siege Warfare: Volume I, The Fortress in the Early Modern World 1494–1660* (London 1979). (Further on, "Duffy, Part I".)

<sup>34</sup> Christopher Duffy, *Siege Warfare: Volume II, The Fortress in the Age of Vauban and Frederick the Great*, (London 1985). (Further on, "Duffy, Part II".)

<sup>35</sup> Henning Eichberg, *Festung, Zentralmacht und Sozialgeometrie: Kragesingenieurwesen des 17. Jahrhunderts in dem Herzogtümern Bremen und Verden* (Köln 1989), p. 518.

<sup>36</sup> Jamel Ostwald, *Vauban Under Siege: Engineering Efficiency and Martial Vigor in the War of the Spanish Succession*, PhD-dissertation (Leiden – Boston 2007), Series: History of Warfare, Volume 41, General Editor Kelly Devries. (Further on, "Ostwald".)

a structure for siege tactics, which will be the opening point for the discussion in Chapter 3.3 of this study.

Among earlier research, there are several works on early modern city planning, which usually comment on fortifications. One example is Gerhard Eimer's *Die Stadtplanung im schwedischen Ostseereich 1600–1715: Mit Beiträgen zur Geschichte der Idealstadt* (Stockholm 1961). These works, however, have not been found able to contribute substantially to this study.

#### *A comment on earlier research*

Earlier research on the subject creates a method problem: it could, for various reasons, include tendentiousness. There could be “patriotic” tendencies – driving an author to overstate the accomplishments of fellow countrymen. Many authors would rely on secondary sources in their writing and, thus, any early misunderstanding could be reproduced until this day. The ambition here has been to use sources as close to the events as possible, to point out discrepancies in various statements, to present discrepancies referred to in earlier research, and to bring attention to cases where circumstances indicating tendency can be identified.

## 1.6 SOURCES

### *Introduction*

Much, but not all, of the information needed for the empirical part of this study can be derived from literature. Information gathered from literature also entails a risk of false rumors and misunderstandings being inserted or repeated. Therefore, printed primary sources and primary sources have been important for this study.

### *Printed primary sources*

In the beginning of the twentieth century, a well known and often cited work was published by August Quennerstedt (ed.). It was called *Karolinska krigares dagböcker jämte andra samtida skrifter* [Diaries of Carolean Warriors as well as other Contemporary Documents] (Stockholm 1901–1918). As the title implies, it was a project in which diaries and other documents were published.<sup>37</sup> Another series is *Historiska handlingar: Utgifna af Kongl.samfundet för utgifvande af*

---

<sup>37</sup> August Quennerstedt (ed.), *Karolinska krigares dagböcker jämte andra samtida skrifter* (Stockholm 1901–1918).

*handskrifter rörande Skandinaviens historia* (Stockholm 1861–1961) [Historical Documents Published by the Royal Society for Publishing of Hand-written Documents Concerning the History of Scandinavia]. Here a diary kept by Swedish officer Leonhard Kagg is especially useful.<sup>38</sup> This series also contains letters exchanged between Karl XII and the Council from April 13, 1700 to October 27, 1710, found in Parts 1–5.<sup>39</sup> That collection of letters, however, contains little material of interest to this study.

Of non-Swedish collections of printed primary sources, Georg Zacharias Yrjö-Koskinen's *Handlingar till upplysande af Finlands öden under det Stora nordiska kriget* [Documents to Inform on the Fate of Finland During the Great Northern War] (Helsinki/Helsingfors 1865), should be noticed.<sup>40</sup>

From the Russian side, the most important published source is Tsar Peter's diary.<sup>41</sup> For this study, Tsar Peter's diary offers the best insight into Russian plans and actions during the period.

### *Primary sources*

For sources required for this study, two major Swedish archives dominate, the Swedish National Archives ["Riksarkivet"] and the Swedish Military Archives ["Krigsarkivet"] in Stockholm.

The primary sources on the Great Northern War constitute a vast amount of material. For example, the meeting minutes of the Swedish Senate (Royal Council) in 1710 are of some 2,000 pages, the minutes of the parallel organization of the Defense Commission (see below) are about as extensive. Apart from the minutes, from the same year and the same organizations, there are well above 1,000 pages of copies of incoming and outgoing documents. The minutes for 1710 of a Swedish Government executive office – such as the Admiralty – cover well above 2,000 pages.

---

<sup>38</sup> Leonhard Kagg, *Leonhard Kaggs dagbok 1698–1722*, Published through Adam Lewenhaupt, *Historiska handlingar*, Del 24, (Stockholm 1912). (Further on, "Leonhard Kagg's diary".)

<sup>39</sup> *Historiska handlingar: Utgifna af Kongl.samfundet för utgifvande af handskrifter rörande Skandinaviens historia*, Del 1, (Stockholm 1861) Del 2, (Stockholm 1862), Del 3, (Stockholm 1863), Del 4, (Stockholm 1864) and Del 5, (Stockholm 1865).

<sup>40</sup> Georg Zacharias Yrjö-Koskinen (ed.), *Handlingar till upplysande af Finlands öden under det Stora nordiska kriget* (Helsinki/Helsingfors 1865). (Further on, "Yrjö-Koskinen".)

<sup>41</sup> Peter I of Russia, *Journal de Pierre le Grand depuis l'année 1698, jusqu'à la conclusion de la paix de Nystadt. Traduit sur l'original russe. Imprimé d'après les manuscrits corrigés de la propre main de Sa Majesté Impériale, déposés dans les archives* (Paris 1773). (Further on, "Tsar Peter's diary".)

In the preface of his work on Reval in the Great Northern War, German researcher Stefan Hartmann remarked that material from the city archives alone covered about 60,000 pages.<sup>42</sup> In total, it would not be surprising if the source material on the Great Northern War consisted of one or more million pages, in a multitude of different languages. The absolute majority of the material would be minutes from various government bodies and documents sent to or from them. Ironically, accounts of various battles and sieges – for long the most sought-after material – on the contrary, are scarce. Here it can be assumed that most of those sources already have been identified and even published *in extensio*. The discovery of a new account of a battle or siege, for instance, would be a rare event.

The minutes of the Defense Commission [“Defensionskommissionen”] are an important source on the official Swedish stance in several matters relating to the sieges of Swedish fortifications. The Commission was a body created by Karl XII to handle defense matters in his absence (see Chapter 2). Their minutes are kept in bindings, year by year, and are easily accessible.<sup>43</sup> Incoming letters to the Defense Commission add a substantial amount of relevant information. They are also kept in bindings, where each binding holds letters from a certain category of writers, and each binding normally contains an index, which lists the names of the writers.<sup>44</sup>

From 1704, the Royal Council [“Rådet”], at the time called the “Senate” [“Senaten”], but in this study referred to as the “Council”, was also charged with handling military matters. The minutes here are somewhat problematic, since they are sorted by the minutes’ writer for the parts of the period studied<sup>45</sup>. Incoming letters to the Council have been divided into various collections [“Riksarkivets ämnessamlingar”], depending on the nature of the letter. Several of the documents of relevance to this study are found in “Militaria” [Military Matters].<sup>46</sup> Others are found in a collection dedicated to the Baltic Provinces, “Livonica” [Livonian Matters], though primarily found in “Livonica II”, since

---

<sup>42</sup> Stefan Hartmann, *Reval im Nordischen Krieg* (Bonn-Bad Godesberg 1973), p. XI.

<sup>43</sup> 31 Äldre kommittéer, 243 Defensionskommissionen 1700, A Protokoll, I Huvudserien, volumes by year, Riksarkivet. (Further on, “Minutes of the Defense Commission”.)

<sup>44</sup> 31 Äldre kommittéer, 243 Defensionskommissionen 1700, E. Inkomna handlingar, volumes by writer, Riksarkivet.

<sup>45</sup> 1111 Det odelade kansliet. Rådsprotokoll 1621–1723, A 1 Huvudserie, volumes by year and minutes writer, Riksarkivet.

<sup>46</sup> 754 Riksarkivets ämnessamlingar. Militaria, 2 Krigshistoriska samlingen, XXIII Karl XII:s krig. Stora Nordiska kriget 1700–1720, Riksarkivet.

“Livonica I” covers the period from 1299 to 1621.<sup>47</sup> In Livonica II, letters from military commanders in the Baltic Provinces can be found, regardless of which government body the person was addressing.

At the National Archives, there are also the documents of the Chancellery [“Kanslikollegium”].<sup>48</sup> Some of the military commanders in the provinces, for example, would write to the Chancellery instead of the Defense Commission.

The Swedish Military Archives hold a considerable amount of relevant material for this study. Indexing there, on the first level, is organized in ring binders or bound books called “Förteckning” [Index].

Förteckning 72 “Försvars- och befästningsplaner 1637–1851” [Defense and Fortification Plans 1637–1851] has material of interest for this dissertation. Of particular note is a memorandum written by Erik Dahlbergh in 1698, where he summarizes the status of Swedish fortification in twenty pages (see below).<sup>49</sup> Apart from that memorandum there are several other reports on Swedish fortifications, the volumes are sorted by year.

Förteckning 424 “Sverige, stads- och fästningsplaner 1521–1942” [Sweden, City and Fortress plans], has a wealth of maps and floor plans, but since they only cover the area of Sweden of today the material has been of limited use to this study. Corresponding material for the former Swedish territories is listed in Förteckning 406 “Utländska stads- och fästningsplaner 1550–1989” [Foreign City and Fortress Plans 1550–1989], where the material of interest to this study is found under the headings of “Finland” and “Östersjöprovinserna (de baltiska staterna)” [The Baltic Sea Provinces (the Baltic States)].

The main source on the Great Northern War in the Swedish Military Archives would have seemed to be Förteckning 388, “Krigshandlingar Stora nordiska kriget 1699–1734” [War Documents the Great Northern War 1699–1734]. That collection, however, proved to be of limited use to this study, although “Avdelning 16 Avskriftssamlingen” [Section 16 The Collection of Transcripts] contains copies of letters to the Defense Commission which, have been used for this study.<sup>50</sup>

Förteckning 425 “Sveriges krig 1521–1864” [Sweden’s Wars 1521–1864] contains several maps, designs and drawings of battles and sieges. The material in the collection is quite extensive and has been of use for this study.

---

<sup>47</sup> 2042 Riksarkivets ämnessamlingar Livonica II, Riksarkivet.

<sup>48</sup> 1411 Kanslikollegium 1584–1801, Riksarkivet.

<sup>49</sup> Förteckning 72 Försvars- och befästningsplaner 1637–1851, Krigsarkivet.

<sup>50</sup> Avdelning 16, Avskriftsamlingen, Förteckning 388 Stora nordiska kriget, Krigsarkivet. (Further on, “Avskriftssamlingen, Krigsarkivet”).

The naval aspect, in certain sieges, was important. In the Swedish Military Archives, naval matters are listed in Förteckning 500–503 “Flottans arkiv” [The Navy Archives]. Förteckning 500 contains the minutes of the Admiralty.<sup>51</sup> Incoming letters are found in bound letter books, often with an index.<sup>52</sup> In Förteckning 503a, the title “Sjöexpeditioner” [Naval Expeditions] is found. The material is not extensive, but has been important to this study.<sup>53</sup>

At the Swedish Military Archives, there are also archives from various offices of the War College<sup>54</sup> [“Krigskollegium”]. Förteckning 1 “Krigskollegii kansli 1631–1865” [The Secretariat of the War College] contains numerous documents, usually dealing with details of war like deliveries of rifles or requests for various materiel.<sup>55</sup> For the period studied, a special index of incoming letters has been created, *Register till Krigskollegii brevböcker* [Index to the Letter Books of the War College].<sup>56</sup> The index is a bound book not listed in any main index.

Of the offices in the War College, Förteckning 3 “Artilleridepartementet 1600–1881” [The Artillery Office 1600–1881]<sup>57</sup> proved to be useful, as it contains information on the armament of fortresses. However, Förteckning 4 “Fortifikationsdepartementet 1640–1866” [The Fortification Office 1640–1866]<sup>58</sup> and Förteckning 43 “Fortifikationen 1620–1943” [The Fortification 1620–1943]<sup>59</sup> were of less use.

From a fortification point of view, some of the primary sources deserve special attention. One is an untitled document from 1695, specifying the planned armament of each Swedish fortification.<sup>60</sup> The document not only provides in-

<sup>51</sup> Flottans arkiv, Förteckning 500 Flottans centrala ledning, 001 Amiralitetskollegium, kansliet 1630–1807, A II Protokoll i renskrift. a/huvudserie, Krigsarkivet.

<sup>52</sup> Flottans arkiv, Förteckning 500 Flottans centrala ledning, 001 Amiralitetskollegium, kansliet 1630–1807, E II Inkomna handlingar från ämbetsverk m. fl. myndigheter samt enskilda, Krigsarkivet.

<sup>53</sup> Flottans arkiv, Förteckning 503a Amiralitetskollegiets med efterföljares kontor, Arméns flotta, loggböcker, rullor m. m., 033 Sjöexpeditioner, eskaderchefer 1642–1814, Krigsarkivet. (The “a” reference only exists in the manual system.)

<sup>54</sup> The translations of Swedish government bodies in this study follow Leon Jespersen, “The Constitutional and Administrative Situation”, in Leon Jespersen (ed.), *A revolution from above? The Power State of 16th and 17th Century Scandinavia* (Odense 2000), p. 68.

<sup>55</sup> Förteckning 1 Krigskollegium Krigskollegii kansli 1631–1865, Krigsarkivet.

<sup>56</sup> S. Kreüger, *Register till Krigskollegii brevböcker. 1700–1722*, Krigsarkivet (s. l. s. a.). (Further on, “Kreüger”.)

<sup>57</sup> Förteckning 3 Krigskollegium Artilleridepartementet 1600–1881, Krigsarkivet.

<sup>58</sup> Förteckning 4 Krigskollegium Fortifikationsdepartementet 1640–1866, Krigsarkivet.

<sup>59</sup> Förteckning 43 Krigskollegium Fortifikationen 1620–1943, Krigsarkivet.

<sup>60</sup> *No title [Register uppå understående befästningars bestyckningh som i detta bandh finnes]*, Volume 1, 1695, i. Bestyckningsplaner, I. Kansliet, E. Inkomna handlingar, Förteckning 3 Krigskollegium Artilleridepartementet, Krigsarkivet, p. 51. (Further on, “Bestyckningsplan 1695”.)

sight into the number of guns but, more importantly, it describes which fortresses were considered important in 1695. The plan also specifies the armament of each bastion in the fortresses, which is rare. Next is a summary on Swedish fortresses presented by Erik Dahlbergh in 1698, *Underdånig relation om rikets fästningar*, [...] [Humble Report on the Fortresses of the Realm]<sup>61</sup>. The document provides insight into an important Swedish fortification officer's way of thinking.

A third central document is a memorandum from a commission on fortresses reporting in 1685.<sup>62</sup> That memorandum, however, does not cover all the Swedish fortifications.

It should be noted that the material at the National Archives and the Swedish Military Archives can be accessed via computer, "Nationell Arkivdatabas", NAD [National Archives Database] or manually via ring binders and bound indexes. The two methods do not always provide exactly the same information on a source. Generally, the manual systems would provide more detailed information than the NAD on the contents of volumes, etc. The aim of this study has been to provide reference information which works using both methods. That approach, however, has sometimes proven impossible, since some of the material in question is not yet in the database.

Regarding archives outside Sweden, a visit to the National Archives of Finland [Finnish: "Kansallisarkisto", Swedish: "Riksarkivet"], proved to be of little value to this study, since the relevant material was regularly sent to the archives in Stockholm, as long as Sweden and Finland belonged to the same nation.

Visits to archives in the Baltic nations, for example, Tallinn, Tartu (former Dorpat) and Riga have not been made. Material from there has been used in earlier research, for example, Friedrich Georg von Bunge's *Archiv für die Geschichte Liv-, Est- und Kurlands* (see above), Fredrik Arfwidsson's dissertation *Försvaret av Östersjöprovinserna 1708–1710* (see above) and Margus Laidre's works (see above). Here, the General Governor's Archive in Tartu [Estonian: "Riigi Keskarhiiv, Swedish: "Estlands Centralarkiv i Tartu"] should be men-

---

<sup>61</sup> Erik Dahlbergh, *Underdånig relation om rikets fästningar*, [...], 22 February 1698, Copy 10b, Volume 10 1698 Underdånig relation [...], Förteckning 72 Försvars- och befästningsplaner, Krigsarkivet. (Further on, "Dahlbergh 1698".)

<sup>62</sup> *Originalakter tillhörande den av Karl XI förordnade generalkommissionen över rikets fästningar* [...], Volume 8 1685–1687 Originalakter tillhörande [...], Förteckning 72 Försvars- och befästningsplaner, Krigsarkivet. (Further on, "Befästningskommissionen 1685".)



tioned. It has several documents from commanding officers in Swedish Livonia. That material was, however, extensively used by Fredrik Arfwidsson.<sup>63</sup>

From what can be seen in earlier research, city archives reveal information about life in cities under siege, which is not, however, within the scope of this study, whereas they have little about the military aspects. Thus, it seemed more productive to spend time in Swedish archives. Danish archives have not been visited, since A. P. Tuxen's work *Bidrag til den store nordiske krigs historie* (see above) was based on extensive archive studies. Facts not found in Tuxen's work are assumed to be very difficult to find. Russian archives have not been studied, due to a language barrier made worse by the fact that eighteenth-century Russian language differs widely from the modern.

#### *A comment on sources*

Contemporary Swedish letters and reports create a special question, since they normally relate to failure – a fortress lost. When reading the material, it has been assumed that the writer wanted to keep the blame away from himself. Even before a siege, a fortress commander would be interested in pointing out needs, which, if not satisfied, could result in the loss of the fortress. These demands would then serve as an insurance policy in case the fortress actually fell. Apart from such tendencies, it can also be assumed that no military commander would intentionally enter statements which easily could be proven false by contemporaries, but would endeavor to exclude facts which were to his disadvantage.

In documents contemporary with the events, statements of troop strength or other relevant quantifications are rare. Swedish writer Sture M. Waller attributed the lack of such material to the need of secrecy. A document could easily fall into enemy hands, and there were probably other problems of security. He suggested that documents containing statements of strength were destroyed, instead of archived, when an updated version was produced; thus, very few have survived until our days<sup>64</sup>. Actual garrison strength is not always possible to establish. The method applied here has been to present the information available, and then discern what could have been a reasonable figure.

Illustrations are an important part of source material for this study. Maps and pictures are crucial to our understanding of the fortifications and the siege

---

<sup>63</sup> Arfwidsson, *Försvaret*, p. XVI and passim.

<sup>64</sup> Sture M. Waller, "Den svenska huvudarméns styrka år 1707", in *Karolinska förbundets årsbok* Stockholm 1957, p. 95, note 18.



battles. Just relying on words would generate much text, but still not capture the situation the way a picture can. The illustration material has a few major problems. The first two concern the fortifications. It is not always obvious that a picture of a fortification shows what was actually built, nor if it was a plan for what was to be built. The second is that the date of a picture also is crucial. A conqueror could improve a fortress captured, and soon after the siege, the fortress could appear different from what it looked like during the siege. A few decades later, the fortress could have been completely altered. A solution to this is to compare each illustration to what is otherwise known about the works at the time of the siege.

Another problem pertains to an illustration showing an actual siege. The general impression is that the ones made shortly after a siege battle tend to be accurate, probably following the same logic as the contemporary documents. Any obvious errors could be discovered and then lower the credibility of the illustration. However, illustrations made long after a siege run a considerable risk of an artist having influenced the illustration. It would then be important to base one's impressions on fairly contemporary illustrations, and compare the content of the illustration to what otherwise is known about the siege.

## 1.7 NOTE ON DATES

In the years 1702 to 1710, many European nations, among them Denmark from March of 1700, had converted from the old Julian calendar to the new Gregorian. The Gregorian calendar was then eleven days ahead of the Julian. In Sweden, slow process to convert from the Julian to the Gregorian calendar began in 1700. It was in that year that leap day was abolished. Russia used the Julian calendar as of 1700.<sup>65</sup>

In the period studied, the situation was that the Russians were one day behind the Swedes, and the Swedes were ten days behind the Danes. Any date would then have three possible identifications, for example March 19/20/30. In this study, the Swedish style is used as the norm. When important sources have used other calendars, the dates are given with these alternatives, in order to facilitate backtracking to the original source.

---

<sup>65</sup> Wikander, p. 6 and B-d. B-c., "Kronologi", in *Nordisk familjebok*, Del 15, (Stockholm 1911), column 42.

## 2. THE SWEDISH EMPIRE

### 2.1 INTRODUCTION

In 1700, the Swedish Empire covered a land area of 990,000 square kilometers and had 2,500,000 inhabitants. The area can be compared to that of today's Sweden, with 450,000 square kilometers. Of the population, slightly more than half lived in today's Sweden while 320,000 lived in Finland. Around 900,000 lived in the provinces of Ingria, Estonia, Ösel, Livonia (today Latvia and the southern part of Estonia) and in the German possessions of Swedish Pomerania, Wismar and Bremen-Verden.<sup>66</sup> In 1699, the revenues of the Swedish government totaled 6.68 million rixdollars.<sup>67</sup>

### 2.2 THE CREATION OF THE SWEDISH EMPIRE

Gustav Vasa is known as the first Swedish early modern king, ruling from 1521 until his death in 1560. Gustav Vasa's Sweden consisted of today's Sweden, except the southern provinces of Skåne, Halland and Blekinge, the western provinces of Bohuslän, Jämtland and Härjedalen and the island of Gotland, and included Finland. During medieval times, Finland had become an integral part of Sweden, which was then in competition with the Russians.<sup>68</sup> The first settlement of this conflict was the Peace of Nöteborg in 1323. The border to the south was then drawn across the middle of the Karelian Isthmus along the Systerbäck River.<sup>69</sup>

In 1561, when Erik XIV had just succeeded his father, Gustav Vasa, on the throne, a chain of events was set off by the decline of the Teutonic Order which ruled Estonia and Livonia. Russia, Poland and Denmark were bidding for power in these Baltic States. The starting point of the struggle was the Russian attack in 1558 when they captured the stronghold of Narva. The last Grand Master of the Teutonic Order opted for Poland, so Livonia became Polish territory. In Estonia, the nobility saw Sweden as the best alternative.

---

<sup>66</sup> Wikander, p. 13.

<sup>67</sup> Michael Roberts, *The Swedish Imperial Experience 1560–1718* (London 1979) (Further on "Roberts"), p. 112, note 2, referring to Heckscher, *Sveriges ekonomiska historia* II, s. 424.

<sup>68</sup> Jan Melin, Alf W Johansson and Susanna Hedenborg, *Sveriges historia: Koncentrerad uppslagsbok: fakta, årtal, kartor, tabeller* (Stockholm 2006), pp. 106 and 110. (Further on, "Melin")

<sup>69</sup> Ulf Sundberg, *Sveriges krig 1249–1610: Freder och stillestånd*, Del 4, (Stockholm 2010), pp. 50–53.

It should be noted that Estonia of the sixteenth century was considerably smaller than that of today, consisting of only the counties of Harrien, Wierland and Jerven and the main city of Reval. Simply put, Estonia was the land north of the city of Pernau, west of Narva and excluded the island of Ösel. In April of 1561, a Swedish Army unit was sent to Estonia and in August, Estonia became a Swedish possession.<sup>70</sup> Estonia was not made part of the Swedish core nation, but rather was taken up as a province not fully integrated into the core nation – a principle that would be used for some, but not all, of Sweden’s further conquests.<sup>71</sup>

In 1568, Johan III succeeded his brother, Erik XIV, on the Swedish throne. In 1570, there was a new Russo-Swedish war which would become a lengthy conflict, with peace not being concluded until 1595. Johan III’s son, Sigismund, had then succeeded his father. In the treaty signed in the village of Teusina, the Russians acknowledged the Swedish possession of Narva and the Estonian land west of it and,<sup>72</sup> thus, made the Narva River the border between Sweden and Russia. Michael Roberts saw the Teusina treaty as a major stepping stone in construction of the Swedish Empire or, as he phrased it: “After a quarter of a century of war, Sweden found herself, not with an outpost, but with an overseas dominion.”<sup>73</sup> Sigismund was then ousted from the Swedish throne by Karl IX, another son of Gustav Vasa. In 1611, Karl IX died and was succeeded by his son who was known as Gustav II Adolf. The young Gustav II Adolf inherited three wars from his father: one with Denmark, one with Russia, and one with Poland. In 1613, the Danish war was concluded without territorial consequences. In 1617, the Russian war was settled by the Peace of Stolbova. Russia now ceded the Province of Kexholm and the major part of Ingria with the fortresses of Nöteborg, Ivangorod, Jama and Koporie to Sweden. Gustav II Adolf was most satisfied that the Russians were landlocked from the Baltic Sea and, as such, were now incapable of launching a fleet into it. Sweden had taken a new and important step in its expansion.<sup>74</sup> Michael

---

<sup>70</sup> Nicholas V. Riasanovsky, *A History of Russia*, Fifth edition, (New York 1993), p. 147 (Further on, “Riasanovsky”) and Ulf Sundberg, *Sveriges krig 1249–1610: Freder och stillestånd*, Del 4, (Stockholm 2010), p. 238.

<sup>71</sup> Roberts, p. 83.

<sup>72</sup> Ulf Sundberg, *Sveriges krig 1249–1610: Freder och stillestånd*, Del 4, (Stockholm 2010), pp. 257–260.

<sup>73</sup> Roberts, p. 10.

<sup>74</sup> Riasanovsky, p. 176 and Ulf Sundberg, *Sveriges krig 1611–1814: Freder och stillestånd*, Del 5, (Stockholm 2010), pp. 13–18 and 19–23.

Roberts saw the Peace of Stolbova as the point where Swedish expansionism gained momentum.<sup>75</sup>

With the wars with Denmark and Russia now concluded, Gustav II Adolf turned against Poland, where a branch of the Vasa family claimed his Swedish throne. In 1621, Swedish forces captured Riga, and Livonia became Swedish. This was temporarily confirmed in a truce of 1629, and permanently in a peace treaty of 1660.<sup>76</sup>

After the truce with Poland in 1629, Gustav II Adolf got Sweden involved in the ongoing Thirty Years' War. In the Peace of Westphalia in 1648, Sweden received sizable territories consisting of the duchies of Bremen and Verden, the city of Wismar and the province of Western Pomerania according to the borders held by the former duke<sup>77</sup>. These possessions were perceived as important in Sweden. Michael Roberts quoted Swedish statesman Arvid Horn who, in 1724, said that the attention paid [to Sweden] by France and the Protestant Powers in Germany was due to the Swedish possession of Pomerania.<sup>78</sup> The new lands brought potential new enemies. The elector of Brandenburg saw Swedish Pomerania as a natural part of his territory. Wismar was situated in the less powerful principality of Mecklenburg. Bremen-Verden would be interesting to several rulers.

While Swedish forces were operating in Germany in the Thirty Years' War, Sweden launched a surprise attack on Denmark. In August of 1645, the Peace of Brömsebro was signed. Sweden gained Halland for thirty years and Jämtland, Härjedalen, Gotland and Ösel forever.<sup>79</sup> The Peace of Brömsebro added a considerable and strategically important area to the Swedish realm.

In May of 1656, Russia declared war on Sweden, which then was at war with Poland. Karl X Gustav was now king of Sweden. In 1655, he began his reign with an attack on Poland, a war which would last until 1660. Russian Tsar Alexis was intent on territorially reaching the Baltic Sea. The Russian attack began with the sieges of Dorpat, Kokenhusen and Riga. The weak fortress of Kokenhusen was swiftly conquered by the Russians; in the fall, Dorpat also had to surrender. Riga, however, was held, resupplied and reinforced by sea as the

---

<sup>75</sup> Roberts, p. 33.

<sup>76</sup> Melin, pp. 134, 143 and 163.

<sup>77</sup> Jerker Rosén, "Westfaliska freden", in *Den svenska historien*, Del 4, pp. 124–129 and Ulf Sundberg, *Sveriges krig 1611–1814: Freder och stillestånd*, Del 5, (Stockholm 2010), pp. 51–71.

<sup>78</sup> Roberts, pp. 126–127.

<sup>79</sup> Ulf Sundberg, *Sveriges krig 1611–1814: Freder och stillestånd*, Del 5, (Stockholm 2010), pp. 38–44.

Russians failed to block the Düna River leading up to the city from the Baltic Sea. The final peace was made in 1661, where it was decided that the Russians should return their conquests.<sup>80</sup>

In June of 1657, Denmark declared war on a hard-pressed Sweden. Hearing of the Danish declaration of war, Karl X Gustav left Poland with his army and marched on Denmark, attacking from the south. The ensuing peace treaty was signed in Roskilde in February of 1658. Denmark had to cede Skåne, Blekinge, Bohuslän and Halland forever. Sweden, thus, acquired much of its present-day borders.<sup>81</sup> The times of Karl X Gustav – unruly as they may have been – then left Sweden at the height of its territorial status.

In 1660, Karl X Gustav died, leaving a regency for his son, Karl XI, who came of age in 1672. Two years later and lasting until 1679, the young Swedish Empire was to be engaged in a war for survival.<sup>82</sup> In the spring of 1672, a treaty had been concluded with France. In 1674 and in urgent need of support, France compelled Sweden to join its war against Austria, Brandenburg, Spain and the Dutch Republic.<sup>83</sup> Michael Roberts saw the Swedish entry into this war as the end of Sweden's "Age of Greatness". He claimed that in the eyes of Europe, Sweden was no longer a power but a protégé of France.<sup>84</sup> In September of 1675, Denmark declared war on Sweden. The allies launched an attack on the Swedish possessions in Germany, which proved impossible to hold in the long run. Jerker Rosén noted that the constant failures of the Swedish Navy led to the losses of the German possessions for Sweden, since they could not be supported from the core land.<sup>85</sup> The year of 1676 began as an *annus horribilis* for Sweden. In the end of June, a Danish army landed in Skåne. The Danes quickly captured the fortified cities of Helsingborg, Landskrona and Kristianstad.<sup>86</sup> In December, however, the bloodiest battle ever between Swedes and Danes was fought near the city of Lund; when it was over, the Swedes had won.<sup>87</sup> In the

<sup>80</sup> Riasanovsky, p. 181, Ulf Sundberg, *Sveriges krig 1611–1814: Freder och stillestånd*, Del 5, (Stockholm 2010), pp. 104–105 and T. Holm, *Översikt över Sveriges krig under 1600-talets senare hälft*, (Stockholm 1927), pp. 58–63.

<sup>81</sup> Ulf Sundberg, *Sveriges krig 1611–1814: Freder och stillestånd*, Del 5, (Stockholm 2010), pp. 77–84.

<sup>82</sup> Jerker Rosén, *Stormaktens senare skede*, Del III:2 of Schüeck, Henrik, (red.), *Svenska folkets historia* (Lund 1914–1963), p. 21.

<sup>83</sup> T. Holm, *Översikt över Sveriges krig under 1600-talets senare hälft*, (Stockholm 1927), p. 136.

<sup>84</sup> Roberts, p. 139.

<sup>85</sup> Jerker Rosén, "Krig och utrikespolitik 1675–1679", in *Den svenska historien*, Del 5, p. 115.

<sup>86</sup> Ludvig W:son Munthe, III:1, p. 387.

<sup>87</sup> T. Holm, *Översikt över Sveriges krig under 1600-talets senare hälft* (Stockholm 1927), pp. 175–179.

beginning of 1677, the Danes laid siege to the important fortress of Malmö, but made no progress, and the siege was raised in the beginning of July. 1678 brought more fighting in Skåne.<sup>88</sup> The war came to an end, mostly due to exhaustion among the nations at war. Sweden exited the war with a minimum of territorial losses in Germany. A reasonable peace for Sweden had only been achieved as a result of French pressure.<sup>89</sup>

Michael Roberts pointed out that the war of 1674–1679 was a disaster for Sweden's standing as a power, but then described how Sweden actually recovered from this low ebb.<sup>90</sup> After the war, Karl XI focused on strengthening the Swedish military. He also pursued a foreign policy based on neutrality, thereby avoiding all alliances. Thus, in 1679 we can see a Swedish Empire that is no longer intent on growth, but instead is determined to defend every last inch of ground. After 1660, the Empire was on the defensive.

Why and how a minor nation like Sweden built an empire has been much discussed among Swedish historians. In 1944, Swedish historian Artur Attman suggested that the main motive for Swedish expansion in the east was control of Russian trade<sup>91</sup>. This standpoint was argued against by Michael Roberts in 1979, claiming that Swedish commercial considerations were subordinate to political and strategic objectives.<sup>92</sup> In an article in *Finsk tidskrift* in 1982, Finnish historian Nils Erik Villstrand continued the discussion. He concluded that the financial motives could be seen as a means for expansion, and that security motives then remained.<sup>93</sup>

Regarding how Sweden could build an empire, Michael Roberts expanded on the matter. He pointed out several factors, such as Sweden using mercenary armies in several wars and the Swedish production of copper and iron. Roberts also underscored the fact that several Swedish kings acted as efficient commanders-in-chief, that the Swedish war efforts were supported by an efficient administration, and that Sweden was offered several opportunities to exploit

<sup>88</sup> T. Holm, *Översikt över Sveriges krig under 1600-talets senare hälft* (Stockholm 1927), pp. 182–183 and 185–188.

<sup>89</sup> Jerker Rosén, "Krig och utrikespolitik 1675–1679", in *Den svenska historien*, Del 5, p. 120.

<sup>90</sup> Roberts, p. 139.

<sup>91</sup> Artur Attman, *Den ryska marknaden i 1500-talets baltiska politik 1558–1595* (Lund 1944), p. 295.

<sup>92</sup> Roberts, p. 32.

<sup>93</sup> Nils Erik Villstrand, "Gustav II Adolf, troshjälte eller erövrare?", in *Finsk tidskrift*, Åbo 1982:8, p. 382.

weaknesses of neighbors. For example, when Riga was captured in 1621, Poland was also at war with the Ottoman Empire.<sup>94</sup>

### 2.3 COMMAND ORGANIZATION

Karl XII was an absolute monarch – he ruled without limitations from a parliament or a council. The principle had been established by Parliament’s decisions of 1680 and 1682 under his father, Karl XI.<sup>95</sup>

During the early modern times, the Council [“Riksrådet”] had been a powerful congregation. Karl XI’s reforms, however, ended this, and the councilors were thereafter known as “Royal Councilors” [“Kungliga råd”] to underscore their advisory status. The main role of the Council came to be that of a court of appeal. During Karl XII’s reign, the Council was known as the “Senate” [“Senaten”]<sup>96</sup>. It still had little power until 1704, when Karl XII invested it with powers to solve any crisis when there was no time to consult with him on the matter<sup>97</sup> <sup>98</sup>. In 1700, the Senate had seventeen members; ten lived in Stockholm and the other seven were posted in places making it impossible for them to participate in meetings on a regular basis.<sup>99</sup>

When Karl XII left Sweden with the main army in 1700, he established the Defense Commission [“Defensionskommissionen”] to handle matters regarding defense of the realm and the provision of men and materiel for the main army. This commission originally had eight members, Johan Gabriel Stenbock, Christopher Gyllenstierna, Fabian Wrede, Carl Gyllenstierna, Didrik Wrangel, Gabriel Falkenberg, Lars Wallenstedt and Jakob Gyllenborg. The members of the Defense Commission were also members of the Senate. Of the ten senators living in Stockholm, only Bengt Oxenstierna and Nils Gyldenstolpe were not afforded seats on the Defense Commission. The Commission was abolished by a royal decree of October 24, 1713; their last official meeting was on April 23, 1714, when their duties were transferred to the Senate.<sup>100</sup>

<sup>94</sup> Roberts, pp. 44, 49, 56 and 12.

<sup>95</sup> Melin, p. 178.

<sup>96</sup> J. C., ”Senat”, *Nordisk familjebok*, Del 25, (Stockholm 1917), column 76.

<sup>97</sup> Minutes of the Defense Commission of September 2, 1704, Volume 2, s. p.

<sup>98</sup> Jerker Rosén, ”Den inre maktkampen och riksdagen 1680”, in *Den svenska historien*, Del 5, pp. 133–143.

<sup>99</sup> Wikander, p. 17 and p. 17 note 1.

<sup>100</sup> Wikander, p. 17 and p. 17 note 1 and J. Th. W., ”Defensionskommissionen”, in *Nordisk familjebok*, Del 5, (Stockholm 1906), columns 1494–1495.



The permanent central administration had its roots in five “colleges” [“kollegier”], corresponding to departments, created by a reform in 1634. The departments were the High Courts [“hovrätter”], the War College [“krigskollegiet”], the Admiralty [“amiralitetskollegiet”], the Chancellery [“kanslikollegiet”] and the Treasury [“kammarkollegiet”]<sup>101</sup> Karl XI made several modifications to this system, establishing various offices which took over duties from the departments. The most notable change for this study was that the War College had lost much of its influence up until the period studied. Beginning in the days of Karl XI, the department lost much of its status, as some of its offices began to report directly to the King.<sup>102</sup> Additionally, the Treasury lost much of its work to the State Office [“Statskontoret”], created in 1680, and also reporting directly to the King. The State Office handled the government’s finances and cash transactions.<sup>103</sup>

From the government’s angle, the regional level was handled by provincial governors [“landshövdingar”, strictly translated “country chiefs”]. In the core nation of today’s Sweden and Finland, there were provincial governors for the provinces [“län”].<sup>104</sup> In the provinces outside the core nation, there were governors general who were responsible for entire provinces, but they could also be appointed for several “län” in core Sweden or in Finland. Since 1594, a governor general had normally been appointed for Finland. In various places, mostly in cities in recently conquered provinces, lord lieutenants [“ståthållare”] were appointed.<sup>105</sup> Apart from the offices of the central government, there were local governments, which will be encountered to a limited extent in this study.

<sup>101</sup> Björn Asker, *Hur riket styrdes: Förvaltning, politik och arkiv 1520–1920*, Riksarkivet 27, (s. l. 2007). p. 90. The English translations are according to Leon Jespersen, “The Constitutional and Administrative Situation”, in Leon Jespersen (ed.), *A Revolution from Above? The Power State of 16th and 17th Century Scandinavia* (Odense 2000). p. 68.

<sup>102</sup> Bertil Broomé, “Arméns centrala förvaltningsorgan”, in Stefan Östergren, Carl Wilhelm Lindblad & Erik Norberg (red.), *Arméförvaltningens historia*, Armémusei skrifter nr IV, (s. l. 1987), pp. 13–15.

<sup>103</sup> Arne Granholm and Margot Rydén (red.), *Statskontoret 1680–1980: en jubileums- och årsskrift* (Stockholm 1980), p. 38, 138–142 and 342–348.

<sup>104</sup> Björn Asker, *I konungens stad och ställe: Länsstyrelser i arbete 1635–1735*, Arkivvetenskapliga studier 7, (Uppsala 2004), p. 39.

<sup>105</sup> Compare Sten Lewenhaupt, *Svenska högre ämbetsmän från 1634: högre ämbetsmän och chefer för statliga verk inom central och lokal förvaltning m.m.: namn och årtal* (Stockholm 1962), passim.



## 2.4 THE DEFENSE OF THE SWEDISH EMPIRE

### *Introduction*

During the war of 1674–1679 mentioned above, the Swedish Empire was in dire straits. Karl XI made it the work of his life to improve the Swedish defense system. Available cash was the key factor for creation of strong armed forces. Similar to several other early modern states, the Swedish government sometimes lacked money. From Gustav Vasa's days to the middle of the seventeenth century, the nobility had acquired more and more of the arable land. In fact, in 1655, the nobility owned two-thirds of the homesteads [“hemman”]. Since the nobility was excluded from paying taxes, government revenues dwindled. There was hope, however, that revenues from customs could fill the royal coffers instead, but that never materialized. The obvious solution was revocation of land from the nobility, called the Great Reduction [“Reduktionen”]. In 1655, a Parliament decision provided the legal framework for such action, but work was slow in the making. From 1680, Karl XI intensified the Reduction. In 1700, only one-third of the homesteads were in noble hands. The Reduction significantly increased royal revenues from two million rixdollars in silver to four million. Thus, from 1680 to 1700, government finances vastly improved.<sup>106</sup> The effects of the Great Reduction varied throughout the Swedish Empire. In South Estonia, eighty-five percent of the land held by nobles was recovered; in North Estonia, only forty percent.<sup>107</sup>

### *The Army*

Before the war of 1674–1679, there had been various army organizations, basically tied to conscription. After the war, Karl XI improved and developed this system, which created regiments for a standing army where the soldiers were supported by a group of homesteads. This system is referred to as the “indelningsverk”<sup>108</sup>. This army consisted of thirteen regimental units of cavalry and twenty-two regiments of infantry. The cavalry was of about 11,500 men and

---

<sup>106</sup> Jerker Rosén, “Reduktionen och indelningsverket”, i *Den svenska historien*, Del 5, pp. 175–176.

<sup>107</sup> Heldur Palli, “The Population of Estonia in the Last Decades of the Swedish Period”, in Aleksander Loit (ed.), *Acta Universitatis Stockholmiensis Studia Baltica Stockholmiensia* 11, *Die Schwedischen Ostseeprovinzen Estland und Livland in 16–18. Jahrhundert* (Stockholm 1993), p.196.

<sup>108</sup> Örjan Martinsson, “The Swedish Army of the Great Northern War”, in *Great Northern War Compendium*, Volume One, p. 134 and Lars Ericson [Wolke], *Svensk militärmakt: Strategi och operationer i svensk militärhistoria under 1500 år* (Stockholm 2003), pp. 62–65.

the infantry about 25,000. A cavalry regiment had around 1,000 soldiers and an infantry regiment normally 1,200, having two battalions of 600.<sup>109</sup> This army is often described by the Swedish word “indelt”, which is difficult to translate. They are referred to as “conscripted troops” hereinafter.

Apart from conscripted troops, there were hired soldiers [“värvade soldater”], men who voluntarily served for money. The hired infantry mainly served as garrisons in cities and fortresses. They formed fourteen regiments and totaled about 18,000 men. There were also hired cavalry regiments which had approximately 5,000 men in nine units.<sup>110</sup> The “adelsfana” [Noble Banner], was a special type of unit. They were permanent cavalry units, financed by the nobility in return for their privileges.<sup>111</sup>

Thus, at the outset of the Great Northern War, the Swedish Army consisted of a total of 60,000 men, 37,000 conscripted and 23,000 hired. This figure is consistent with that of military historian J. G. Wikander who claimed that there was a total of 61,000 men on land, of whom 39,000 were conscripted.<sup>112</sup>

There were several options for augmenting the size of the Swedish Army in times of war. The most straightforward option was to hire new soldiers. The army was also increased within the “indelningsverk”. One of the methods of obtaining more soldiers from the provinces was creation of “fördubblingsregementen”, translated as “double regiments”. In this case, larger groups of homesteads delivered a new recruit for a new regiment. There were also “tremänningsregementen”, “fyrmänningsregementen” and “femmänningsregementen”. Here, three, four or five groups of homesteads together provided a new soldier. New regiments set up in this way then did not reach the same strength as the original regiments. Therefore, the new units were often limited to battalion size.<sup>113</sup> Another method used was to make the nobility and

<sup>109</sup> Alf Åberg, “Den karolinska armén skapas”, i *Den svenska historien*, Del 5., pp. 180 and 182 and Nils Erik Villstrand, “Adaptation or Protestation: Local Community Facing the Conscription of Infantry for the Swedish Armed Forces, 1620–1679”, in Leon Jespersen (ed.), *A Revolution from Above?: The Power State of 16th and 17th Century Scandinavia* (Odense 2000), pp. [297]–298.

<sup>110</sup> Lars-Eric Höglund and Åke Sallnäs, *Stora Nordiska Kriget 1700–1721: Fanor och uniformer* (Karlstad 2000) pp. 20, 81–99 and 100–114 (Further on, “Sallnäs.”) and Nils Erik Villstrand, “Adaptation or Protestation: Local Community Facing the Conscription of Infantry for the Swedish Armed Forces, 1620–1679”, in Leon Jespersen (ed.), *A Revolution from Above?: The Power State of 16th and 17th Century Scandinavia* (Odense 2000), pp. [297]–298.

<sup>111</sup> Örjan Martinsson, “The Swedish Army of the Great Northern War”, in *Great Northern War Compendium*, Volume One, p. 135.

<sup>112</sup> Wikander, p. 13.

<sup>113</sup> Wikander, p. 13 and Sallnäs, p. 129.

the Church of Sweden set up dragoon units, called “ståndsdragoner” [Estate Dragoons].<sup>114</sup>

Wikander claimed that the army expansion of 1700 had brought it up to the strength of 88,000 men.<sup>115</sup> From 1701 until the Battle of Poltava in June of 1709, several new units were set up. There was also the continuous process of completing the ranks of the existing regiments with new men to replace the dead. For example, the Västmanland Infantry Regiment received 854 new soldiers in the years 1700–1709.<sup>116</sup>

At the same time as the Swedish Army recruited, there were losses. Wikander estimated that the Swedish main army lost 49,500 men from the summer of 1708 to the surrender after Poltava in July of 1709. Of these, 16,600 succumbed to disease, suffering and small war.<sup>117</sup>

After Poltava, work began in Sweden on reconstruction of lost regiments. On July 11, 1709, Karl XII wrote a letter from the city of Otjakov ordering the Defense Commission to set up a new field army.<sup>118</sup> This process was to a certain, but unknown, extent supported by the existence of double and “männing”-regiments in Sweden and Finland. The recreation of the Swedish Army after Poltava is not a process studied in detail.

With regard to the armies of Sweden’s enemies, a few observations can be made. In his article in the *Great Northern War Compendium*, historian Örjan Martinsson gives a picture of potential competing armies. Denmark had deployed an army of 36,000 in the previous war of 1675–1679 with Sweden; Saxony had about 30,000 troops; Russia had fielded an army of 120,000 against the Ottoman Empire in its 1695 Azov campaign.<sup>119</sup> The Russian Army created by the end of 1699 is specified in Tsar Peter’s diary. It consisted of General Golovin’s division, of nine regiments of 10,782 men, Weyd’s division, of nine regiments of 10,146 men, two regiments in Novgorod with a total of 1,701 men and nine regiments in other places with a total of 9,400 men. The Russian field army then consisted of 32,029 men in twenty-nine regiments.<sup>120</sup>

<sup>114</sup> Örjan Martinsson, “The Swedish Army of the Great Northern War”, in *Great Northern War Compendium*, Volume One, p. 135.

<sup>115</sup> Wikander, p. 13.

<sup>116</sup> Sallnäs, pp. 85–99 and 20 and Örjan Martinsson, “The Swedish Army of the Great Northern War”, in *Great Northern War Compendium*, Volume One, pp. 145–148.

<sup>117</sup> Wikander, pp. 132–133.

<sup>118</sup> Sven Grauers, “Karl XI”, in *Svenskt biografiskt lexikon*, Del 20, (Stockholm 1973–1975), p. 667.

<sup>119</sup> Örjan Martinsson, “The Swedish Army of the Great Northern War”, in *Great Northern War Compendium*, Volume One, p. 133.

<sup>120</sup> Tsar Peter’s diary, pp. 6 and 7.

### The Navy

In 1700, the Swedish Navy and its only direct competitor in the Baltic Sea, the Danish Navy, were matched as shown in Table 2.1 below, which indicates a Swedish naval superiority at the time. In an article in 2000, Finnish historian Nils Erik Villstrand, however, pointed out that the Swedish Navy, compared to the Danish, had a weakness in manning. The Danes relied on civilian seamen while the Swedes relied on conscripted men, living on land. The Swedish seamen were, thus, more susceptible to disease when called up for service.<sup>121</sup>

**Table 2.1.** The Strength of the Swedish and Danish navies in 1700

Displacement (tons)	The Swedish Navy	The Danish Navy
2,700–3,400	1	1
1,800–2,300	4	3
1,400–1,750	10	9
800–1,300	16	13
500–850	8	6
TOTAL	39	32

Source: Jan Glete, *Navies and Nations: Warships, Navies and State Building in Europe and America 1500–1860*, Volume One, Acta Universitatis Stockholmiensis, Stockholm Studies in History, 48:1, (Stockholm 1993), Table 22:26, p. 238.

Note: The source used different spans of displacement of the Swedish and the Danish Navies, which is the reason for an overlap in the two last entries in the table.

In his work on the history of the Swedish Navy, P. O. Bäckström pointed out that in 1697, Stockholm had seventy-nine larger and 150 smaller merchant's ships which could be armed; the other Swedish cities had fifty-two larger and 564 smaller ships. These ships had been built as potential men-of-war in exchange for certain owner privileges. Their construction, however, was not suitable for trade and this system was soon abolished.<sup>122</sup> From the perspective of this study, the figures are interesting. A central point of this study is the resupply of fortresses by sea, which calls for transports sometimes in military history a limited resource. From the figures above it appears, at

<sup>121</sup> Nils Erik Villstrand, "Bondpojkar doppade i vatten". Svensk sjömilitär rekrytering ur ett jämförande perspektiv (1500–1800)", in Christoffer H. Ericsson and Kim Montin (red.), *Människan i flottans tjänst: Sjöhistoriskt jubileumssymposium i Åbo 24 november 2000*, Jungfrusund 6, Meddelanden från Jungfrusundsprojektet. (Åbo 2001), pp. 44, 47 and 50.

<sup>122</sup> P. O. Bäckström, *Svenska flottans historia* (Stockholm 1884), p. 150.

least generally, that there was a good supply of available merchant ships in Sweden at the time.

For purposes of this study, littoral naval resources are interesting, but will only be commented on briefly here. It is easy to form the impression that the Swedish awareness of, and the preparations for, littoral warfare were insufficient. For example, Swedish historian Lars Ericson Wolke wrote about the naval aspects of the Great Northern War, referring to Swedish naval historian Jan Glete, and pointed out that the Swedish Empire prioritized large ships in a sailing navy while sacrificing smaller vessels suitable for littoral warfare<sup>123</sup>. This would be true, but not likely to the extent that could be assumed. For example, a plan for the armament of the fortress of Nöteborg from 1695 included fifty 3-pounder cannons. These would be used to improve the defense of the tower in wartime, but would also be used to arm a number of strugs.<sup>124</sup> Thus, we can see how preparations for improvising littoral resources were made.

There were, however, also examples of how preparations for littoral warfare were not implemented. Dahlbergh pointed out that there were good, usable Lake Ladoga harbors by Kexholm (see below). He also suggested that a lake flotilla should be built secretly in peacetime, and that it should then be used to strike at the heart of Russia in wartime, as far as Novgorod.<sup>125</sup> As history shows, this scheme was never carried out.

---

<sup>123</sup> Ericson Wolke, *Rysshärjningar*, p. 187.

<sup>124</sup> Bestyckningsplan 1695, p. 51. Regarding "strugs", see Translations.

<sup>125</sup> Dahlbergh 1698, s. p. [24].

**Table 2.2.** The Swedish fortification system in 1695

FORTIFICATION	Location	Type	Bastions	Heavy guns*
<b>Sweden</b>				
Vaxholm	Stockholm	Fortress	3	74
Dalarö Redoubt	Stockholm	Tower fortress	2	56
Gothenburg	Göta älv	Fortified city	10	146
Ryssåsen	Göta älv	Artillery tower	n. a.	18
Gullberg	Göta älv	Artillery tower	n. a.	-
Nya Älvsborg	Göta älv	Sea fortress	n. a.	21
Kalmar Castle	Kalmar	Fortress	n. a.	36
City of Kalmar	Kalmar	Fortified city	9	30
Grimskär	Kalmar	Artillery tower	n. a.	80
Borgholm	Öland	Fortress	Pages missing	..
Bohus	Bohuslän	Fortress	3	60
Karlsten	Bohuslän	Sea fortress	n. a.	53
Malmö Castle	Skåne	Fortress	4	20
City of Malmö	Skåne	Fortified city	11	76
Landskrona	Skåne	Fortress	4	64
Varberg	Halland	Fortress	5	56
Halmstad	Halland	Fortified city	6	40
Viborg (and Castle)	Finland	Fortified city	Pages missing	..
Kexholm	Finland	Castle	n. a.	12
Kexholm	Finland	Fortified city	n. a.	23
<b>Baltic Provinces</b>				
Reval (Royal works)	Estonia	Fortified city	3	96
Arensburg	Ösel	Castle, improved	4	32
Narva	Ingria	Fortified city	9	157
Ivangorod	Ingria	Castle	n. a.	61
Nyenskans	Ingria	Fortress	7	68
Nyen	Ingria	Fortified city	9	39
Nöteborg	Ingria	Castle	n. a.	12
Riga, incl. citadell	Livonia	Fortified city	9	114
Nymünde	Livonia	Fortress	6	83
Cobron's Redoubt	Livonia	Redoubt	n. a.	
Kokenhusen	Livonia	Castle	n. a.	28
Pernau	Livonia	Fortified city	7	56
Dorpat	Livonia	Fortified city	8	92
<b>In Germany**</b>				
Stettin	Pomerania	Fortified city	6	124
Stralsund	Pomerania	Fortified city	2	124
Wismar	Wismar	Fortified city	14	198
Stade	Bremen	Fortified city	9	156

\*Defined as 18-, 24- and 36-pounders.

\*\*Only the main fortifications.

n. a. = not applicable

Source: *No title* [Register uppå understående befästningars bestyckningh som i detta bandh finnes], Volume 1695, i. Bestyckningsplaner, I. Kansliet, E. Inkomna handlingar, Förteckning 3 Krigskollegium Artilleridepartementet, Krigsarkivet, Index and passim.



**Picture 2.1** The map above shows the Swedish fortifications under siege in 1702–1710. The strongly fortified Gothenburg (Göteborg) and the main fortresses in the Swedish German possessions are included for reference. The unfortified cities of Stockholm and Åbo are also included. (Map by Samuel Svärd, Stockholm, Sweden.)

### *The Fortifications*

This chapter serves as an overview of the Swedish fortification system in 1700; more details will be provided for individual fortresses in Chapter 4. Various fortifications were an important part of the defense of the Swedish Empire. Certain fortresses served as “anchors” for the Swedish possession of each province.<sup>126</sup> The main building blocks in this construction were Finland, Ingria, Estonia, Livonia, Pomerania, Wismar, Bremen-Verden and the newly captured provinces in southern Sweden, Skåne, Blekinge and Halland. Gothenburg and

<sup>126</sup> Dahlbergh 1698, s. p. [28].



Stockholm were also protected by fortifications. In attempting to define the scope of the Swedish fortification system at the outset of the Great Northern War, it is easy to encounter problems. No single source seems to fully cover this system. An attempt to compile a list of fortified places in the Swedish Empire in 1700, one way or another, rapidly adds up to 400 entries which would include a large number of old castles, aging city walls and redoubts in disrepair.

There are, however, two important sources that give insight into Swedish prewar priorities concerning the fortification system. One is a plan for the armament of Swedish fortifications, which was presented in 1695 after ten years of work (see Table 2.2).<sup>127</sup> The other is a memorandum written by Quartermaster General Erik Dahlbergh for the young Karl XII in 1698, describing and discussing the Swedish fortifications.<sup>128</sup> There was also a Royal Commission on fortifications created in 1685, but the documents from that commission treat some fortifications in depth and do not include an overview.<sup>129</sup>

Comparing the two main sources mentioned above, a picture of the Swedish fortification system will emerge. Here, the armament plan would be the more important document, since it dealt with the actual arming of fortifications – an indication that they were to be defended. The Dahlbergh document indicated not only what existed, but what would be desirable. The fortifications in the Swedish German possessions will be treated only briefly below, since they are not a part of the study.

In Finland, the armament plan lists the city of Viborg and the Viborg Castle, plus the city of Kexholm and the Kexholm Castle, but the pages describing the planned armament for Viborg are missing, which is the reason the details of these fortifications are lacking. In his 1698 document, Dahlbergh gave Viborg very little attention. For Kexholm, he remarked that it had been repaired over the years, and that it had good harbors. He briefly touched on the older fortifications of Tavastehus, Nyslott and Kajaneborg which will not be observed in this study.<sup>130</sup>

In Ingria, the armament plan shows that Narva was the more important fortification. Ivangorod was situated right next to Narva and could be seen as a Narva satellite, with its destiny closely related to Narva's. According to Dahlbergh, Nyenskans was important, but was in poor condition. He pointed out

---

<sup>127</sup> Bestyckningsplan 1695.

<sup>128</sup> Dahlbergh 1698 (See reference in Chapter 1)

<sup>129</sup> Befästningskommissionen 1685.

<sup>130</sup> Bestyckningsplan 1695, Index and pp. 95–96 and Dahlberg 1698, s. p. [23].



the significance of its location – situated by the mouth of the Neva River. Nöteborg was considered weak and was just briefly commented upon. A key issue in Dahlbergh’s remarks on Ingria is that he claimed Narva and Ivangorod had been in a miserable state in 1682. Now, however, after a “[...] stort och märkligt arbete [...]”<sup>131</sup>, Ingria was safeguarded against enemy attacks.<sup>132</sup> He also noted that Russia’s desire for a harbor on the Baltic Sea was obvious, and that Russia seemingly was prepared to recapture Ingria, at any cost.<sup>133</sup>

In Estonia, the fortified city of Reval – often referred to as “Refle” in earlier sources – was the main fortification, but was also in poor condition. Dahlbergh warned that matters had to be improved, and that it was dangerous to believe that Reval was protected by Livonia and Ingria. The Russians could bypass Dorpat and march on Reval. Even more dangerous, if the Danish fleet and “[...] des hielperes hielpare [...]”<sup>134</sup> could gain supremacy on the Baltic Sea, Danish troops could land in the vicinity and occupy Reval.<sup>135</sup>

On the island of Ösel, the castle of Arensburg was the main fortification. Dahlbergh briefly remarked that it was being improved. In looking at Livonia, one of the richest and most prestigious holdings of the Swedish Empire, the city of Riga on the Düna River was obviously the core fortification. Cobron’s Redoubt [“Cobrons skans”] was a Riga satellite, and the fortress Neumünde was located by the mouth of the Düna River. Kokenhusen was an improved medieval fortification, intended to protect Riga upstream on the Düna River. Two important population centers remained: Pernau and Dorpat. Pernau was by the open sea and was well fortified. Dorpat, to the contrary, was located by Lake Peipus on the eastern border of the Swedish Empire, where its fortifications works were in a poor condition. The problems of defending Dorpat are obvious when looking at a map; Dahlbergh, however, took an optimistic stance and believed the city could be defended against a Russian attack, especially since the small fortifications of Kirrumpä and Wardebeck would block all access on the land side or from Lake Peipus.<sup>136</sup>

The defenses of core Sweden – what today is Sweden – were centered on five different areas: Stockholm, Gothenburg [“Göteborg”] and the Göta River

<sup>131</sup> Dahlbergh 1698 s. p. [27]. Translation: “[...] grand and remarkable work [...]”.

<sup>132</sup> Dahlbergh 1698, s. p. [28].

<sup>133</sup> Dahlbergh 1698, s. p. [24].

<sup>134</sup> Dahlbergh 1698, s. p. [29]. Translation: “[...] its helper’s helpers [...]”.

<sup>135</sup> Dahlbergh 1698, s. p. [29–30].

<sup>136</sup> Dahlbergh 1698, s. p. [30].

["Göta älv"], Kalmar, the newly conquered Bohuslän and also the newly conquered southern provinces of Skåne, Blekinge and Halland. Since Stockholm was not a fortified city, it primarily relied on the fortifications at Vaxholm for its safety which blocked the main sea entrance to the city. There was also the Dalarö Redoubt ["Dalarö skans"], which protected a harbor area farther south of the city. Gothenburg, the most important harbor and population center in the west of Sweden, was protected by strong city walls. The city had two satellites, supporting fortifications, Ryssåsen and Gullberg. There was also a fortification in the sea off the mouth of the Göta River, which passes Gothenburg, called Nya Älvsborg. Kalmar, the former border city toward Denmark, was strongly fortified and had Grimskär as a satellite. On the large island of Öland, off Kalmar, was Borgholm Castle, often called "Borkholm" in earlier sources. For Borgholm, the pages containing information about the armament are also missing in the armament plan, so we do not obtain an indication of its importance there. Borgholm Castle, however, seems to have been a fortification with low priority.

The newly captured provinces were prioritized in the fortification system. The main city in Skåne, Malmö, was obviously strong, and there was also the Landskrona Fortress. In Halland, there were two fortifications, the fortress of Varberg and the fortified city of Halmstad. In Blekinge, the new fortified naval base of Karlskrona was the most important, but is not mentioned in the armament plan presented in Table 2.2. It is possible that the armament committee excluded Karlskrona, as it was a naval fortification and not army. In Bohuslän, the sea fortress Karlsten by the city of Marstrand and Bohus Castle were the two strong points.<sup>137</sup>

It should be noted that the Swedish German possessions were protected by four strong fortifications: the fortified cities of Stettin and Stralsund in Pomerania, the fortified city of Wismar in Wismar, and the fortified city of Stade in Bremen. These were the main fortifications, but there were many other smaller fortified cities, castles and redoubts.

Table 2.2 reasonably reflects the general layout and strength of the Swedish fortresses in the Great Northern War and indicates that Gothenburg, Narva, Riga, Stettin, Stralsund, Wismar and Stade were the strongest fortresses in the Swedish Empire, closely followed by Reval and Malmö. Grimskär, a Kalmar satellite, looks strong but it was never built up to comparable strength. The

---

<sup>137</sup> Dahlbergh 1698, s. p. [12–20].

fortified city of Dorpat seems to be another one of the stronger fortifications, but its construction never reflected its importance as indicated by the planned armament. Most notable are the figures revealing the weaknesses of Nöteborg and Kexholm, which have a small number of heavy guns.

## 2.5 THE GREAT NORTHERN WAR

### *Prewar*

The main actors in the Great Northern War were Swedish King Karl XII, Russian Tsar Peter I, known to history as the “Great”, August, Elector of Saxony as August I and King of Poland as August II, and King Frederick IV of Denmark. All these nations, except Saxony, had lost land to Sweden in previous peace treaties. Apart from reconquering lost territories, Denmark also wanted to stop or weaken Swedish support of her enemies in the Duchies of Holstein and Gottorp south of Denmark<sup>138</sup>.

It would have been unwise for any of the above nations to attack Sweden on their own. A unified attack, however, seemed to hold the promise of a swift victory, especially since the new Swedish king, who succeeded his father in 1697, was young and inexperienced. A Livonian nobleman, Johann Reinhold Patkul, was instrumental in negotiations which led up to the attack on the Swedish Empire. Peter, August and Frederick began to put the finishing touches on their mutual agreements for an attack on Sweden, a process that was completed on November 11, 1699, when Peter and August entered an alliance directed against Sweden. Tensions around Holstein-Gottorp heated up and on December 6, 1699, the regiments in Sweden were ordered to mobilize.<sup>139</sup>

### *1700*

The Great Northern War began with a Saxon attempt to take Riga by a surprise attack, a *coup-de-main*. The Saxons launched their attack during the night of February 11–12. However, Field Marshal Count Erik Dahlbergh, leading the defense of Riga as governor general [“generalguvernör”] of Livonia had been previously warned, so the *coup* failed. The Riga satellite fortification of Cobron’s Redoubt and Neumünde Fortress were captured nonetheless. The Sax-

---

<sup>138</sup> Michael Bregnsbo, “The Goals and Ambitions of the Danish Empire during the Great Northern War”, in *Great Northern War Compendium*, Volume Two, p. 48.

<sup>139</sup> Jerker Rosén, “Från fredspolitik till krigsutbrott 1680–1700”, in *Den svenska historien*, Del 5, p. 221 and Wikander, pp. 29–34.

ons then turned to blockading Riga, but withdrew when a Swedish relief army from Finland arrived in May. August then increased his army to 14,000 and marched on Riga again in July. Now the Swedish field force retreated, having reinforced the garrison, and Riga was under siege again.

When Frederick IV of Denmark was informed of the Saxon attack on Riga, he marched on Holstein-Gottorp. In March, Danish troops crossed the border to Holstein-Gottorp and laid siege to Tönningen, the main fortress there. On March 9, Karl XII first received news of the Saxon attack on Riga; on March 20, he learned of the Danish attack on Holstein-Gottorp.

In Sweden, a decision was reached to make Denmark a priority and strike with the main army there. On June 16, a Swedish fleet left Karlskrona and reached Malmö. It was then that General Admiral Wachtmeister hesitated to move further but, on the express orders of the King, the fleet soon moved into the Sound<sup>140</sup>. During the morning of July 25, Swedish troops began to land north of Copenhagen. Concerned about this threat, Frederick IV concluded a peace with the Duke of Holstein-Gottorp on August 8 in Traventhal; the Danish campaign was over. When news of the Danish peace treaty arrived in Riga, the Saxons raised the siege and turned against the fortress of Kokenhusen to ensure communications with the Russians. Kokenhusen was rapidly captured.

It had taken some time for Russia to join the conflict as Peter I, before attacking Sweden, wanted to conclude a truce in his ongoing war with the Ottoman Empire. This was achieved in July of 1700. In the beginning of September, Russian forces entered Swedish territory, burning and ravaging the countryside. Their first move was to capture the small Swedish fortifications of Jama and Koporie. Jama, thus, became Peter I's first conquest on Swedish territory. Having captured these fortifications, the Russians turned against Narva.

On September 9, Russian forces reached Narva and tried a *coup-de-main*. The Russians knew that the Narva fortifications were somewhat in a state of disrepair and that the garrison was too small for the fortress, so they counted on the success of a swift attack. As the attempted *coup* failed, the Russians turned to blockading. The Russian forces were supplied from Novgorod and Pskov. The latter transports were carried out by boats sailing Lake Peipus and up the Narva River.

---

<sup>140</sup> Gunnar Unger, *Illustrerad svensk sjökrigshistoria: Senare delen omfattande tiden 1680–1814* (Stockholm 1923), pp. 30–31.

Returning from Denmark, Karl XII planned to turn against the Saxons. The news of a Russian declaration of war and the siege of Narva, however, reached Karl XII before the fleet sailed from Sweden. He now decided to prioritize Narva. Karl XII left Karlshamn with 8,000 men to sail to Pernau. A total of 17,000 soldiers were left in Sweden to hedge against a Danish threat.

On November 19/20/30, Karl XII would strike against the Russian siege army with less than 10,500 soldiers. The Russians numbered 24,000 men in the first line. After a fierce battle, the Russians were defeated, and Narva was free. In the wake of the Russians' retreat, they evacuated the fortresses of Jama and Koporie. The Swedish forces then went into winter quarters around Dorpat.

The first year of the war had been most successful for Sweden. The Danes were out of the war; Riga had held up against the Saxons and Narva against the Russians. It had been proven, however, that small fortifications were of little use. Jama, Koporie, Cobron's Redoubt, Kokenhusen and even the stronger Neumünde had fallen swiftly. The main fortifications of Riga and Narva held up well despite their shortcomings. Before the year ended, Karl XII created two new armies for mobile defense in the east. The first was the "Army of Narva" with 6,000 men, assigned to Major General Baron Abraham Cronhiort. This army was created on December 19, 1700 and was responsible for protecting Ingria, a duty which was later extended to include Finland. The second was the "Army of Dorpat", a smaller force with Colonel Wolmar Anton von Schlippenbach as its commander. The Army of Dorpat included the garrisons of Dorpat and Marienburg and was supposed to defend 200 kilometers of border, from the Düna River in the south to the northern end of Lake Peipus.<sup>141</sup>

It is unclear whether developments in 1700 went according to a preconceived plan. The closest document to a plan for a future Swedish war is one written by Lieutenant General Baron Carl Gustaf Rehnschiöld (general in April 1703, field marshal in December of 1705 and count in June of 1706<sup>142</sup>). It was a memorandum to the young king, most likely written in 1700. The memorandum began with the importance of the navy, where Rehnschiöld was quite detailed, and emphasized that the successful execution of any plan depended on the navy. He underscored that the navy had a role in reinforcing the closest

---

<sup>141</sup> Ludvig W:son Munthe, Del III:2, p. 338 and 374–375, Wikander, p. 30–52, Adlerfelt, *Karl XII:s krigsföretag 1700–1706: Efter författarens originalmanuskript av Samuel E. Bring*, (Stockholm 1919), p. 56 and Laidre, *Narva*, pp. 146–153.

<sup>142</sup> Gustaf Jonasson, "Carl Gustaf Rehnschiöld", in *Svenskt biografiskt lexikon*, Del 29, (Stockholm 1995–1997), p. 769.

fortresses and redoubts with infantry. Strategically, Rehnschiöld meant that attacks could primarily be expected against Ingria, Estonia, Livonia, Pomerania, Bremen, the Norwegian border and Skåne. The islands of Ösel, Gotland and Öland could also be targets. He considered all the troops in Ingria, Estonia and Livonia as necessary for local defense, bolstered by Finnish troops.

The Uppland Infantry Regiment should be kept in reserve to reinforce any attacked fortress. So should the Tiensenshusen's regiment, expanded by recruiting dragoons. Tiensenshusen's regiment could then be used in the field or in fortresses. For covering the Norwegian border, Rehnschiöld recommended the local infantry regiments, reinforced by the Noble Banner. For the west coast, he recommended the local regiments reinforced by the Västerbotten Infantry Regiment. Having made these dispositions, there were only ten regiments,<sup>143</sup> a force of approximately 12,000 men, left to create a main army strike force. Rehnschiöld thought it important to increase the infantry strength by whatever means, and to recruit dragoons as well. At the end of his document, Rehnschiöld warned of problems with Pomerania, Bremen and Wismar. He thought it difficult to act from there and to defend these distant possessions. Rehnschiöld was especially concerned about the possibilities of resupplying Wismar, because it was situated in the Duke of Mecklenburg's territory.<sup>144</sup> Rehnschiöld's document was scarcely a plan for war, in that it did not differentiate between various scenarios regarding attackers, nor did it contain a strategy regarding fortress warfare. A crucial question might have been whether or not the loss of a fortress would be acceptable as part of the overall defensive strategy.

### 1701

In June, the Swedish main army left its winter quarters around Dorpat and moved south. Karl XII crossed the Düna River into Courland on July 9, fighting the Saxon army in the crossing. The retreating Saxons evacuated Cobron's Redoubt and Kokenhusen, but Neumünde was stubbornly defended. During 1701, Karl XII issued the demand that August II should be dethroned in Po-

---

<sup>143</sup> These were the Life Guards ["Livgardet"], the Dal Regiment, the Västmanland Regiment, the Guards ["Drabanterna"], the Life Guards Cavalry ["Livregementet till häst"], troops from Östergötland ["Östgötar"], troops from Småland ["Smälänningar"], The Northern and the Southern Skåne Cavalry Regiments ["Norra och Södra Skånska kavalleriregementena"], half of Västgöta Cavalry and half of Aschenberg's cavalry regiment.

<sup>144</sup> Carl Gustaf Rehnschiöld, "Memoria" (in "Bref och skrivelser från C. G. Rehnsköld till konung Carl XII 1703–1707 (1715)"), in Aug. Quennerstedt (red.), *Karolinska krigares dagböcker jämte andra samtida skrifter*, Del XI, (Lund 1916), pp. 115–116 and 118–121.

land. By the end of September, the Swedish main army entered winter quarters around Libau in Courland.

In Ingria, Cronhiort carried out only a few minor expeditions against Russian land. In Livonia, Neumünde would be recaptured in December. On the inner waters, Vice Admiral Gideon von Numers took charge of the Swedish naval units on Lakes Ladoga and Peipus in May. During the summer, the Swedish Lake Peipus Flotilla began to take shape. It was under the immediate command of Lieutenant [“kapten”] Jonas Hökflycht. In July, the flotilla also fought its first battle against Russian strugs. The Ladoga flotilla was also strengthened, partly by small ships arriving from Karlskrona and partly by arming local ships. By November, von Numers and the Ladoga flotilla left the lake for Viborg to winter there. On September 5, a Russian force led by General Boris Petrovich Sheremetov, attacking Livonia, was defeated by von Schlippenbach in the Battle of Rauge. The battle made von Schlippenbach a major general. On December 30, the armies clashed again. Sheremetov now won a decisive victory at Erastfer. The Russians did not, however, exploit their advantage.<sup>145</sup>

On the European arena, the War of the Spanish Succession broke out in 1701; it would last until 1714. In the conflict, France, Bavaria and Cologne stood against Austria, England/Great Britain, the Netherlands, Brandenburg/Prussia and Hanover, to name the more important nations, except for Spain itself.

### 1702

At the end of January, the Swedish main army left its winter quarters in Courland and settled in new quarters in Lithuania. By the end of March, the army marched south, heading for Warsaw. In May, Karl XII stood outside Warsaw, but found no one with whom to negotiate. After inconclusive operations, in which Karl XII defeated a Saxon army in the Battle of Kliszov on July 9, the army took winter quarters around Lublin, southeast of Warsaw.

In April of 1702, in the Baltic Provinces, Major General Baron Carl Magnus Stuart succeeded Erik Dahlbergh as governor general in Riga. In July, Sheremetov marched against von Schlippenbach and his Army of Dorpat, which was defeated in the Battle of Hummelshof on July 19. Parts of Livonia were then

---

<sup>145</sup> Ludvig W:son Munthe, Del III:2, pp. 379–382, 385, 417–420, Arnold Munthe, Del I, pp. 74–75, Wikander, pp. 52–56, Ericson Wolke, *Rysshärjningar*, pp. 99–103 and 109–110, Margus Laidre, *Segern vid Narva: Början till en stormakts fall*, Swedish translation Enel Melberg (Stockholm 2001, copyright 1996 (further on, “Laidre, *Narva*”), pp. 207–220.



subjected to devastation and ravaging. During the year, the small Swedish fortifications of Menzen and Marienburg fell to the Russians (see Chapters 4.2 and 4.3). On Lakes Peipus and Ladoga, the Swedish flotillas fought Russian flotillas of small boats.

On August 12 in Ingria, Cronhiort was defeated in the Battle of Ingrishof; the shores of the Neva River were now open to the Russians. On August 29, Russian vessels attacked von Numers's Swedish Ladoga flotilla, which retreated to Viborg with heavy losses. This retreat signaled the practical relinquishment of Lake Ladoga to the Russians. By the end of October, the Russians had captured the Swedish fortress of Nöteborg (see Chapter 4.4). News from the east on the loss of Nöteborg made the Defense Commission order the fortifications at Vaxholm to be manned and strengthened, and the fortifications in the Swedish archipelago be improved.<sup>146</sup>

### 1703

By the end of February, the Swedish main army moved out of its winter quarters southeast of Warsaw, and Karl XII continued his fruitless negotiations for dethroning August II in Poland. The main army moved to lay siege to the fortified city of Thorn where the Saxon infantry was lodged; on October 4, the city surrendered. In November, the Polish city of Elbing was captured without major bloodshed. The Swedish main army then went into winter quarters in the area around Elbing. During the year, August II concluded a treaty with Tsar Peter. The Russians would supply August with an army of 12,000 men, in addition to a Cossack force led by Hetman Mazepa.

In the spring, Russian forces captured the Swedish fortresses of Nyenskans, Jama and Koporie (see Chapters 4.5, 4.6 and 4.7). Around Nyenskans, the Russian city of St. Petersburg would rise. After the fall of the fortresses, Karl XII expanded the mandate of the Defense Commission. They were now empowered "[...] att sätta trupper och fästningar i stånd utan att för varje gång avvakta Våre orders [...]."<sup>147</sup>

Subsequently, a Russian force, led by Lieutenant General Baron Carl Ewald Rönne, secured Ingria, except for the land around Narva and Ivangorod. In

<sup>146</sup> Ludvig W:son Munthe, Del III:2, pp. 420–431, Arnold Munthe, Del I, pp. 116–117 and 135, Wikander, pp. 63–70 and Ericson Wolke, *Rysshärjningar*, pp. 104–107.

<sup>147</sup> Wikander, p. 72. Translation: "[...] to set troops and fortresses in shape, without awaiting Our orders each time [...]."



Finland, Cronhiort handed over his command to Major General Baron Georg Johan Maydell.

On April 28, the Swedish Ladoga flotilla under von Numers left Viborg and arrived at the eastern end of the Gulf of Finland on May 4. Tsar Peter refrained from naval encounters. In the beginning of October, the flotilla went to Karlskrona to winter. On August 31, Sheremetov crossed the Narva River into Estonia with 7,000 men and began to ruin the land; at least 1,500 villages were burned. All Swedish forces retreated behind the walls of the fortresses as the countryside was destroyed. On March 19, in Livonia and Courland, Colonel Count Adam Ludvig Lewenhaupt fought Russian-Polish forces and won in the Battle of Saladen; he was subsequently named major general and Swedish deputy governor of Courland<sup>148 149</sup>.

#### 1704

In the second week of June, the Swedish main army left its winter quarters and marched on Warsaw. Karl XII's prospective candidate for the Polish throne, Stanislaus Leczinsky, a young man who was governor of Posen, was elected king of Poland by a Polish parliament on July 2. August II responded by calling another parliament, which met in Sandomierz and decided to retain August on the throne and declare war on Sweden. A series of marches began, as the Swedish forces tried to prevent the unification of August's scattered armies. By the end of October, the Swedish Army took winter quarters by the border of Silesia; almost all Saxon troops had left Poland.

During the summer, in Finland, Maydell carried out attacks on Russian territory, but failed to achieve any significant results. On April 20, the Swedish Ladoga flotilla, now led by Vice Admiral Jacob de Prou, arrived in Reval. It carried out an ineffectual bombardment of the Russian fortifications at Retusaari, an island not far from the former Swedish fortress of Nyenskans.

During the year, the Swedish strongholds of Dorpat, Narva and Ivangorod were captured by Russian troops (see Chapters 4.8 and 4.9), after the Swedish Lake Peipus Flotilla had been defeated on May 3. Following these conquests, Tsar Peter ordered the construction of a fortified base camp in the city of Poolsk in Lithuania, which was to be used for a more substantial Russian mil-

---

<sup>148</sup> Gunnar Artéus, "Adam Ludvig Lewenhaupt", in *Svenskt biografiskt lexikon*, Del 22, (Stockholm 1977–1979), p. 618.

<sup>149</sup> Ludvig W:son Munthe, Del III:2, pp. 399–403, 430–431 and 438–439, Arnold Munthe, Del I, pp. 155–156, 160, 162 and 164, Wikander, pp. 70–73, Ericson Wolke, *Rysshärjningar*, p. 108.

itary involvement in Poland. In Livonia on July 27, Lewenhaupt defeated a Polish-Russian army in the Battle of Jakobstadt;<sup>150</sup> he was named commander-in-chief of Swedish field forces in Livonia in November of 1704.<sup>151</sup>

### 1705

In the beginning of the year, Russian troops were concentrated to northeastern Poland, using the Lithuanian city of Grodno as their center. On July 27, the Swedish main army left its winter quarters and marched on Warsaw. On November 18, Sweden and Poland signed a peace treaty. At the very end of the year, the Swedish main army marched east toward Grodno.

In Finland, Maydell and his army of 3,000 men launched ineffectual attacks against the Russians. In the beginning of May, the Swedish flotilla – now called the Nyen Flotilla – led by Admiral Baron Cornelius Anckarstierna, arrived in the Gulf of Finland from Karlskrona. It remained there until the middle of November, when it returned to Karlskrona. On December 29, Lieutenant Colonel Georg Lybecker was made provincial governor of the Viborg Province; Lieutenant General Count Nils Stromberg was made governor general of Estonia.

On July 16 in Livonia, Swedish and Russian troops clashed at the Battle of Gemauerthof. Lewenhaupt and his 7,000-man army won a victory, which delayed Russia's plans of conquest. He was promoted to lieutenant general in August<sup>152</sup>. Tsar Peter then reinforced Sheremetov, and by September, Lewenhaupt was forced into Riga, and Courland was in Russian hands. During the fall, an uprising began in Russian Astrakan. Tsar Peter sent Sheremetov and his troops from Courland to fight the rebels.

In Sweden, Generals Nils Gyllenstierna and Otto Vellingk and Lieutenant Generals Arvid Horn, Karl Gustaf Fröhlich, Karl Nieroth and Knut Posse left the main army to become members of the Council; General Carl Gustaf Rehn-schiöld also became a member of the Council, but he remained with the army.<sup>153</sup>

---

<sup>150</sup> Ludvig W:son Munthe, Del III:2, pp. 453–454, Arnold Munthe, Del I, pp. 244 and 255, Wikander, pp. 73, 74, 77 and 78 and Ericson Wolke, *Rysshärjningar*, pp. 110–111 and 113,

<sup>151</sup> Gunnar Artéus, "Adam Ludvig Lewenhaupt", in *Svenskt biografiskt lexikon*, Del 22, (Stockholm 1977–1979), p. 618.

<sup>152</sup> Gunnar Artéus, "Adam Ludvig Lewenhaupt", in *Svenskt biografiskt lexikon*, Del 22, (Stockholm 1977–1979), p. 618.

<sup>153</sup> Ludvig W:son Munthe, Del III:2, pp. 409, 410, 454–457 and 460, Arnold Munthe, Del II, pp. 301 and 306, Wikander, pp. 78–81, Ericson Wolke, *Rysshärjningar*, pp. 114–115 and Sjögren, *Karl XII*, pp. 450 and 453.

1706

On January 14, Karl XII began to blockade Grodno, holding 25,000 Russian infantry. During March, attempts were made to make Cossack Hetman Mazepa change his camp. Additionally, on February 3, while the Swedish main army was blockading the Russians, Rehnschiöld defeated a Saxon force at Fraustadt. On March 25, the Russians slipped out of Grodno, and a Swedish attempt to pursue yielded no major results.

The following summer was uneventful until Karl XII decided to invade Saxony and crossed its border in the early fall. On September 14, Sweden and Saxony concluded the Peace of Altränstadt. August II resigned as king of Poland, and Saxony was out of the war. The Swedish main army then remained in Saxony for the rest of the year. Meanwhile, Russian General Prince Alexander Danilovich Menshikov's army, 20,000 strong, moved into Poland.

In Finland, Maydell carried out several raids and made an unsuccessful attempt to attack St. Petersburg. The Swedish Nyen Flotilla arrived in the Gulf of Finland, but no major fighting took place at sea. In October, when Karl XII was turning against Saxony, Tsar Peter launched a failed attempt to conquer Viborg (see Chapter 4.10).

During the spring, Swedish forces drove the Russians out of Lithuania. Shortly after Christmas, Russian troops from Dorpat began raiding in Livonia. Lewenhaupt then sent 1,500 men on horse, who successfully blockaded the city, which stopped the raiding. During the fall in Estonia, newly appointed Governor General Lieutenant General Nils Stromberg, with 3,000 men, repelled a Russian force sent from Narva to ravage.<sup>154</sup> In June in Livonia, Lewenhaupt, newly promoted to general, was made governor in Riga and Neumünde.<sup>155</sup>

1707

With the Swedish main army still in Saxony, Russian troops established their headquarters in Warsaw. On August 22, with the Swedish army beginning its eastward march out of Saxony, the Russians withdrew east to Lithuania and Minsk. By the end of the year, the Swedish main army was marching farther east, having rested by the Weichsel River.

---

<sup>154</sup> Ludvig W:son Munthe, Del III:2, pp. 411, 413, 461, 462 and 469, Arnold Munthe, Del II, pp. 311–313, Wikander, pp. 82–88 and Sjögren, *Karl XII*, pp. 478 and 481.

<sup>155</sup> Gunnar Artéus, "Adam Ludvig Lewenhaupt", in *Svenskt biografiskt lexikon*, Del 22, (Stockholm 1977–1979), p. 618.

In Finland, Provincial governor of Viborg, and now Major General and Baron, George Lybecker, was appointed as commander-in-chief of Swedish forces in Finland. On July 24, a Swedish detachment was defeated in the Battle of Kyrölä, and the Russians began to ravage the provinces of Viborg and Kexholm.

On May 14, the Swedish Nyen Flotilla, commanded by Anckarstierna and delayed by the winds on the Baltic Sea, arrived in the Gulf of Finland. In November, the flotilla returned to Karlskrona. In Russia, Tsar Peter was further troubled by a rebellion at the Don River – the Bulavin Rebellion. During the year, Mazepa sent a messenger to Karl XII offering him access to fortifications in Ukraine.<sup>156</sup>

### 1708

In 1708, the Swedish main army marched southeast, reaching the Poltava area in the last months of the year. In the spring, Lewenhaupt had been ordered to bring two-thirds of his roughly 18,000 troops in Livonia, to assist the main army. Having suffered a defeat against Russian troops at Lesnaya, but escaping with a number of men, Lewenhaupt could finally join Karl XII. In November, the Swedish main army went into winter quarters in Ukraine. By Christmas, Russian armies were following Karl XII, who was basically surrounded by significantly larger Russian forces.

Fearing a major attack by the Swedes, Tsar Peter ordered a wave of destruction on his Livonian conquests in the summer. Also of concern were Russian raids into Swedish-held Livonian territory, which were intensified after Lewenhaupt's departure. The Swedish main army remained in southeastern Europe, but in August, Lybecker, with 12,000 men, launched an offensive from Finland against Ingria. The expedition, however, generated no strategic results and was aborted in October.

On April 26, the Swedish Nyen Flotilla left Karlskrona. Before arrival of the Swedish flotilla, the Russians, for the first time, ventured out into the Gulf of Finland. They left their harbors with sixteen light vessels and sailed for Borgå on the southern coast of Finland. On May 11, the Russians burned the city. The Swedish flotilla later took up a position deep in the Gulf of Finland, where they kept the Russian Navy locked up in harbor.

---

<sup>156</sup> Ludvig W:son Munthe, Del III:2, pp. 489 and 490, Arnold Munthe, Del II, pp. 380–384, Wikander, pp. 94–95, Steve Kling, “The Bulavin Rebellion 1707–1708”, in *Great Northern War Compendium*, Volume One, pp. 226–227 and Sjögren, *Karl XII*, p. 481.

In Russia, the Bulavin Rebellion was suppressed during the year. The rebel leader died in the summer, and the rebel forces were defeated in four battles, two in August and two in October. The rebellion had tied up five or six Russian regiments.<sup>157</sup>

### 1709

By the end of January, the Swedish main army proceeded south, farther into Ukraine. On June 27/28/July 8, it was defeated by Russian forces in the Battle of Poltava, and the surviving Swedish troops subsequently surrendered at Perevolochna. The end result: Sweden had lost its main army.

Karl XII escaped into the Ottoman Empire. He had hoped for a war between Russia and the Ottoman Empire, however, in December of 1709, Russia and the Ottoman Empire prolonged the truce that had been concluded in 1700. In June, the alliance between Frederick IV and August II was renewed. In September, Russian troops stood in central Poland, bringing with them the plague. On November 2, a Danish army of around 14,000 men landed at Råå, some four kilometers south of Helsingborg.

During most of 1709, Finland and Estonia were quiet fronts, but in October in Livonia, the Russian siege of Riga had begun (see Chapter 4.11).<sup>158</sup>

## 2.6 OPINIONS ON THE FALL OF THE SWEDISH EMPIRE

The fall of the Swedish Empire has called for an explanation. Sven Lagerbring (1707–1787) was the first person to write a complete Swedish history after 1721. He commented on the fall of the Swedish Empire with a certain resignation, claiming that the losses came as no surprise. He just found it odd that anything was left.<sup>159</sup> Later, the discussion would become more heated.

In the nineteenth century, the fall of the Swedish Empire was often attributed to Karl XII's shortcomings (see the list below). Advocates of this explanation found rich material in the memoirs and notes authored by discontented gener-

<sup>157</sup> Ludvig W:son Munthe, Del III:2, pp. 481 and 490–496, Arnold Munthe, Del II, pp. 380, 400–411, Wikander, pp.100–112, 128–130, Pavel Konovaltjuk and Einar Lyth, *Vägen till Poltava: Slaget vid Lesnaja 1708* (s. l. 2009), pp. 60, 61, 182 and 229–233 and Steve Kling “The Bulavin Rebellion 1707–1708”, in *Great Northern War Compendium*, Volume One, pp. 229–230.

<sup>158</sup> Ludvig W:son Munthe, Del III:2, pp. 510, Wikander, p. 112. 119–127, 138 and 145, Gustaf Jonasson, ”Karl XII i Turkiet”, in *Den svenska historien*, Del 5, p. 294, Peter Ullgren, *Det stora nordiska kriget 1700–1721: En berättelse om stormakten Sveriges fall* (Stockholm 2008), p. 239, Karl-Erik Frandsen, ”The Great Northern War’s Plague Epidemic”, in *Great Northern War Compendium*, Volume Two, p. 38.

<sup>159</sup> Sven Lagerbring, *Sammandrag av Swea rikes historia* (Stockholm 1775), p. 156.

als such as Gyllenkrook.<sup>160</sup> A harsh critic of Karl XII was commercially successful Swedish history writer Anders Fryxell (1785–1881) in his work *Berättelser ur svenska historien* [Tales from Swedish History] where the parts concerning the period of Karl XII were published from 1856 to 1859.<sup>161</sup> The trend to blame Karl XII was common in the upsurge of Swedish history writing during the later part of the nineteenth century and beginning of the twentieth. The influential history work of August Strindberg deserves mention here.<sup>162</sup>

It should be noted that although Fryxell was highly critical of Karl XII, his end analysis of the fall of the Swedish Empire was not solely centered on the king. In fact, he claimed that the Swedish Empire fell because of long-term changes in the geopolitical structure. Prior to the eighteenth century, water had been an important link between people. In the eighteenth century, Europe had become more developed with more people and roads, so land became the connector and water the separator. The Swedish Empire, built around the Baltic Sea, consequently was impossible to defend in the long run.<sup>163</sup> The increase seen in history writing in the nineteenth century then displayed various explanations for the fall of the empire. One of the more original was churchman and history writer Arvid August Afzelius who, in 1868, entirely blamed Rehnschiöld for the defeat in the war, as he had advised Karl XII on the march that ended at Poltava in 1709.<sup>164</sup> Then there was the theory of lack of resources, claiming that the Swedish Empire was doomed to succumb sooner or later since Russia's resources were far superior to those of Sweden. The first to promote this theory appear to have been Swedish history writers C. Georg Starbäck and P. O. Bäckström in 1877. They claimed that Sweden's imperial status was unnatural, since it did not correspond with its resources.<sup>165</sup>

At the turn of the nineteenth and twentieth centuries, a new perspective on the history of the Great Northern War and Karl XII emerged, called the "New

<sup>160</sup> Helge Almquist, Karl XII: "Högtidstal vid Göteborgs högskolas minnesfest på 200-årsdagen av konung Karl XII:s död den 30 november 1918", in *Karolinska förbundets årsbok* Stockholm 1919, p. 55.

<sup>161</sup> Anders Fryxell, *Berättelser ur svenska historien*, Del 21–29 (Stockholm 1856–1859). (Further on, "Fryxell".)

<sup>162</sup> August Strindberg, *Svenska folket: I helg och söcken, i krig och i fred, hemma och ute: eller: ett tusen år af svenska bildningens och sedernas historia* (Stockholm 1882, reprinted Stockholm 2001).

<sup>163</sup> Fryxell, Del 29 (Stockholm 1859), p. 174.

<sup>164</sup> Arvid August Afzelius, *Swenska folkets sago-häfder*, Del 11 (Stockholm 1868), p. 119.

<sup>165</sup> C. Georg Starbäck och P. O. Bäckström, *Berättelser ur svenska historien*, Del 17, (Stockholm 1877), p. 676.

School". This school was advanced by persons such as Harald Hjärne, Ludvig Stavenow, Arthur Stille and Helge Almquist. They were considerably more forgiving with regard to Karl XII. They also claimed the fall of the empire was not inevitable. Ludvig Stavenow explained the theories of inevitability as human nature, which he saw as inclined to make undesirable past events inevitable. He also meant that a look back at the past centuries would make it impossible to maintain the position of the necessity of the fall of the Swedish Empire.<sup>166</sup> Like the claimants of inevitability, Stavenow did not substantiate his claims to the opposite.

In more modern research, Swedish historian Sverker Oredsson in his article "Karl XII och det svenska stormaktsväldets fall i historieskrivning och tradition" [Karl XII and the fall of the Swedish Empire in history writing and tradition] did present a list of twelve explanations why the Swedish Empire fell.

1. Karl XII's decision to wage war on August the Strong of Poland and Saxony from 1701 to 1706, thus abandoning the Swedish Baltic Provinces.
2. Karl XII's decision to march against Moscow and then Ukraine in 1707 to 1709, thus abandoning the Swedish Baltic Provinces.
3. Karl XII's decision to stay in the Ottoman Empire from 1709 to 1714, a period when the Russians conquered large parts of the Swedish Empire.
4. The question whether or not Karl XII was an able strategist.
5. The question of Karl XII's views on diplomacy and negotiations.
6. The question whether or not Karl XII wanted war for its own sake, or if he was too rigid.
7. Karl XII did everything right, but his generals failed him at crucial moments.
8. Karl XII did not lose the Swedish Empire; he died in 1718, and his successors then lost the empire.
9. The fault lay with Karl XII's father, Karl XI, who had made Sweden too many enemies.

---

<sup>166</sup> Ludvig Stavenow, "Karl XII och det svenska stormaktsväldet. Högtidstal vid Uppsala universitets minnesfest på 200-årsdagen efter konung Karl XII:s död den 30 november 1918", in *Karolinska förbundets årsbok* Stockholm 1919, p. 27.



10. Karl XII did everything right, but he was subjected to unusually bad luck. For example, the winter of 1708–1709 was exceptionally harsh.
11. The Swedish Empire was condemned due to insufficient population and a lack of resources. It was just a matter of time until it would succumb.
12. The European powers did not realize that Russia was a threat to western culture, and let Sweden fight the war against Russia alone.<sup>167</sup>

Oredsson's list did not include arguments like Fryxell's. To produce a complete list of all explanations for the outcome of the Great Northern War would, most likely, be difficult. From the above list, number eleven, lack of resources, seems to be the most common explanation accepted today. One example is Estonian historian Margus Laidre, claiming that Russia's superiority in population, area and other resources would be decisive in the long run<sup>168</sup>. In his work on Swedish history, Finnish historian Nils Erik Villstrand claimed that parts of the Swedish Empire possibly could have been saved for some time, if the king had been more clear-sighted.<sup>169</sup>

Michael Roberts's (1908–1997) rationale is not entirely clear, but a claim that Sweden's resources were not the resources of a great power could be seen as a central statement. Roberts also believed it was unfortunate that the inevitable Swedish abdication from greatness came as it did, with a military disaster that, at the time, could have been avoided.<sup>170</sup> In a way, Roberts was then on both sides of the fence – the resources were insufficient, but the military disaster could have been avoided.

In an article in 1919, Arthur Stille pointed out a danger in theories comparing eighteenth-century resources, in that present-day power relations could be conceived as having been permanent over time and, thus, could disturb the historic picture<sup>171</sup>. The lack-of-resources theory also has a theoretical problem. The resources could have been insufficient – creating an inherent problem – or the resources could have been sufficient but were used inefficiently, thereby

---

<sup>167</sup> Sverker Oredsson, "Karl XII och det svenska stormaktsväldets fall i historieskrivning och tradition", in Sverker Oredsson (red.), *Tsar Peter och kung Karl: Två härskare och deras folk* (Stockholm 1998), pp. 275–277.

<sup>168</sup> Laidre, *Narva*, p. 227.

<sup>169</sup> Nils Erik Villstrand, *Sveriges historia 1600–1721* (Stockholm 2011), pp. 229–230.

<sup>170</sup> Roberts, pp. 150–152.

<sup>171</sup> Arthur Stille, "Tvåhundraårsminnet af Karl XII:s död: Högtidstal vid Lunds universitets minnesfest på 200-årsdagen efter Konung Karl XII:s död den 30 november 1918", in *Karolinska förbundets årsbok* Stockholm 1919, p. 43.



causing the Swedish Empire to fall, due to problems that were not inherent. There are, of course, complicated problems in determining which of the two different cases applied at the time.

As mentioned above, weaknesses in the Swedish fortification system have not been advanced as one of the reasons for the fall of the Swedish Empire. Chapter 5 will discuss whether or not such weaknesses existed and, if so, how they could affect our perception of the fall of the Swedish Empire.

## 3. FORTRESS WARFARE

### 3.1 INTRODUCTION

On the surface, fortress warfare is about sieges – where a garrison is defending a fortified place against an enemy who tries by any and all means to conquer it. This description is accurate, but there are a few more dimensions to fortress warfare. When a fortress is attacked, it has, in one respect, failed its own purpose. The best fortress is one that is never attacked – the one an aggressor will always consider too costly to conquer and, therefore, refrains from attacking. In the best scenario, the aggressor shelves the plans for war altogether.

From the defender's point of view, fortress warfare is about giving leverage to its troops.<sup>172</sup> If 1,000 soldiers are attacked by 2,000 in an open field, the 1,000 soldiers will, *ceteris paribus*, be defeated. If the 1,000 soldiers are protected by a fortification, the likelihood is that the 2,000 cannot defeat them. This quest for leverage has existed for centuries. In fact, the walls of Babylon, Ur of the Chaldees, and Troy date back to the third millennium BC<sup>173</sup>.

Fortress leverage for the defender was created in several ways. First, since height normally gave an advantage in battle, fortress walls normally placed the defender in a higher position than that of the attacker. Second, walls offered protection for the defender, in that the risk of their being hit by a projectile was reduced. Third, a fortification would most likely channel the attacker, e.g. making it impossible for the 2,000 soldiers to fight the 1,000 at the same time (see below). The reasoning is summarized in one central thought which, to a large extent, describes the concept of fortress warfare, namely “stormproof”. For some reason, the German translation *sturmfrei* is often used. Quentin Hughes defined the concept in his book *Military Architecture*: “A work is said to be stormproof when, given a complete and efficient garrison, attacking infantry can be destroyed as fast as they can approach.”<sup>174</sup> As long as a fortress is *sturmfrei*, it will remain unconquered. It could be argued whether or not Hughes's requirement “given a complete and efficient garrison” is necessary.

---

<sup>172</sup> Antoine de Ville, *Les Fortifications* (Paris 1666), p. 450. (Further on, “de Ville (1666)”.)

<sup>173</sup> Sidney Toy, *A History of Fortification: From 3000BC to AD1700* (Barnsley 2005), first published in 1955, p.11. (Further on, “Toy”.)

<sup>174</sup> Quentin Hughes, *Military Architecture: The Art of Defence from Earliest Times to the Atlantic Wall* (Liphook 1991, First Edition London 1974), p. 247. (Further on, “Hughes”.)

*Sturmfreiheit*, the state of being *sturmfrei*, could be illustrated by an example. If 100 men charged against a fortress wall with four ladders, they could land four men simultaneously on top of the fortress wall. If the fortress was defended by ten men, they should – all things being equal – be able to fend off the attack. If the 100 men raised twenty ladders against the wall, the ten men on the walls would most likely – all things being equal – be defeated. As long as the attacker charged with less than eleven ladders, the fortress would be *sturmfrei*. *Sturmfreiheit* then is obviously time dynamic. If the attacker continually attacked with ten ladders against ten defenders over an extended period of time, the latter would sooner or later be completely exhausted, while a superior attacking force could continue to send rested men into the battle. In the end, the place would no longer be *sturmfrei*. The concept of eliminating *Sturmfreiheit*, and fortress warfare, could be understood as the attackers managing to overwhelm the defenders, nullifying the advantage of the defensive works, using various techniques to do so.

The dynamics in all respects around *Sturmfreiheit* are an important part of the history of fortification warfare, where the defender would strive to maintain it and the attacker would try to eliminate it. It is always useful to bear in mind the concept of *Sturmfreiheit* when studying fortress warfare.

Since this chapter includes an amount of military theory, it could be useful to discuss the subject here, although it will be revisited throughout the chapter. Lars Ericson Wolke, in his *Krigets idéer* [The Ideas of War],<sup>175</sup> presented an extensive overview of Swedish literature on military theory. He pointed out that the first work on military theory to be published in Swedish was a work by Francisci Mariae, Duke of Urbin, which was translated into Swedish by Aegidius Girs and published in 1626 as *Krijgz Discurs* (Holmiae 1626)<sup>176</sup>. The work consists of sixty-two questions on war that are answered by the duke. Of these, well over half are relevant to fortress warfare.

More works in Swedish followed. In 1672, Johannes Gezelius (the Elder) published the *Encyclopaedia synoptica*,<sup>177</sup> a work written in Latin in which fortifications were included under the heading *Militaris architectonica*. He subdivided fortifications into *Magnas*, *Mediocres* and *Parvas* [large, medium and

---

<sup>175</sup> Lars Ericson Wolke, *Krigets idéer* (Stockholm 2007), pp. 92–97.

<sup>176</sup> Aegidius Girs, *Krijgz Discurs* (Holmiae [Stockholm] 1626). (Further on, “Girs (1626)”.)

<sup>177</sup> Johannes Gezelius, *Encyclopaedia synoptica* [...] (s. l. 1672), pp. 579–608.

small]<sup>178</sup> and thus introduced a structure for fortification not seen in Girs's work. For the most part, Gezelius focused on the geometrics of fortress construction and the difference between regular and irregular works.

In 1691, volume eight of a work intended for the education of young nobles was published. The author was Åke Rålamb and it was titled *Fortification eller Adelig öfnings ottonde tom, medh behörige kopparstycken*, (Stockholm 1691). This book focused on construction options and presented several different manners of fortification. Included also, were comments on fortress warfare.<sup>179</sup>

Fortress warfare could have ramifications beyond the siege battle itself. One is the “countereffect”: When a fortress is lost, it begins to work against its former owner, who then has to divert army resources to reconquer it or see the land controlled by the fortress as lost (see below). This countereffect was not unknown to Swedish military men of the seventeenth century. Girs's work of 1626 already contained warnings against fortifications which could not be held, and the notion that the enemy would benefit from captured fortifications<sup>180</sup>.

Acknowledging these observations – not having any fortresses at all – might seem like a safer strategy. This would not, however, be quite accurate. Without a fortress in an important area, the enemy could move in with superior field forces and begin constructing its own fortress. In such an instance, the nation defending the territory would be forced to send an army to the area, defeating the enemy and keep him from constructing the fortress. History offers several examples of attackers building fortresses on undefended enemy land. One is Landskrone Castle located near today's St. Petersburg in Russia and built by Swedish troops in 1300; the Russians conquered the castle in the following year<sup>181</sup>.

In the first place, the obvious conclusion is that fortresses should not be lost. In the second place, no defensive strategy could be based on fortresses only. Field armies played a vital role in any defensive strategy, not the least of which was to hinder an enemy from building fortresses in one's own territory.

---

<sup>178</sup> Johannes Gezelius, *Encyclopaedia synoptica* [...] (s. l. 1672), pp. 579 and 585.

<sup>179</sup> Åke Rålamb, *Fortification eller Adelig öfnings ottonde tom, medh behörige kopparstycken* (Stockholm 1691). (Further on, “Rålamb (1691)”)

<sup>180</sup> Girs (1626), pp. 72–74.

<sup>181</sup> Lovén, p. 99.

## 3.2 FORTRESSES

### INTRODUCTION

The definition of a fortress should be considered, since there are various definitions used. Hartwig Naumann, the author of a German standard work on fortification, suggested a broad definition: “[...] die Produkte der *Architectura militaris*, der Kriegsbaukunst.”<sup>182</sup> This definition would then contrast fortresses to construction for peaceful use, *Architectura civilis*.

Writer Pierre Rocolle, an author of a French standard work on fortifications, did not offer a definition, but instead pointed out the development of permanent fortifications, as opposed to makeshift or temporary ones.<sup>183</sup> In his dissertation on medieval castles and fortifications in Sweden, Lovén did expand on the concept of fortifications. He concluded that the modern definition of a fortification is a place surrounded by material blocking humans, means of transportation and weapons. On reflection, “projectiles” could have been a better choice of words than “weapons”. Lovén then emphasized that a fortification should be surrounded by defensive works, but also stated that there were exceptions to this rule. Lovén also pointed out that it was impossible to define a fortification precisely. He noted that any farmstead could have a wall built around it, which did not make it a castle.<sup>184</sup>

It is not obvious how to define a fortress. In this work, however, the following assumption is used: “A fortress is a permanent defensive construction.” To this should be added: “A fortress needs to have lodgings for a garrison to live permanently on the site.” The definition of a fortress then excludes works such as temporary field fortifications, observation posts along a coast or a sentry box outside a palace.

### THE PURPOSE OF A FORTRESS

Looking at fortresses and fortress warfare, the purpose of each fortress should be considered. Having no idea about the purpose of a nation’s fortresses, it becomes difficult to evaluate the outcome and effectiveness of fortress warfare.

---

<sup>182</sup> Hartwig Neumann, *Festungbau-kunst und -Technik: Deutsche Wehrbauarchitektur vom XV. bis XX. Jahrhundert* (Bonn 2004), p. 9. Translation: “[...] the product of *Architectura militaris*, the art of military construction.”

<sup>183</sup> Pierre Rocolle, *2000 ans de fortification française*, Part 1 and 2, (Limoges 1972), Part 1, p. XIII.

<sup>184</sup> Lovén, pp. 27–28.

Literature touching on the purposes of fortresses is scarce, as many of the previous writers focused on the actual construction while not concerning themselves with the reason for the construction<sup>185</sup>.

The idea that fortresses control ground is sometimes found in earlier research. In his *The Military Revolution* (Cambridge 1988), Geoffrey Parker quoted R. C. Smail's *Crusading Warfare 1097–1193* (Cambridge 1956), saying that an enemy could occupy an area with field army forces, but if he captured no fortresses, his control would end when the army evacuated the area. Smail then concluded that the objective of an invader, who wanted to capture territory, was not to destroy the defender's army, but to capture fortified points.<sup>186</sup>

Another example is Jeremy Black's statement in *The Cambridge Atlas of Warfare: Renaissance to Revolution 1492–1792*, where he saw fortresses as “[...] tangible manifestations of regional control”<sup>187</sup>. A third example of the controlling property of fortresses is clearly expressed in Jeremy Black's description of the British conquest of Canada in 1759–1760 “[...] on 8 September 1760 the 3,520 French troops in Montreal surrendered to Amherst's force of 17,000. Canada had fallen.”<sup>188</sup> In 1763, Canada officially came into the hands of the British in the Peace of Paris.

In his *Norges festinger: Fra Fredriksten til Vardøhus* [The Fortresses of Norway: From Fredriksten to Vardøhus] (s. l. 1987), Norwegian historian Guthorm Kavli pointed in the same direction. He claimed that “[...] kan man si at i århundrer fremover var den som var herre på Akershus også herre i Norge.”<sup>189</sup>

The logic of statements like the one above is not completely obvious. To make an attempt to develop the idea put forward by Kavli, the fundamental idea is to control a certain area by means of force. The one who controls a fortress, however, does not necessarily control much land around the actual fortress itself. In the eighteenth century, the area of actual control was defined by the range of the best cannons in the fortress, which, in reality, would not exceed two kilometers at best. For this reason, there must be more to Kavli's statement.

---

<sup>185</sup> Compare Rocolle (1972) and Neumann (2004), *passim*.

<sup>186</sup> Geoffrey Parker, *The Military Revolution* (Cambridge 1988), p. 7, quoting R. C. Smail, *Crusading Warfare 1097–1193* (Cambridge 1956), p. 24, pp. 21–25, 39 and 204–205.

<sup>187</sup> Jeremy Black, *The Cambridge Illustrated Atlas of Warfare: Renaissance to Revolution 1492–1792* (Cambridge 1996), p. 90.

<sup>188</sup> Jeremy Black, *European Warfare 1660–1815* (London 1994), p. 142.

<sup>189</sup> Guthorm Kavli, *Norges festinger: Fra Fredriksten til Vardøhus* (s. l. 1987), p. 41. Translation: “[...] one could say that for centuries to come, whoever ruled Akershus [a fortress in Oslo] also ruled Norway.”

Time would be a crucial factor. If, for example, Akershus had a garrison of 1,000 men, it could be besieged by a force of at least 1,000 and thereby kept contained. With no other Norwegian defenses, anyone with a small force could do as they pleased in the rest of Norway, as long as the Akershus garrison was contained. Thus, the statement that ruling Akershus equals ruling Norway was not quite accurate. If the size of the siege force dropped to perhaps 500 men, the Akershus garrison could sally and defeat the siege force. If the siege force and the fortress garrison were alone in contesting power in Norway, the Akershus garrison would now be in charge. The opposing power had only one option if it wanted to regain power in Norway – send a new siege army of 1,000 men to force the garrison of Akershus to return to their fortress. To control Norway then called for a permanent siege force of 1,000 men around Akershus. In the example, the only way to permanently resolve the situation for the attacking party was to conquer Akershus. The conclusion is that the possession of Akershus meant the rule of Norway, but only in an indirect way.

The above discussion somewhat mimics Christopher Gravett's reasoning in his *Medieval Siege Warfare*. Here, Gravett claimed that castles controlled the countryside around them by providing bases from which squadrons of knights could ride out and fight an enemy. An enemy passing such a stronghold would leave himself open to constant harassment and a threat to his lines of communication and supply.<sup>190</sup>

Thus, possession of a fortress in a certain area does, in general terms, give control of that area. The extent of this control, however, would depend on the size of the garrison in the fortress. The size of the garrison would define the level of threat an unconquered fortress entailed. If left unguarded by an even larger siege force, a large garrison could pose a threat in the rear to an army advancing beyond it. If left unguarded, a large garrison could also begin to influence a considerable area around the fortress. A large garrison would also be a political statement, saying "we are still here, and we are here in force".

Then, what could be said about Dahlbergh's view of the purposes of the Swedish fortresses, judging from his 1698 memorandum? It is obvious that Dahlbergh was mostly concerned about population and political centers. Stade, Wismar, Stettin, Stralsund, Riga and even smaller cities like Ottersburg in Bremen, should be fortified.<sup>191</sup> Additionally, Dahlbergh believed in the purpose of

---

<sup>190</sup> Christopher Gravett, *Medieval Siege Warfare* (London 1990, reprinted 1999), p. 3.

<sup>191</sup> Dahlbergh 1698, s. p. [41], [42], [34], [32], [39] and [45].

using fortresses to stop the enemy at the frontiers. One example is his suggested improvement of fortifications at the passes on the Peene River in Swedish Pomerania<sup>192</sup>. Another of his examples is advocating a fortress in Livonia near the eastern border.<sup>193</sup>

Dahlbergh also saw fortresses as bridgeheads for Swedish armies attacking on the continent. Here, Dahlbergh primarily seems to have had Germany in mind, by mentioning Peenemünde in Swedish Pomerania and Wismar as important places for debarkation of Swedish armies.<sup>194</sup> Dahlbergh also pointed at a factor often overlooked in earlier research – the importance of fortifications for national prestige.<sup>195</sup> In his 1698 memorandum, Dahlbergh did not consider the issue of controlling land while the main army was otherwise occupied.

Much can be said about the purpose of fortresses. In this study, it will be assumed that the major motive of the vast majority of the Swedish fortresses was to “controll land” – maintaining the territory of the Swedish Empire. The Swedish fortification system should therefore be evaluated from that perspective. As long as a fortress in a province was still in the hands of the Swedes, the province could be considered still to be a Swedish possession. The operational imperative for the Swedish planners, thus, should have been to construct fortifications which could be efficiently defended against a siege army for an extended period of time.

## FORTRESS CONSTRUCTION

### *Introduction*

In this chapter, a short overview of the vast topic of fortress construction will be presented. The goal here is to present the main concept of fortress construction and introduce the various theories which will be covered further in this study. The overview will also serve as a structure for estimating the status of the Swedish fortification system in the Great Northern War.

---

<sup>192</sup> Dahlbergh 1698, s. p. [39].

<sup>193</sup> Dahlbergh 1698, s. p. [31].

<sup>194</sup> Dahlbergh 1698, s. p. [38].

<sup>195</sup> Dahlbergh 1698, s. p. [13], [42] and [48].



*Large, medium or small*

Fortresses were built in different sizes. In his book on fortification from 1691, Åke Rålamb subdivided the fortresses into large, medium and small [“stora”, “medelmåttiga” and “lilla”].<sup>196</sup> In the seventeenth century, the distinction between various sizes was made from various measurements of bastions and walls.<sup>197</sup> Garrison size, however, will be the leading measurement for size in this study. The general principles followed are that a fortress with a garrison of less than 1,000 men will be considered small, 1,000 to 5,999 medium and 6,000 and over large. The limits are set by the author of this study, since there is a lack of guidelines in earlier research and fortification theory.

Contemporary military theory warned against defense of small or weak fortresses. Antoine de Ville suggested that a bad place should normally not be defended against an enemy’s main army.<sup>198</sup> Girs’s work stated that “En Capiten skall icke lättelighen underståå sigh at förswara hwar then ringste Stadh eller Befästning uthi Landet.”<sup>199</sup> In modern research, German historian Henning Eichberg noticed that small fortifications had served very little purpose in the wars in Bremen and Verden between 1627 and 1712.<sup>200</sup>

*The Construction*

The topic of fortress construction fills several older and modern books, since it is the main interest of many writers<sup>201</sup>. The question of construction will be kept limited in this study. The presentation of fortress construction is supported by the picture below, originating from a work by French writer Allain Manesson-Mallet, who published his work in 1685.

---

<sup>196</sup> Rålamb (1691), pp. 160–162.

<sup>197</sup> See for example Pierre Bourdin, *L’Architecture militaire* (Paris 1655), p. 92.

<sup>198</sup> de Ville (1666), p. 453.

<sup>199</sup> Girs (1626), p. 6. Translation: “A captain shall not easily venture to defend each of the smallest cities or fortresses in the nation.”

<sup>200</sup> Henning Eichberg, *Militär und Technik: Schwedenfestungen des 17. Jahrhunderts in den Herzogtümern Bremen und Verden* (Düsseldorf 1976), p. 95.

<sup>201</sup> Compare for example Neumann (2004) and Rocolle (1972) for modern works. For seventeenth century works, see below.



**Picture 3.1** The picture above shows the main principles for the fortifications existing by 1700. (Source: Allain Manesson-Mallet, *Les travaux de Mars ou L'art de la guerre* (Paris 1685), p. 47.)

Allain Manesson-Mallet divided fortifications into offensive, defensive, natural, artificial, ancient, modern, regular and irregular<sup>202</sup>. From here, all types can be eliminated except for ancient and modern. Natural fortresses could be either strongholds created by nature herself, which are not dealt with in this study, or as Allain Manesson-Mallet indicated in his picture, they could also be fortresses located in a way to enhance their defensive properties. All remaining fortresses are then “Artificielle”. This concept can be understood as located on plane or flat ground, where the fortress is not supported by terrain features. The matter of location is dealt with below.

Offensive fortifications are siege works, but are beyond the scope of this study. As such, all fortifications studied here are defensive. Only modern fortifications could be regular or irregular, with the difference being if, from above, they presented a regular geometric shape or not. This is an aspect of construction which is not covered in this study.

The construction principles for regular or irregular fortresses heavily occupied the minds of fortifiers of the seventeenth and eighteenth centuries<sup>203</sup>. The question, however, seems to have been more of theoretical interest than one of practical interest.

The ancient fortifications [“Anciennes”], as seen in the lower left part of the picture, developed on the European continent during medieval times.<sup>204</sup> The principles were that walls and towers comprised the central part of the fortification. Outside the wall, there was normally a moat, wet, that is with water in it, or dry, to make it more difficult for a besieger to bring up ladders to the walls, or various siege machines like metal clad battering rams<sup>205</sup>. The invention of the moat, sometimes called the “ditch”, stems from antiquity. A river or a canal could substitute for a ditch – at least in some directions around a fortification.<sup>206</sup> Since stone-throwing machines had limited power, the concept of the ancient fortifications worked well for a long time.<sup>207</sup> The arrival of gunpowder weapons in the beginning of the fourteenth century brought change. In 1494, gun-

---

<sup>202</sup> Allain Manesson-Mallet, *Les Travaillies de Mars* (Paris 1685), p. 46.

<sup>203</sup> See for example Pierre Bourdin, *L'architecture militaire ou l'art de fortifier des places regulieres et irregulieres. Expliqué, pratiqué, & démontré d'une façon facile, & agreable. Avec un abregé de la pratique de la geometrie militaire*, (Paris 1655), Georg: And: Böckl, *Manuale Architecturae Militaris*, Theil I–III, (s.l. 1647) and Antoine de Ville, *Les Fortifications* (Paris 1666).

<sup>204</sup> See for example Armin Tuulse, *Borgar i västerlandet* (Stockholm 1952) and Toy.

<sup>205</sup> Compare de Ville (1666), p. 436.

<sup>206</sup> Toy, p. 11 and Duffy, Part II, p. 297.

<sup>207</sup> See for example Jim Bradbury, *The Medieval Siege* (Woodbridge 1994), p. 196.



powder artillery had developed to the point where French King Charles VIII could bring a siege train of cannons to Italy, where he could rapidly smash the stone walls of the existing fortifications, thereby making the ancient concept obsolete<sup>208</sup>. Since the initiative could not just be handed over to the attacker, a countermeasure had to be found and it came rather rapidly. The answer was the bastions, connected by low walls<sup>209</sup>. Among the first to express the new idea was Giambattista della Valle di Venafro, who published a work in 1521 where fortifications with thick ramparts and small round or angular towers were described.<sup>210</sup> The bastion system is illustrated in several of the elements in the picture above. The “Artificielle” shows these principles as seen from above. The inner part, containing the word “Artificielle” could be a city or just the lodgings and administrative buildings of a fortress. Next in the layer of the “Artificielle”, are five bastions pointing out from the straight walls.

The bastions can also be seen as the larger works pointing out in the figure below, “Moderne”. Bastions were artillery platforms, and the reasoning behind the shape of a bastion fortress was that there were to be no blind spots around the fortress where an enemy could prepare an attack with impunity<sup>211</sup>. The bastions and the wall, often called the “curtain”, formed an unbroken line of defense, which the enemy preferably should not pass. This line of defense was called the “magistral line”. On fortress plans, it is often marked by a thick black line.<sup>212</sup> The first example of the bastion system being used in Nordic nations is Uppsala Castle [“Uppsala slott”], where a bastioned front was built in the days of Gustav Vasa, most likely in the 1550s.<sup>213</sup>

In the “Artificielle”, the grey area outside the bastions and the walls is the moat – wet or dry. The small triangles in the moat are “ravelins”, also known as “half-moons” or, in French, *demi-lunes*<sup>214</sup>. These were among the first representatives of “outworks”, fortifications detached from the main defensive line. Outworks began to emerge by the end of the fifteenth century<sup>215</sup>. An outwork was always open in the back. If an enemy captured a ravelin, he would be subject to fire from the

<sup>208</sup> Toy, p. 188.

<sup>209</sup> See for example Eric Langenskiöld, *Michele Sanmicheli: The Architect of Verona*, Master’s thesis, (Uppsala 1938), pp. 144–166.

<sup>210</sup> Duffy, Part I, p. 21.

<sup>211</sup> G. U., “Bastion”, in *Nordisk familjebok*, Part 2, (Stockholm 1878), column 48.

<sup>212</sup> Hughes, p. 246.

<sup>213</sup> Törnquist, pp. 276–277.

<sup>214</sup> Duffy, Part II, p. 297.

<sup>215</sup> Toy, p. 189.

main defensive line. If the ravelin was not triangular but straight, it would have been a “tenaille”. The bastions and the walls connecting them were low and built of earth, thereby absorbing the impact of cannonballs better than stone walls<sup>216</sup>.

In the next layer in the “Artificielle”, a thin white line can be distinguished outside the moat, which is the “covered way”, basically a trench from where infantry could fight advancing enemies. If the thin white line was intersected by squares, they would have been “*places des armes*”, larger areas where infantry could gather to sally or to strike against an enemy who had captured part of the covered way. Outside the covered way are what appear to be steep sloping fields. In reality, these might not have been steep at all, just gently falling out from the covered way. This slope was called the “glacis” and was kept completely clean and smooth, having short grass as the only vegetation. Here, attacking infantry would find no cover when advancing across it.<sup>217</sup>

This is a short description of the fortification system which was modern in 1685, and still remained so in the years 1700 to 1721. The new type of works was low and thick, created by large volumes of earth. The earth could be covered with a layer of stone or grass and, although covering with stone was more expensive, it generated lower costs in maintenance, since grass-covered fortifications decayed with time. The new system meant that the artillery was again at a disadvantage. Modern fortresses developed quickly in the Netherlands, where the Dutch were fighting a war of liberation against the Spanish from 1568 to 1648<sup>218</sup>. The competition between walls and artillery was an ongoing process.

When the first bastion fortresses emerged, artillery was definitively at a disadvantage because it had a slow impact on earthen walls and bastions<sup>219</sup>. Artillery then developed to become more accurate and powerful, gradually reducing its disadvantage. A serious blow against the bastion system was delivered by French engineer Vauban, who invented “ricochet fire”. Under this system, the balls bounced forward, hitting the fortification at a low angle, causing severe damage to personell and materiel. When the bouncing balls struck against the defender’s cannons, they were silenced. The system was first used during the French siege of Philippsburg in 1688 and then perfected in the French siege

---

<sup>216</sup> Girs (1626), p. 85.

<sup>217</sup> L. W:son M., ”Betäckta vägen”, in *Nordisk familjebok*, Del 3 (Stockholm 1905), column 181, Neumann, p. 242 and L. W:son M., ”Fästning”, in *Nordisk familjebok*, Del 9, (Stockholm 1908), column 313.

<sup>218</sup> Duffy, Part I, p. 91.

<sup>219</sup> L. W:son M., ”Befästningskonst”, in *Nordisk familjebok*, Del 2, (Stockholm 1904), column 1198.

of Ath in 1697.<sup>220</sup> At the siege of Ath, all but two of the defender's cannons in the target area were rendered out of action after the first day of ricochet fire. Afterward, it was concluded that the bouncing balls had killed 100 defenders each day and wounded several others.<sup>221</sup> When the defender's cannons were silenced, the attackers could focus on reducing the fortress walls, and soon the fortress would no longer be *sturmfrei*. The defenders could then bring up new cannons to the point of attack, to replace the ones destroyed by ricochet fire, which, most likely, would have just prolonged the process, forcing new rounds of ricochet fire from the besiegers.

The increased power of artillery had not gone unnoticed by fortifiers such as Erik Dahlbergh. One of the countermeasures was to strengthen the bastions by making them higher, steeper, better armed and built in two layers. Two layers meant introduction of the "cavalier", a high platform within the bastion.<sup>222</sup> The process of improving the bastions made them less susceptible to ricochet fire, which was more effective against low bastions.

By 1700, fortress constructions could vary considerably. Some fortresses were medieval in their character, having steep walls rapidly razed by modern artillery; some were fitted with older types of bastions, sensitive to ricochet fire; and some had modern bastions with considerable resilience against artillery fire. Constructions did not form a digital scale, but rather an analogue one. A large bastion could be considered strong, even though it was not the latest model. To classify an individual fortress construction in 1700 as strong or weak is a task with no obvious answers. An attempt to do so, however, will be made in Chapter 4. When estimating the strength of a construction, Girs's work noted that the smallest mistake could make a strong place weak<sup>223</sup>. Thus, the general strength of a fortification will be determined by its weakest link.

A few more comments about Picture 3.1 can be made. In the figure "Defensive", just on the edge of the covered way, and in the figure "Moderne", palisades can be seen. One of the drawbacks of the new system was that it did not stop an infantry advance as efficiently as the "Ancienne". Scaling a high vertical

<sup>220</sup> Joseph Jobé, "De la guerre de Trente Ans à la Révolution française (1789)", in J. Jobé (ed.), *Historie illustrée de l'artillerie* (Lausanne 1981), p. 33.

<sup>221</sup> Ostwald, p. 31.

<sup>222</sup> Compare Ragnar Nurk, "Erik Dahlbergi Narva Bastionide projektist ja selle võimalikest eeskujudest", in Merike Ivask (ed./Toim.), *Narva Museum. Toimetised*, (Narva 2015), p. 38 and passim and Ragnar Nurk and Robert Treufeldt, "Uusaeg tõi bastionid", in *Horisont* no 5, (Tallinn 2014), p. 38.

<sup>223</sup> Girs (1626), p. 97.

wall was obviously difficult, but in the modern system, attacking infantry could sometimes run or walk up the slopes of the bastions and the walls. French writer on fortification, Antoine de Ville, noted that the modern fortress did not protect against surprises, it only supported the battle with cannons and firearms<sup>224</sup>. Only a moat would create an obstacle difficult for attacking infantry to pass, especially if it was wet. The solution was palisades. More palisades were the simplest and most cost-effective way to rapidly improve defensive properties. For example, sharpened wood trunks could also be planted horizontally on outer slopes of bastions and walls to make it even more difficult for infantry to advance, or hawthorn as another option, could be planted there<sup>225</sup>.

In the lowest left figure describing a “Reguliere”, several works can be seen next to the “ravelins”. The ones appearing to have two horns were called “hornworks”, the one looking like a crown on the extreme low left was called a “crownwork” and the one at the bottom center, looking like it had three horns, was called a “swallow’s tail”. The outworks presented were the more important ones, but there were others which are not commented upon here.

The main idea behind the outworks was to delay the attacker, by presenting him with more works to capture, and also to push the enemy artillery farther away from the main defensive line. In the seventeenth and eighteenth centuries, the efficiency of artillery would vary dramatically with the distance to the target. The preferred firing distance for heavy siege artillery was 250 meters<sup>226</sup>.

As to things not seen in Picture 3.1, “bombproof shelters” would be one of the more important. In Dahlbergh’s 1698 document, he claimed that what was falling out of the sky was more dangerous in modern warfare than the men on the ground<sup>227</sup>. Thus, it became important to build shelters which were strong enough to protect men and materiel from falling mortar bombs. These shelters needed to be massive in order to be efficient. Already in 1484, the Powder Tower of Prague was built with a roof covered by 5.4 meters of soil to make it bombproof.<sup>228</sup>

To comment briefly on the “Offensive”, Picture 3.1 illustrates how a besieging force would build a line around the fortress where some of the elements are recognizable from the fortress works. An example is the hornwork built

---

<sup>224</sup> de Ville (1666), p. 450.

<sup>225</sup> I. Wärnskiöld, *Fragmenter aff fortificationsfundamenterne: Interims-wiis opsatte*, Andra dehl, (s. l. 1673), paragraph 30, s.p.

<sup>226</sup> Jonas Hedberg, *Kungl. artilleriet: Carl X Gustafs tid* (Stockholm 1982), p. 44.

<sup>227</sup> Dahlbergh 1698, s. p. [34].

<sup>228</sup> Hughes, pp. 140–141.

by the besiegers. The “z” in the center shows how the besieger dug trenches to approach the fortress, getting closer for a final storm, after shooting a breach in the walls (see also Chapter 3.3 Resolving Fortress Warfare).

The work of Allain Manesson-Mallet referred to above is one of the typical fortification books of the time. Contemporary literature on fortification focused on actual construction. A work on fortification in the seventeenth century would, to a large extent, be filled with various tables showing angles for bastions and other works. The writers relied heavily on geometry. Well-known works are Antoine de Ville’s *Les Fortifications* (Paris 1666), Georg And: Böckl’s *Manuale Architecturae* (s. l. 1647), *Traite des Fortifications contenant Les Maximes de l’Architecture*, published by Jean Eric Hanh (Leipzig 1670), Pierre Bourdin, *L’Architecture Militaire* (Paris 1655), I. Erard de Barle-le-Duc’s *Fortificatio* (Frankfurt am Mayn 1604), Samuel Marolois’s *Mathematicorum sui seculi facile principis artis Muniendi sive fortificationis* (Amsterdam 1644), Joseph Furttenbach’s *Architectura Martialis* (Ulm 1630) and *Architectura militaris und civilis* (Ulm 1635), Allain Manesson-Mallet’s *Les traveaux de Mars* (Paris 1685), Adam Freitag’s *Architectura Militaris nova et aucta, oder Neue vermehrte Fortification, von regular Vestungen, von Irregular Vestungen und Hussen wercken, von praxi offensiva und defensiva* (Leyden 1631, 1635 and 1642), also published under the name of Adam Fritach, as *L’Architecture militaire ou La Fortification Nouvelle, Augmentée et enrichie de forteresses regulieres, Irregulieres, et de hors; le tout a la pratique moderne* (Leide [Leyden] 1635).

Much of what was published on the continent could be assumed to have been known in Sweden, although the full extent of that is uncertain. On this matter, Erik Dahlbergh would be the more interesting person to study. Ernst Ericsson’s and Erik Vennberg’s biography on Erik Dahlbergh<sup>229</sup> contains several lists of Erik Dahlbergh’s inventories. One list reflects that Dahlbergh, as a young man in 1654, possessed architectural works by Antoine de Ville and “Freijtag”.<sup>230</sup> The latter could possibly be Adam Freitag and his work *Architectura militaris nova et aucta*. The Dahlbergh archive, kept at the National Archives [“Riksarkivet”] in Stockholm, sheds further light on Dahlbergh’s library. A list compiled in July of 1701 shows the books that Dahlbergh had brought with him from Sweden to his posting as governor general of Riga. Here it is speci-

---

<sup>229</sup> Ernst Ericsson and Erik Vennberg, *Erik Dahlbergh: Hans levnad och verksamhet: Till 300-årsminnet 1625–1925* (Uppsala and Stockholm 1925). (Further on, “Ericsson and Vennberg”.)

<sup>230</sup> Ericsson and Vennberg, p. 160.



fied that an Antoine de Ville book was his *Architectura Civilis*, not the military one. Among the books Dahlbergh brought, which could be assumed to have been the core of his library, there was only one other book about architecture, Muett's work on Palladi's *Architectura Civil*. Other literature on the list is mainly of a religious or judicial nature. There is also a list of books purchased by Dahlbergh on a journey to Hamburg in September of 1698. At the beginning of the list is a book about Asia, Syria, Palestine and Mesopotamia.<sup>231</sup> A picture then emerges that Dahlbergh was not a warrior to the core, rather the opposite. He appears to have been a man deeply concerned with religion and curious about the world beyond his own horizon. This picture fits well with the one painted by his biographers Ericsson and Vennberg, who claimed that the young Dahlbergh was a man aspiring to get out into the world, to satisfy his urge for knowledge and art.<sup>232</sup> The Dahlbergh inventories also contain a large number of copperplate prints with various motifs, often cities and fortifications.<sup>233</sup> The Dahlbergh inventory at the National Archives ["Riksarkivet"] reveals that Dahlbergh was not unaware of Vauban's activities. One entry reads "Monsieur Veaubants Dirct: des Forfif, Fortifications acter, förslag och relationer af åhr 1677 till 1701. Åtskilliga volumina".<sup>234</sup>

Dahlbergh's library was not filled with much military literature. Quite the opposite, literature on civilian architecture seems to have occupied more space on his bookshelves than that of the military. However, it would be surprising if Dahlbergh was not familiar with the military thinking of his times. The large number of prints is also important. Studying pictures of various fortifications could be more productive than reading large volumes of text. The pictures would clearly show advantages and disadvantages with various fortifications. This statement was emphasized by Girs. In his 1626 book, it could be understood that it was a good idea to always have a drawing or a painting under one's eyes. It was claimed that one could, using drawings or paintings "[...] för sigh

<sup>231</sup> "Allehanda förteckningar öfver arkivalier, böcker och saker som tillhört Erik Dahlberg", Volym 44 (E3511), D. 1 Handlingar rörande E. Dahlbergs lefnad, Erik Dahlbergs samling, Riksarkivet, s. p., marked "K".

<sup>232</sup> Ericsson and Vennberg, p. 41.

<sup>233</sup> "Allehanda förteckningar öfver arkivalier, böcker och saker som tillhört Erik Dahlberg", Volym 44 (E3511), D. 1 Handlingar rörande E. Dahlbergs lefnad, Erik Dahlbergs samling, Riksarkivet, s. p., marked "K".

<sup>234</sup> "Allehanda förteckningar öfver arkivalier, böcker och saker som tillhört Erik Dahlberg", Volym 44 (E3511), D. 1 Handlingar rörande E. Dahlbergs lefnad, Erik Dahlbergs samling, Riksarkivet, s. p. [46b]. Translation: "Mister Vauban's, Director of Fortifications, Fortification acts, suggestions and reports from year 1677 to 1701. Several volumes."

sielff mange behandight ting uptenkie.<sup>235</sup> Having studied several pictures of fortifications, Dahlbergh would have gained insight into what was claimed by the military theorists presented in this study.

## FORTRESS LOCATION

Of all the decisions that were to be made when building a fortress, location was the most important. Mistakes in other decisions could be corrected, but not the location. The choice of the site would be crucial for the ability to defend a fortress. Location is rarely observed in modern research, since most modern writers tend to accept the matter of location “as it was” and do not comment more upon it.

As much as fortress location is rarely observed in modern literature, it was included in seventeenth-century writings, although not in every work on fortification. Mathematician and esteemed writer on fortification Adam Fritach [Freitag], was one person who addressed the matter in his work of 1635 (see below). However, well-known Dutch fortifier Minno Baron de Coehorn did not deal with the question in his book *Noevelle fortification* of 1706<sup>236</sup>. Writer Antoine de Ville also commented on location in his 1666 work, generally in agreement with Fritach.<sup>237</sup>

Adam Fritach summarized [Jean Errard de] Bar-le-Duc’s and Simon Stevin’s – two well-known names in the history of fortification – ideas on the location of a fortress. Fritach started his three-page chapter with:

*Les places sont distinguées à cause de leur situations, aucunes estans montagneuses, & sur des roches, aucunes en plaine campagne, les unes sablonneuses, les autres en bonne [t]erre forte & grasse, les unes marescageuses, & les unes dans des vallées, les autres sur le bord de quelque lac, mer, ou port, les unes aupres de quelque fleuve, les autres dans quelque isle, ou autre place environnée d’eaux.*<sup>238</sup>

<sup>235</sup> Girs (1626), pp. 99–100. Translation: “[...] by yourself come up with several convenient things.”

<sup>236</sup> Minno Baron de Coehorn, *Nouvelle Fortification* [...] (s. l: 1706), passim.

<sup>237</sup> de Ville (1666), pp. 10–19.

<sup>238</sup> Adam Fritach, *L’Architecture militaire ou La Fortification Nouvelle, Augmentée et enrichie de forteresses regulieres, Irregulieres, et de hors; le tout a la pratique moderne* (Leide [Leyden] 1635), p. 3. (Further on, (“Fritach (1635)”)

Translation: “The fortresses are distinguished on the grounds of their location, some are mountainous & on rocks, some on plane land, some sandy, others on good strong and fat earth, some watery, & some in the valleys, others on the shore of some lake, sea, or harbour, some close to some river, others on some island, or another place surrounded by water.”

Fritach thus defined six principal types of location, in mountains, on flat land, either sandy or firm, in wetlands, in valleys, on shores and on islands. He then described the advantages and disadvantages of the locations, respectively.

The following points would be important to note. The availability of drinking water could be a problem for a fortress located in mountains. A fortress on flat land was cost efficient to construct, but it facilitated an enemy attack.<sup>239</sup> Fortresses situated in wetlands could be struck by diseases caused by “bad vapors”. As an example, the plague could wipe out the garrison, allowing the fortress to be easily conquered. Fortresses located on the shores of a river or lake, or close to a harbor, had the advantage that they could always be resupplied, if the supplies could be delivered by sea. The disadvantages were that the enemy could move its siege equipment by sea, that the enemy could stop the garrison from being supplied, and that the enemy could attack by boat.<sup>240</sup> Regarding fortresses out in the sea, the advantages were that they could not practically be reached by cannons, if they were far out to sea, and that they held an upper hand on ships, since the latter were unstable artillery platforms. Neither trenches, nor mines could be dug against them. The disadvantage was that they did not add much security to a nation.<sup>241</sup>

At the end of his summary, Fritach noted that a well-located fortress could be defended for a long time, but a passage for resupplying food and ammunition needed to be kept open, which was possible if the fortress was situated on one of the great rivers or in a harbor. Fritach concluded, with regard to the fortification of cities, that there was not much choice of location. Fritach further noted at the end of his text, that a discussion on fortress sites could be quite extensive.<sup>242</sup> Although the discussion could be prolonged, Fritach’s summary, however, does not seem to have been controversial at the time. In 1685, Allain Manesson-Mallet, *Maistre de Mathematiques des Pages de la petite Ecurie de sa Majeste*, presented about the same points in his *Les travaux de Mars ou l’art de la guerre*.<sup>243</sup>

Girs (1626) dealt briefly with location. One of the questions answered in his book was how a city should be located and fortified. The answer was that a city should be located on a plain with a mountain in it. The remainder of the answer

---

<sup>239</sup> Fritach (1635), p. 3.

<sup>240</sup> Fritach (1635), p. 4.

<sup>241</sup> Fritach (1635), p. 5.

<sup>242</sup> Fritach (1635), p. 5.

<sup>243</sup> Allain Manesson-Mallet, *Les travaux de Mars ou l’art de la guerre* (Paris 1685), pp. 226–233.

dealt with details of technical construction.<sup>244</sup> We can thus see that there was no concern about resupply matters in this context. There was, however, the general remark “På hwadh ort och huruleedes en Befästning skall rättelighen warda anstält/förstå fåå Capitener och nestan ingen Byggemestare.”<sup>245</sup> This quote indicates an awareness of location.

Åke Rålamb’s 1691 work only dealt with the matter of location indirectly. Rålamb discussed the fortification of sites with different characteristics. He mostly wrote about the difference between small cities and castles located on mountains, cities located on a coastline and cities with a connection to a river. Without explaining why or referring to resupply matters, Rålamb made the important statement, with regard to cities on a coastline, that the city walls had to reach the water. Thus, the reader of Rålamb’s work had the resupply matter within reach, but would have to decipher on his own why it would be important to have the city walls reach the water.<sup>246</sup> This angle will be expounded on below.

Fritach’s work is a good foundation for creating a structure for the evaluation of fortress location. No such structure can be perfect, since there are several aspects which could be considered. Overall, however, it seems like the main points could be sorted out.

## A STRUCTURE FOR FORTRESS LOCATION

### *Introduction*

Since the location of a fortress is a fundamental factor for the ability of a fortress to survive any type of attack, a structured way of assessing the fortress site is needed in order to evaluate if the location is flawed. Below, such a structure is suggested. The structure relies heavily on the writings of Fritach, but the elements are chosen, grouped and titled by the author of this study. Of the elements identified by Fritach, several have not been included below, for example “unhealthy surroundings”, since there are no malaria swamps in the Nordic countries.

### *Drinking Water*

In Fritach’s text, a fundamental requirement is available, drinking water.<sup>247</sup> A fortress deprived of drinking water would have to surrender in less than weeks,

---

<sup>244</sup> Girs (1626), p. 87.

<sup>245</sup> Girs (1626), p. 95. Translation: “At which location and how a fortress rightfully shall be built, few captains and almost no building contractors understand.”

<sup>246</sup> Rålamb (1691), p. 41.

<sup>247</sup> Fritach (1635), p. 3.

maybe days. Although not often addressed in other fortification literature – and most likely taken for granted – the matter concerned fortress designers such as Vauban. For example, the fortress of Longwy in northern France was difficult to supply with water, so extensive measures were taken to secure the supply<sup>248</sup>. The topic was also underscored by Furttenbach in his *Architectura Martialis*, where he noted that, apart from drinking and cooking, water was needed for work by the blacksmiths and the saltpeter workers.<sup>249</sup> Access to a supply of drinking water within the walls, which could not be severed from outside the walls, then becomes the first criteria.

*Accessibility – Reaching the Fortification*

Fritach wrote about several factors which could be called “accessibility”,<sup>250</sup> basically relating to the matter of reaching the fortification. Accessibility would apply to both the attacking and the defending side. For the attacking side, accessibility would be a matter of getting a siege army with its equipment to the proximity of the fortification and then capture it. For the defending side, accessibility would be a matter of getting supplies and reinforcements to the proximity of a fortification and then getting them inside, past a siege army. Accessibility could be structured in the following way:

- General accessibility, reaching the proximity of the fortification from the main centers of the defending or attacking nations. This accessibility could also be called “strategic accessibility”, since it relates to the highest level of the problem.
- Local accessibility, reaching the fortification when in the proximity of it. This accessibility could also be called “tactical accessibility”.

General and local accessibility could then be classified as high or low, for the attacker, and for the defender, depending on various factors. The resulting analytical tool would appear as follows:

**Table 3.1** A basic structure for accessibility

	General accessibility	Local accessibility
Attacker’s	High/Low	High/Low
Defender’s	High/Low	High/Low

<sup>248</sup> Victoria Sanger, *Military Town Planning under Louis XIV: Vauban’s Practice and Method (1668–1707)*, Volume II, PhD-dissertation., Columbia University 2000, pp. 320–321.

<sup>249</sup> Joseph Furttenbach, *Architectura Martialis* (Ulm 1630), p. 15.

<sup>250</sup> Fritach (1635), pp. 3–4.

*Attacker's general accessibility*

Girs (1626) touched on the subject of general accessibility, although with a narrow scope. His work focused on rivers as reducers of accessibility, since they would have to be bridged by anyone wanting to advance across them.<sup>251</sup> Fritach also touched on the subject, commenting on fortresses by the sea; pointing out that a besieger could benefit from sea transport of siege materiel to the site.<sup>252</sup> Antoine de Ville added the dimension that a fortress could be located where access to it was made difficult by narrow passes<sup>253</sup> that would reduce general accessibility.

High general accessibility for the attacker would simplify bringing his siege army and ditto equipment to the site. There were two basic methods for moving heavy loads in the eighteenth century, on water and by road. Of the two methods, transport on water was more economical. The attacker's general accessibility to a fortress would thus be primarily dictated by its proximity to water. A fortress located by the sea or a river could have a high general attacker's accessibility. However, connectivity becomes important. A fortress could be located on a lake. If the lake was not connected to any other water system, its relationship to water would not improve general accessibility. On the other hand, if a fortress was located on a lake connected to several rivers which, in turn, were connected to oceans or the attacker's base areas, the site would have a high general accessibility. Thus, when evaluating general accessibility rendered by waterways, the full picture would have to be taken into account, from the attacker's base area to the fortress. When analyzing the waterways, navigability of the entire chain within the relevant geographical window needs to be considered. The weakest link would then determine the strength of the chain. If an otherwise useful waterway was broken somewhere – by nature or by the enemy – the value of the waterway for general accessibility could diminish or even vanish. With regard to the various relationships to water that a fortress could have, the number of permutations was obviously quite large.

A good road system, leading from the attacker's base areas to a fortification, would also render a high general accessibility to the fortification in question. As pointed out by Girs and de Ville, passing through a narrow pass or across

---

<sup>251</sup> Girs (1626), p. 67.

<sup>252</sup> Fritach (1635), p. 4.

<sup>253</sup> de Ville (1666), p. 18.

high mountains would constitute a risk. A poor and sparse road system, going through barren land, would give a low attacker's general accessibility on land. Here, also distance would matter. Fortresses located close to the borders of the attacking nation would basically have a high attacker's general accessibility, and vice versa.

Even with favorable geographical conditions, there was still the matter of control. The use of waterways called for naval control; the use of roads called for superiority on land. Using uncontrolled lines of communication could result in military disasters, such as the loss of a siege train. The attacker's general accessibility, thus, hinged on control of the communication routes. River transports would call for both control of the river itself and control of the shores, as river transports could otherwise be intercepted.

#### *Defender's general accessibility*

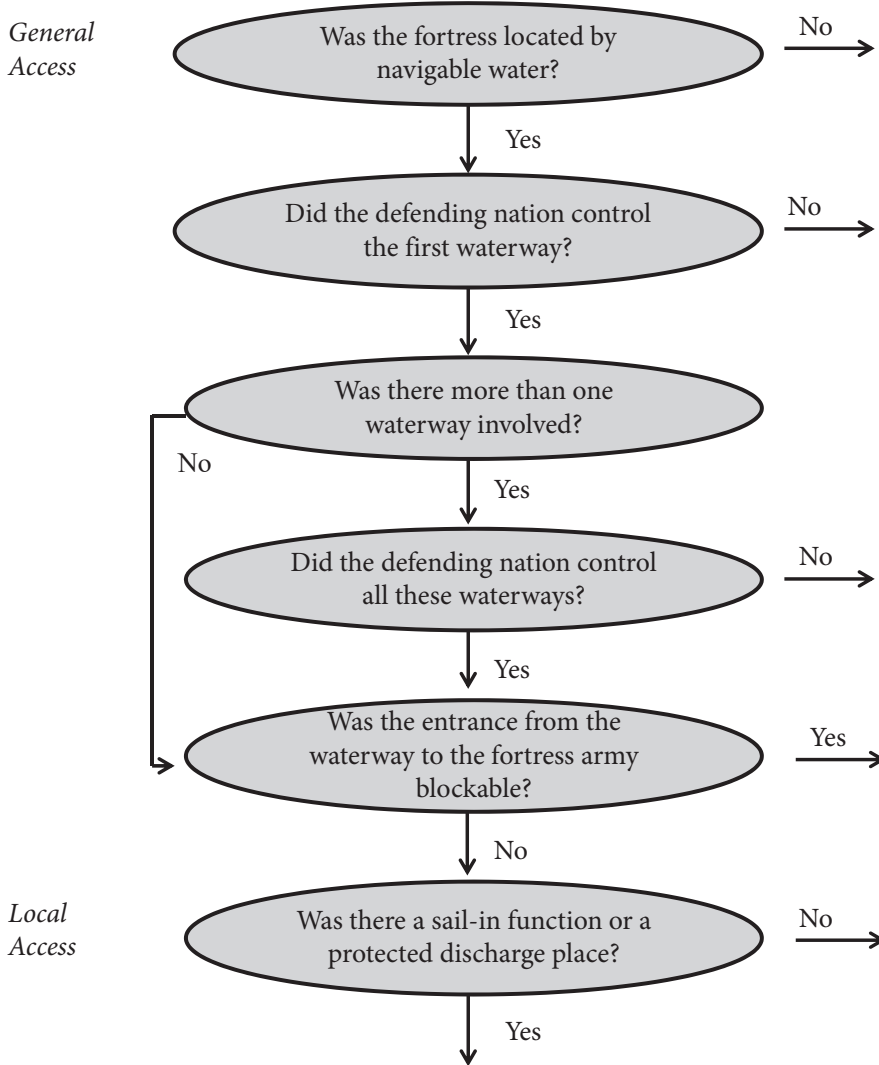
High general accessibility for the defending nation would facilitate bringing in supplies and reinforcements to a fortress. As with the attacker's general accessibility, control was a key factor. Since a fortification under siege normally would have been blockaded by land by a siege army which, at the time, could not be defeated by the field forces of the defending nation, access by sea would be the only solution. If there was such an option, it would be called a "naval loophole". Fritach commented that only ports and fortresses located on large rivers could be effectively resupplied<sup>254</sup>.

A location by navigable water would then give a high defender's general accessibility. The remarks on connectivity made under attacker's general accessibility also apply to the defenders. In rare instances, a defending nation could maintain a high general accessibility to a besieged fortress on land. These cases would, however, call for very special conditions and are not further commented upon here.

---

<sup>254</sup> Fritach (1635), p. 4.

THE DEFENDER'S ACCESS TO A FORTRESS



The fortress could be resupplied and reinforced by the defending nation. In all other cases, the fortress was doomed to fall, when its supplies ran out or when the garrison was worn down.

**Picture 3.2** The illustration above shows the principles for the defender's access to one of its fortifications. It is assumed here that the presence of an enemy siege army would render all access by land impossible, unless the defending nation could launch a superior relief army against it. Regarding "Local Access" (see below).



Some notes concerning rivers should be made. A river could, in most cases, be blocked by army forces, thus creating a low defender's general accessibility. Echoing Fritach's words, (see above) only a large river would be difficult to block with army resources, and none of the rivers in the Swedish Empire could be characterized as "large". An inland fortress, although located on a river with a distant connection to open water, should for all practical purposes be deemed as lacking access to navigable water. Any attempt to sail ships down a narrow river would be stopped by means available to an army force. The simplest way for an army force to fight a river transport would be to use small arms fire against the crews of the ships who would then have to take cover below deck. The ships would then begin to drift and eventually hit the shores.

*The Time Dynamics of General Accessibility*

Since general accessibility was a matter of geography and control, it could change with time if the control situation changed. If a nation held several fortresses on islands, and also had command of the sea, general accessibility to these island fortresses would be high. If the nation suddenly lost command of the sea, the defender's general accessibility to the island fortresses would become low in the same instant that the sea command was lost.

If a defending nation had high general accessibility on land to certain fortresses by a good road system, an attacker's invasion army, which could not be instantly defeated by the field forces of the defending nation, would change this general accessibility on land to low. On the contrary, if an attacking nation had high general accessibility on land to the border fortresses of the defending nation, the defending nation could change the accessibility to low by invading the attacker's border provinces.

General accessibility to various fortifications would then change with the fortunes of war. There were, however, other time dynamics involved. The most important would be changes in weather conditions. In the northern hemisphere, ice would be important. A "naval loophole" could be blocked by ice, changing the defender's general accessibility from high to low. Ice could also create bridges where there previously were obstacles. Thus, the attacker's general accessibility would change to high from low with the water freezing. Spring and fall often turning roads into mud, could also affect general accessibility. Roads which otherwise would give high general accessibility would then cease to be an asset, and would instead generate low general accessibility. General ac-

cessibility would then change with time and events and would largely be unique for each time frame studied.

#### *Concluding note on general accessibility*

General accessibility would be regarded as one of the decisive factors in fortress warfare. The concept does, however, contain several theoretical questions. As can be seen above, the basic model suggested in Table 3.1 could be expanded to great complexity, for example by separating land accessibility from sea accessibility, and then adding season. In the following, only the basic model reflecting the circumstances at the time of the siege will be used, although comments will be provided. As for future research, refinement of the general accessibility model could be a topic.

#### *Attacker's local accessibility*

The concept of local accessibility pertains to the ability of a siege force to attack a fortress with various weapons, including infantry. A location with low local accessibility could, by a limited garrison, be defended for a long time against a strong enemy. The main way to create low local accessibility for the attacker would be height, as specifically pointed out by Fritach<sup>255</sup>. Antoine de Ville remarked that height created considerable problems for an attacker.<sup>256</sup> History offers several examples of high fortifications that became difficult to conquer. One was the fortified monastery of Jasna Góra in Czestochowa in Poland, which proved impossible for the Swedish army to capture in 1655<sup>257</sup>. Another example in history is the Jewish defense of Masada in Biblical times.<sup>258</sup> In his work *Fire & Stone*, Duffy downplayed the importance of height.<sup>259</sup> However, empirical experiences and theoretical concepts, such as the difficulty in fighting a high fortification with ricochet fire, tend to emphasize the importance of height.

Water would also affect local accessibility. The basic example is the wet moat, creating an obstacle that would be difficult for storming infantry to pass, and would also push out siege artillery farther away from the walls. Locating a fortification in a lake would also reduce local accessibility. Several other terrain features could affect local accessibility. One example would be a deep ravine

---

<sup>255</sup> Fritach (1635), p. 3.

<sup>256</sup> de Ville (1666), p. 14.

<sup>257</sup> Duffy, Part II, p. 189.

<sup>258</sup> See for example: Yigael Yadin, *Masada: Herod's Fortress and the Zealots' Last Stand* (London 1966).

<sup>259</sup> Duffy, *Fire & Stone: The Science of Fortress Warfare, 1660–1860* (London 1996), p.31.

on one side of the fortress, like that of the Swedish Narva fortress in Ingria<sup>260</sup>. Fritach touched on the subject when he mentioned how difficult it was for an enemy to attack a fortress in wetlands.<sup>261</sup>

### *Defender's local accessibility*

Local accessibility from the point of view of the defending nation would depend on the ability to bring supplies and reinforcements into the fortress once they had reached the proximity of the fortification.

If a fortress had an unbroken chain of navigable waterways to the source of resupply and reinforcements, there was a “naval loophole” to the fortification. However, the last step in the chain also has to be considered. The last step was to get men and supplies inside the fortification – just getting close was not good enough. The siege army could be expected to do its best to stop deliveries to the fortress, so the site must not be susceptible to army blocking of the shipments. We can here see the following cases:

A fortress with a “sail-in function” means that the fortress had a harbor facility of some sort that could not be blocked by an army force, and that allowed ships to enter inside the defensive system to be discharged.

A fortress with a “protected discharge place” describes a situation where the fortress was situated directly on the waterfront, but without a harbor facility in the fortress. In that case, the fortress depended on a discharge area where the besiegers could not interfere with the deliveries, be it either by artillery, infantry or any other means.

If there was no sail-in function or protected discharge place, the defender's local accessibility would be low – in reality, zero. Any advantage of open waterways could then be negated by the siege force, denying the fortress any possibility of getting supplies or reinforcements within the walls. Only a fortress with an unbroken chain of waterways and with a sail-in function or a protected discharge place could be defended in the long run.

This topic was not frequently discussed in contemporary fortification literature, although it was available to anyone having access to the literature. For example, I. Erard de Bar-le-Duc's work from 1604 contains drawings of fortifications with obvious sail-in functions<sup>262</sup>. In the same work, there are fortress-

---

<sup>260</sup> Kaur Lillipuu, *Põhjasõja-aegsete Narva piiramiste (1700 ja 1704 analüüs vaubani piiramisteooria seisukohast* (Tallinn 2014), p. 61.

<sup>261</sup> Fritach (1635), p. 4.

<sup>262</sup> I. Erard de Bar-le-Duc [Jean Errard], *Fortificatio* (Franckfurt am Mayn 1604), Figures 27 and 28.

es with and without protected discharge places. Rålamb's 1691 work also contained illustrations, one of which obviously points in the direction of a sail-in function and protected discharge places (see below).

It is somewhat remarkable that this difference between various sites and constructions was not more noticed, especially since the circumstances of the siege of Candia (see below) must have been well-known to anyone working in the field of fortification. In general, the defender's general and local access to a fortification was often crucial to survival of a fortress under siege, as developed in the chapter Resolving Siege Warfare.

Regarding earlier research, it should be noted that Henning Eichberg made a comment on the question in his *Militär und Technik: Schwedenfestungen des 17. Jahrhunderts in den Herzogtümern Bremen und Verden* (Düsseldorf 1976). Eichberg pointed out the importance of communications by sea to Sweden, from Bremen-Verden, and mentioned the problem of integrating harbors and channels into the fortress design, and that this problem also applied to city fortifications.<sup>263</sup>

#### *The time dynamics of local accessibility*

Ice would affect an attacker's local accessibility, if a fortification drew advantages from a wet moat or was located in a lake or along a coast where the water between the fortification and the mainland would freeze in the winter. Ice would also affect the defender's local accessibility if it made it impossible for a ship to enter through a sail-in function at a fortress or reach a protected discharge place.

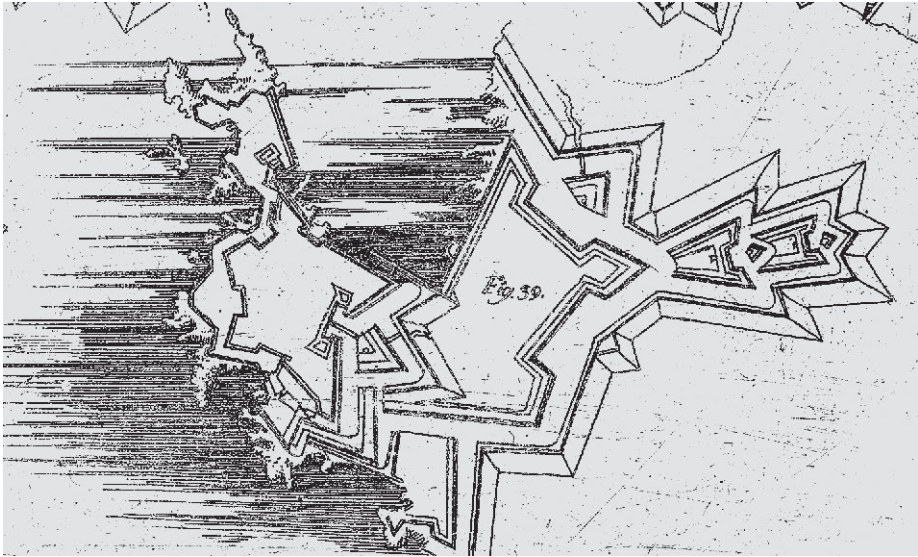
#### *Summary*

If a potential attacker had high general accessibility to a location, and the defender low, it would speak against spending money on fortifying it. In his war plan, Rehnschiöld pointed out problems regarding Sweden's access to German possessions, especially Wismar<sup>264</sup>. The same would be true for local access. Any fortification with high attacker's local access and weak works should have created an alarm signal, where the fortification should either have been improved or disbanded.

---

<sup>263</sup> Henning Eichberg, *Militär und Technik: Schwedenfestungen des 17. Jahrhunderts in den Herzogtümern Bremen und Verden* (Düsseldorf 1976), p. 95.

<sup>264</sup> Carl Gustaf Rehnschiöld, "Memoria" (in "Bref och skrivelser från C. G. Rehnsköld till konung Carl XII 1703–1707 (1715)"), in Aug. Quennerstedt (red.), *Karolinska krigares dagböcker jämte andra samtida skrifter*, Del 11, (Lund 1916), p. 115–121.



**Picture 3.3** The picture above shows a fortress with a sail-in function and also protected discharge places. It can be seen that, provided the water is navigable, a ship can sail into the fortress in the bay in the center of the picture. The water on the left-hand side of the picture provided protected discharge places. It can also be seen that access to the water by the fortress cannot be blocked by army forces. (Source: Åke Rålamb, *Fortification Eller Adelig Öfnings Ottonde Tom Medh behörige Kopparstycken* (Stockholm 1691), Figure 39. The Swedish Military Archives, the Library.)

*Suggested structure for a fundamental evaluation of a fortress*

Selecting the main points from the text above, the following structure for fundamental evaluation of a fortress emerges:

- Size (large, medium or small)
- Construction (strong or weak)
- Access to drinking water (yes or no)
- Attacker's general access (high or low)
- Defender's general access (high or low)
- Attacker's local access (high or low)
- Defender's local access (high or low)

Any weakness will make the fortress classified as weak. An evaluation of each fortress treated in this study will be presented in Chapter 4, and the results will be summarized in Chapter 5.

## OPPOSING FORCES

### *Introduction*

A fortress garrison and a siege force could vary in size from one extreme to another. However, a brief comment on the opposing forces will be made below. The text, to a large extent, is based on David Chandler's *The Art of War in the Age of Marlborough*<sup>265</sup>. Chandler relied on Vauban's *Traité de l'Attaque des Places* (edition Paris 1779) and Surirey de St. Rémy's *Mémoire d'Artillerie* (Paris 1693 and Amsterdam 1702).

### *The fortress*

Vauban drew up standards for the defense of various fortresses. To withstand a siege for over a month, a fortress with six bastions would need a garrison of 3,600 infantry, 360 cavalry, 200 staff, 120 gunners, eighty bombardiers and forty miners. The peacetime garrison of such a fortress should be 1,200 infantry, 100 cavalry and a minimal staff. The fortress should be armed with sixty cannons, thirty mortars, sixty wall muskets and a reserve of 3,000 muskets.<sup>266</sup> Compared to Swedish circumstances around 1700, Vauban's figures are low regarding cannons, and high regarding mortars. For example, in the Swedish Artillery Plan of 1695, the well-armed walls of Narva were designated to have 150 cannons of 24 and 18 pounds. The number of mortars, however, was only ten. There were also to be four 16-pound howitzers in Narva.<sup>267</sup> The howitzers were fairly new to the European battlefield, having been introduced in the seventeenth century. These guns combined the properties of the cannon and the mortar, shooting an exploding shell from a piece that looked like a cannon, but had a shorter barrel.<sup>268</sup> The howitzer was a weapon with the destructive powers of a light mortar, combined with the mobility of a cannon. A fortress would also have a large number of lighter pieces for fighting the besieger's infantry. These would be mostly 6-pounders and 12-pounders, but there were also various smaller pieces for shooting scrap at storming infantry.

With regard to garrison strength, various units of burgher militia often create confusion on the issue of the actual numbers defending a fortified city. Antoine de Ville was adamant that these troops should not be included in gar-

---

<sup>265</sup> David Chandler's *The Art of War in the Age of Marlborough* (Staplehurst 1990). (Further on, "Chandler".)

<sup>266</sup> Chandler, p. 244.

<sup>267</sup> Bestyckningsplan (1695), p. 45.

<sup>268</sup> H. C. B. Rogers, *Artillery Through the Ages* (London 1971), p. 52.

ri-son strength, and that the fortress commander should not try to use them as regular troops. According to de Ville, burghers could be used for work and for manning the walls during a sally, the latter to give the besiegers an exaggerated impression of garrison strength. Otherwise, de Ville saw the burghers as too poorly trained to operate as soldiers. He commented that strength is not in the numbers, it is in the quality.<sup>269</sup>

According to Vauban, ammunition needed in the fortress was 24,000 cannonballs, 15,600 bombs and grenades, 340,000 pounds of gunpowder, 420,000 pounds of lead and 300,000 lengths of match.<sup>270</sup>

De Ville underscored an important, but often overlooked, aspect of fortress warfare – the fortress commander needs money. He remarked that one can do nothing without it, such as paying the people in your service.<sup>271</sup>

### *The siege army*

According to Vauban, a siege force should outnumber a garrison ten to one. In addition, local peasants with several thousands of wagons and horses would be needed for transports and trench digging.<sup>272</sup> In the sieges by Louis XIV of France in 1673 and 1693, the number of digging civilians had varied from 12,000 to 20,000,<sup>273</sup> although northern sieges seemingly never employed this number of civilians. It rather seems as though it was the soldiers of the besieging armies who did most of the digging. One of the largest siege forces employed before 1734 was the French army besieging Philippsburg, counting 117,000 men<sup>274</sup>.

Apart from the regular soldiers, engineers were an important part of the siege army. They would plan the attack, coordinating the infantry and artillery. The organization of this command structure was most important for a successful siege.<sup>275</sup> The size of the siege army is complicated by the existence of a force covering the siege, ready to meet a relief army in the field.<sup>276</sup> In Nordic sieges, however, it does seem like the siege army most often was also prepared to meet a relief army, so normally no distinction was made between the two missions.

---

<sup>269</sup> de Ville (1666), p. 456.

<sup>270</sup> Chandler, p. 244.

<sup>271</sup> de Ville (1666), p. 455.

<sup>272</sup> Chandler, p. 241.

<sup>273</sup> Jean-Pierre Rorive, *La guerre de siège sous Louis XIV* (Paris 2015), p. 81.

<sup>274</sup> Chandler, p. 241.

<sup>275</sup> Ostvald, pp. 146, 212–213.

<sup>276</sup> Compare Chandler, p. 248.



St. Rémy made calculations on the supplies to sustain 60,000 soldiers, plus a labor force for forty days. He arrived at 3.3 million rations and 0.73 million issues of forage. The necessary ammunition supply would have been a minimum of 40,000 shots for the 24-pounders and 16,000 for lighter cannons. For the mortars, 9,000 bombs were required, as were 40,000 hand grenades and 30,000 rounds of musket ammunition for the infantry. The quantity of gunpowder needed was around 800,000 pounds, with an additional 150,000 pounds in reserve. For siege works, 550,000 cubic feet of timber was required for gun platforms and trench-shoring, 18,000 picks and mattocks were needed for digging and 4,000 baskets were required to carry earth. Besides these needs, plenty of rope and nails were needed.<sup>277</sup> St. Rémy's recommendation for siege force artillery was 110 cannons, of which fifty should be 24-pounders or 33-pounders, and forty mortars.<sup>278</sup>

The breach shooting siege artillery would normally have been of 18 or 24 pounds, although heavier cannons could also be used.<sup>279</sup> Here, cannon weight compared to effect was crucial, where the 24-pounder was the optimum.<sup>280</sup> A 24-pounder would weigh over two tons. If transported by road, horses were preferably used. Oxen and men were alternatives, but slower ones. In 1689, the British army assumed that just over 200 kilos of metal could be pulled by a horse on good roads; experience showed that 150 kilos could be too much for several horses. If men were to pull cannons or wagons, it was estimated that a man could pull 45 kilos on a good road.<sup>281</sup> The artillery would thus require many horses. For practical purposes, heavy guns would need twenty horses each, a heavy mortar sixteen. A siege train of eighty cannons would also need 3,000 four-horse wagons for various purposes. In 1708, a British siege train could cover seventy-five miles in seven days. It was led with great precision, and the roads can be assumed to have been in fairly good condition at the time.<sup>282</sup>

Setting up a siege, with the ambition of breaching the walls of the besieged place, called for an artillery train, which created a considerable logistics problem. A siege with the ambition of blockading a certain place, and waiting until the garrison starved, called for less materiel, and, thus, for less logistics (see below Resolving Siege Battles).

---

<sup>277</sup> Chandler, p. 241.

<sup>278</sup> Chandler, p. 243.

<sup>279</sup> Boris Megorsky, "Siege Operations in the Great Northern War", in Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium* (St. Louis Missouri 2015), p. 166.

<sup>280</sup> Duffy, Part I, p. 96.

<sup>281</sup> H. C. B. Rogers, *Artillery Through the Ages* (London 1971), pp. 46–47.

<sup>282</sup> Chandler, p. 243.



### 3.3 RESOLVING SIEGE BATTLES

#### INTRODUCTION

When a siege force approached a fortress or a fortified city, a siege battle was about to be resolved. The number of permutations in siege battles is virtually endless, i.e., anything could happen. There are, however, a number of standard scenarios seen in the history of fortress warfare. Some examples will be presented below, where places and years for these examples are given within brackets in the beginning of the footnotes.

#### EXAMPLES OF SIEGE ARMY TACTICS

In siege battles, the initiative would often rest with the siege force commander, and the garrison commander then reacted to various siege force moves. There were exceptions to this rule, which are presented below in the section *The fortress commander resolving the siege battle*. In the following, a variety of siege force tactics is presented. These examples will then serve as the basis for a structure concerning siege force tactics, formed as a general background to the topic and as a foundation for analyzing siege force tactics in Chapter 4.

The siege army commander:

- could try a *coup de main* – a surprise attack. The attack could be launched in several ways. One was to raise ladders against unguarded walls,<sup>283</sup> preferably at night; another was to hide soldiers in civilian wagons going into the fortification;<sup>284</sup> and a third was having a traitor let siege army troops into the fortification<sup>285</sup>. The *coup de main* aimed to reduce the *Sturmfreiheit* of the fortification, by exploiting the defender's unawareness.
- could try to bribe the fortress commander to surrender his fortress.<sup>286</sup>
- could try to threaten the fortress commander to surrender his fortress. The threats could vary. The siege force commander could, for

---

<sup>283</sup> (Farfar 1308), Peter Fraser Purton, *A History of the Late Medieval Siege 1200–1500* (Woodbridge 2009/2010), p. 90.

<sup>284</sup> (Ypres1578), Duffy, Part I, p. 66.

<sup>285</sup> (Antioch 1097), Jim Bradbury, *The Medieval Siege* (Woodbridge 1994), p. 110. (Further on, “Bradbury”).

<sup>286</sup> (Wismar 1711), Tuxen, Del III, p. 330.

example, be in control of members of the fortress commander's family or his property<sup>287</sup>.

- could try to break the morale in the fortress by psychological means. An attack on morale could take various forms, from “resistance is futile” to political persuasion.<sup>288</sup>
- could use a ruse to make the fortress commander surrender, for example, by showing a forged letter from the king of the defending nation ordering the fortress commander to surrender.<sup>289</sup>
- could have one of the gates to the fortification blown up with a petard, a portable explosive charge, and storm in.<sup>290</sup>
- could have the walls stormed without trying to breach them, using, for example, ladders,<sup>291</sup> mobile towers<sup>292</sup> or mounds built up in front of the wall<sup>293</sup>. The attacking infantry would advance toward the fortress on open ground. They could be covered by mobile sheds, or by trenches dug in the direction of the fortress. The attack would normally be supported by various weapons to suppress the enemy on the walls. A storm could also be launched from underground by digging a tunnel into the fortress. With this tactic, the *Sturmfreiheit* was reduced by sheer force.
- could decide to breach the walls and then storm.<sup>294</sup> The walls, or any other suitable part of the fortress construction, could be breached by a number of means. Sapping was an old technique, in which the attacker simply pulled stones out of the fortress wall until the section attacked fell apart.<sup>295</sup> Walls, or at least gates, could be pounded with a battering ram, until they broke.<sup>296</sup> Around 1700, the standard technique to be

---

<sup>287</sup> (Forli [1488]), Bradbury, pp. 186–187.

<sup>288</sup> (Venlo, Roermond and Maastricht 1632), Duffy, Part I, p. 102, also compare Christopher Gravett, *Medieval Siege Warfare* (London 1990, reprinted 1999), pp. 18–21.

<sup>289</sup> (Helsingborg 1678), Ludvig W:son Munthe, Del III:1, p. 446.

<sup>290</sup> (Novgorod 1611), Olof von Dalin, *Svea Rikes Historia ifrån des begynnelse til våra tider* (Stockholm 1761 och 1762), p. 639.

<sup>291</sup> (Rome 1527), Duffy, Part I, p. 19.

<sup>292</sup> (Constantinople 1453), Bradbury, p. 241.

<sup>293</sup> (Plataia 429 BC), Nic Fields, *Ancient Greek Fortifications 500-300 BC* (Oxford 2006), p. 53.

<sup>294</sup> (Azov 1637), Duffy, Part I, pp. 206–207.

<sup>295</sup> Christopher Gravett, *Medieval Siege Warfare* (London 1990, reprinted 1999), pp. 32 and 45.

<sup>296</sup> Christopher Gravett, *Medieval Siege Warfare* (London 1990, reprinted 1999), p. E.

able to breach walls was to use heavy artillery. The walls could also be mined by digging a tunnel under the wall and then setting off an explosive charge at the end of it.<sup>297</sup> The breaching would reduce the *Sturmfreiheit* of the fortress and increase the chances for the attacking infantry. For the storm, the infantry could advance across open ground, or through trenches dug toward the fortress. Around 1700, the artillery had become powerful enough to make an advance through trenches the most realistic alternative for an attacking siege force.



**Picture 3.4** The picture above shows the principles for a siege force approaching a fortification by trenches, from a book published in Swedish in 1626. In front of the main camp “Hufwudh-läger”, a redoubt [“Skantzen”] was built. From the redoubt, a trench [“Skantzgraafwen”] was dug in a zigzag pattern toward the moat. In the moat, the bastions are visible as hammer-shaped construction. Along the way, casemates [“Casameterne”] were dug to support the attack. (Source: Aegidius Girs, *Krijgz Discurs* (Holmiae [Stockholm] 1626), p. 129.)

<sup>297</sup> Duffy, Part II, p. 29.

- could chose to blockade the fortress into submission. If the siege army could cut off the fortress from communication with the outside world, the supplies in the fortress would sooner or later run out. The garrison would then begin to starve, and soon the fortress would have to surrender.<sup>298</sup> In an extreme case, the fortress would be *Strumfrei* as the garrison was either dead or too weak to fight through starvation.
- could decide to try to break the defender’s morale by bombardment. Around 1700, mortars would have been the most efficient weapon available for this tactic. In 1684, Vauban claimed that fifteen mortars would destroy a garrison’s morale better than sixty well-served cannons<sup>299, 300</sup>.
- could try to flood the fortification, sometimes called an “aquatic attack”, which meant much work, but was highly efficient if successful. However, in the seventeenth and eighteenth centuries, most attempts to launch aquatic attacks seem to have failed.<sup>301</sup>
- could decide to launch a chemical or biological attack. Chemical weapons based on sulphur date back to the thirteenth century.<sup>302</sup> Biological weapons have been known since antiquity.<sup>303</sup>
- could decide to burn the attacked fortification to the ground.<sup>304</sup> This tactic was very efficient when it worked, and would be most effective against wooden constructions.

---

<sup>298</sup> (Stockholm 1523), Oskar Alin, *Sveriges Historia från äldsta tid till våra dagar*, Del 3, (Stockholm 1878), p. 58.

<sup>299</sup> Ostwald, p. 65.

<sup>300</sup> (Landskrona 1676), Ludvig W:son Munthe, Del III:1, p. 367.

<sup>301</sup> (Kristianstad 1677), Ludvig W:son Munthe, Del III:1, p. 397 and (Elbing 1703), Ludvig W:son Munthe, Del III:2, p. 403.

<sup>302</sup> (Beaucaire [1216]), Christopher Gravett, *Medieval Siege Warfare* (London 1990, reprinted 1999), p. 30.

<sup>303</sup> (Schwanau 1332), Bradbury, p. 214. See also Adrienne Mayor, *Greek Fire, Poison Arrows and Scorpion Bombs: Biological and Chemical Warfare in the Ancient World* (London 2003).

<sup>304</sup> (Tälje hus 1436), Lovén, p. 169.

## STRUCTURES FOR SIEGE ARMY TACTICS

### *Introduction*

As set out above, a siege army commander had a wide array of choices regarding tactics for attacking a fortress. Among those options, there should be some sort of structure, which is necessary for a systematic approach to fortress warfare in any period. Some of the attacker’s tactics, such as bribery, would be difficult to hedge for in peacetime, but others could be predicted.

### *Previous structures*

Not much effort has been put into creating a structure for siege army tactics. Some structures can be seen in sixteenth- and seventeenth-century military theory, but these structures tend to be incomplete.<sup>305</sup> The latest, and the most ambitious approach, was Jamel Ostwald’s, presented in his dissertation *Vauban under Siege* in 2007. Ostwald concluded that the most widely used tactics in the War of the Spanish Succession were “[...] siege, blockade, bombardment, storm and stratagem or surprise [...]”<sup>306</sup>. His structure was presented in a table, rendered below.

**Table 3.2** Structure for siege army tactics suggested by J. Ostwald

<b>Tactics</b>	<b>[...]</b>	<b>Target of Attack</b>	<b>[...]</b>
“Formal” siege		Walls and fortification	
Storm (escalade, assault)		Overrun walls	
Blockade		Garrison’s supplies	
Bombardment		Buildings or population (morale)	
Stratagem (treachery, surprise, ruse)		Town’s security measures	

Source: Jamel Ostwald, *Vauban Under Siege: Engineering Efficiency and Martial Vigor in the War of the Spanish Succession* (Leiden – Boston 2007), p. 349.

Ostwald defined a “formal siege” as the tactic described and used by Vauban. Here, it will be briefly noted that Vauban’s siege called for breach shooting, as the infantry dug themselves closer and closer to these walls. Ostwald specified that in his “Storm (escalade, assault)”, an attack was made without artillery preparation or trenches<sup>307</sup>.

<sup>305</sup> Compare for example Antoine de Ville (1666), pp. 229–408, Rålamb (1691), pp. 58–72 and Girs (1626), pp. 95–114.

<sup>306</sup> Ostwald, p. 349.

<sup>307</sup> Ostwald, p. 348.

Ostwald’s structure then seems satisfactory on one level. As seen above, however, there are tactics that will not fit into Ostwald’s table, aquatic attacks and biological warfare, to mention two. Apart from this weakness, Ostwald’s taxonomy is more a list than an actual taxonomy. Any new technique discovered would add an entry to the list without having any structure to fall into. Ostwald’s structure could then be modified, relabeled and restructured as suggested below.

*Suggestion for a new structure*

It is suggested here, that there are two key elements in the various tactics – storming and breaching – and that these elements could be the basis for the simplest possible structure in which all siege army tactics could be included. Building a matrix with four fields, beginning with “storming” and “breaching”, having a “yes-or-no” alternative for both of them, creates a structure into which all siege tactics could fit. The result is presented in Table 3.3 below.

**Table 3.3** A suggested structure for siege army tactics

	<b>Not Breaching</b>	<b>Breaching</b>
<b>Storming</b>	<ul style="list-style-type: none"> <li>- <i>Coup de main</i> (unprepared garrison)</li> <li>- Escalade (prepared garrison)</li> <li>- Running/walking</li> <li>- Siege tower attack</li> <li>- Tunneling to storm</li> </ul>	<ul style="list-style-type: none"> <li>- Sapping</li> <li>- Mining</li> <li>- Ramming</li> <li>- Stone-throwing attack</li> <li>- Gunpowder artillery attack</li> <li>- Petard attack</li> </ul>
<b>Not Storming</b>	<ul style="list-style-type: none"> <li>- Ruse</li> <li>- Attacks on defender’s morale</li> <li>- Blockade</li> <li>- Bombardment to break morale</li> <li>- Chemical attack</li> <li>- Biological attack</li> </ul>	<ul style="list-style-type: none"> <li>- Fire</li> <li>- Flooding</li> </ul>

Comment: Some of the tactics above would only work against specific types of fortification. The most particular are “Running/walking”, which would only work against a low bastion type of fortification, “Sapping” and “Stone-throwing attack” would be most viable against a construction with vertical stone walls.

With any creation, a suggested structure will meet with some problems; two of the most obvious are suggested here. The first is that the defender’s morale could be broken not only by “attacks on defender’s morale”, but also by bombardment. The other is that a *coup de main* could be carried out by an escalade against an unprepared garrison. Therefore, “escalade” is described here as an

escalade against a prepared garrison. “Running/walking” refers to sloping walls that allowed the attacking troops to run or walk up the walls.

It should be noted that the defender’s morale could break down at any stage of a siege and, in a way, could be seen as the ultimate reason for the surrender of any fortress, where garrison members are still alive. However, if morale collapses sometime into the siege, it can be assumed that the tactic employed by the siege army has broken morale.

Another observation is that “fire” and “flooding” must destroy the entire fortification for their placement in the matrix to be relevant. If fire or flooding destroyed only a part of the fortification, storming would most likely be needed to resolve the siege battle, and the fire or flooding would only have been an alternative for breaching. However, these cases would have been rare and the matrix is not, therefore, burdened with this aspect. Some of the above tactics, siege tower attacks, sapping, ramming and breaching with stone-throwing machines, were basically medieval.

According to the table above, there were four main tactics available for a siege army commander:

1. Storming and not breaching
2. Breaching and storming
3. Not storming and not breaching
4. Breaching and not storming, which, in reality, would equal destruction of the entire fortress

The actual tactic used by a siege army at any instance is specified in each box. Within the above structure, all tactics ever used by a siege army against a fortress would fit into one – and only one – of the boxes.

The resulting structure differs from Ostwald’s in two principal ways. First, the concept of “formal siege” is discarded. This concept burdens discussions on siege force tactics. Second, blockade and bombardment to break morale fall into the same category but are separate in Ostwald’s structure. In a way, it might seem unsatisfactory to include these two tactics in the same category. However, it might not be seen as a major shortcoming of the structure suggested here, since the similarities of these two tactics would be greater than the differences, in relation to other tactics.

A complete list of possible siege force tactics would have been of utmost importance when designing a fortification system. If a particular fortress was susceptible to certain tactics, the designers of a fortification system would need to consider that fact. If most of the fortresses in a system were susceptible to one set of tactics or another, the entire fortification system needed to be considered.

Separating the tactics along the lines of “breaching” and “storming” would have provided guidance for analyzing the fortresses, in relation to a potential enemy. In the seventeenth and eighteenth centuries, breaching would have called for considerable resources, to bring siege artillery to a fortress. Fire and flooding would rarely have been practical, but should be considered nonetheless. Storming would have called for sufficient numbers of elite troops to lead the storm. If potential enemies were likely to lack the ability to breach and/or storm a certain fortress, the “not storming and not breaching” tactic would then need to be considered.

#### *Alternative structures*

Apart from the structure suggested above, other structures could be imagined. Sixteenth and seventeenth-century fortification literature sometimes provides structures for siege army tactics. One example is Antoine de Ville, who first grouped surprise and ruse tactics under one heading, and then grouped blockade and breach-and-storm under another heading of *Des Attaques par force*<sup>308</sup>. Seemingly, these older structures do not aim for comprehensiveness.

However, two alternatives can be considered. One is separating fast tactics from slow; the other, separating active from passive, but both would suffer from shortcomings. The matter of fast or slow is not obvious. Storming unbreached walls could be done rapidly, or the preparations for it could take a long time. A blockade could also take a long time if directed against a fortress with ample supplies, but could be fast if it was directed against a fortress lacking water in a warm climate. Thus, any such structure would be difficult to use in practice. Separating active from passive measures would be quite arbitrary. It could be asked whether bombardment to break morale is an active or passive measure. It is passive in the respect that it does not include a storm, but active in the way that it includes shooting a large number of bombs. Thus, it would also become difficult to build a structure around the concepts of active and passive.

---

<sup>308</sup> de Ville (1666), pp. 229–302 and 303–408.



Another viable structure could be the logistic demands of the tactic. Breaching by artillery and bombardment, to break morale, would call for transport of heavy siege equipment. This alternative is not discussed here, although it would be a good alternative.

### *The definition of a siege*

At first glance, defining a siege seems simple – an outside force trying to capture a fortification. Ostwald offered a discussion on the matter and referred to Duffy, who wanted to separate a “formal siege” from other means of reducing a fortress, such as storm, surprise, bombardment and starvation<sup>309</sup>.

Ostwald’s suggestion was to avoid the generic use of the term “siege” and instead state the besieger’s tactic in each case.<sup>310</sup> In his own study, he chose to use the word “siege” for any operation against a fortification that used artillery or underground mines for a day or more.<sup>311</sup> Ostwald’s idea, however, creates problems. To begin with, describing fortress warfare with the tactics actually used would call for a plethora of concepts to describe the sieges in history, which would be highly impractical and make military history too complicated. An adoption of Ostwald’s ideas would also lead to difficult discussions. For example, if someone referred to the “siege of place X”, this could need to be corrected to the “blockade of place X”, which could then be questioned.

Thus, a case could be made for keeping the word “siege” at the top of the definition structure regarding fortress warfare. When considering the definition, Ostwald concentrated on the activities of the siege army, once it was outside a fortification, and then created a definition of a siege. The question could be made simpler, however, just beginning with the fact that a siege army was outside a fortification. Thus, a siege can be defined as:

- *There is a siege when a hostile army stands outside a fortification.*

It should be noted that Ostwald touched on this definition in his Appendix B, where he pointed out that a siege could begin with a siege army investing a town, or when it opened the trenches.<sup>312</sup>

Ostwald introduced the “desire or intention to resist” in the fortress, making it a prerequisite for the existence of a siege.<sup>313</sup> He used the example of a city sur-

---

<sup>309</sup> Ostwald, p. 348. Ostwald here referred to Duffy, *Fire and Stone*, pp. 94–101.

<sup>310</sup> Ostwald, p. 348.

<sup>311</sup> Ostwald, p. 350.

<sup>312</sup> Ostwald, p. 337.

<sup>313</sup> Ostwald, p. 350.

rendering at once on the arrival of a siege army.<sup>314</sup> There is a noticeable problem with Ostwald's "desire to resist", in that, without the siege army standing outside the city, there probably would not have been any surrender. Thus, Ostwald's prerequisite for the willingness to fight from the defender's side seems superfluous, although his point is well taken. It seems awkward to talk about a siege, when there was no battle or longer blockade, although by definition, there was a siege. Describing an individual case, one might want to refer to the "surrender of fortress X" instead of the "siege of fortress X", in case fortress X surrendered at once. This would only be a stylistic matter. From a statistical perspective, a fortification lost by "surrender at once" should be seen as a siege lasting less than a day. In short, cases of instant surrender are best seen as sieges, as the surrender was set off by the presence of a siege army. This conclusion seems reasonable in itself, and any alternative would lead into difficult methodological problems.

Ostwald also introduced the "a day or more" criteria for a siege.<sup>315</sup> Following the definition suggested above, the question would be irrelevant, since there would be a siege as soon as the siege force had moved up to a fortress. Ostwald's requirement did, however, create the problem of defining "a day". It could be as long as the sun is up, a twenty-four-hour period, a working day, or a period beginning at an arbitrary time of day and ending by midnight. It can be noted that a definition of "a day" is convenient to use when treating siege warfare. As to a definition of "a day", it is suggested here that "the sun did not rise twice between the arrival of the siege army and the surrender of the fortification". Consequently, "a day" would be over at the second sunrise after the arrival of the siege army.

The definition of surrender would also need some consideration. Ostwald presented three possibilities to define the end of the siege: the signing of the capitulation, the garrison evacuating the fortress or the siege army's main body leaving the area.<sup>316</sup> Of Ostwald's three alternatives, the signing of the capitulation is the more attractive choice, since this point defined the end of the battle. One other complication could be added. The *chamade* – a signal given by a drum or trumpet – is often found in siege battles. The *chamade* was not surrender in itself, it was a signal calling for negotiations<sup>317</sup>. If the *chamade* was respected by the attacking force, there would be negotiations, or an instant surrender without any conditions for the future destiny of the garrison involved.

---

<sup>314</sup> Ostwald, p. 350.

<sup>315</sup> Ostwald, p. 350.

<sup>316</sup> Ostwald, p. 337.

<sup>317</sup> "Schamade", *Meyers Großes Konversations-Lexikon*, Band 17, (Leipzig 1909), p. 688.

A third possibility is that the garrison fought to the last defender. In that case, the end of the siege would be defined as the moment when all organized resistance in the fortress had ceased.

Finally, it could be concluded that a siege calls for a fortification as defined in Chapter 3.2. A struggle around any fortification, which would not qualify as a fortress, should be called a field battle and classified according to its definition, for instance, a battle or skirmish.

The suggested definition could be bolstered by defining a siege army. A few enemy soldiers did not make a siege. The concept of “outside” could also be considered. A hostile army standing hundreds of miles from a fortification would normally not create a state of siege. The focal point then becomes when the siege army affected life in the fortress. The original definition could then be supplemented by two more statements, and the full definition becomes:

- There is a siege when a hostile army stands outside a fortification.
- A hostile army is an enemy force of the size which a fortification commander could not with great confidence undertake to drive off.
- A hostile army is outside when fortress communication with the outside world cannot be maintained in an otherwise normal manner, regarding information, people and goods.

### *The Vauban model*

Much of the discussion around structures for fortress warfare centers on the Vauban model for sieges. Sébastien le Prestre de Vauban (1633–1707) was a French fortification officer, who in his *De l'attaque et de la défense des places*<sup>318</sup> described a siege which stands out as a model. He envisioned 60,000 besiegers pitted against a garrison of 4,000. The former would be supported by 110 cannons and the latter by sixty<sup>319</sup>. Having arrived at the fortress, the siege forces should carry out the siege as described in Table 3.4.

---

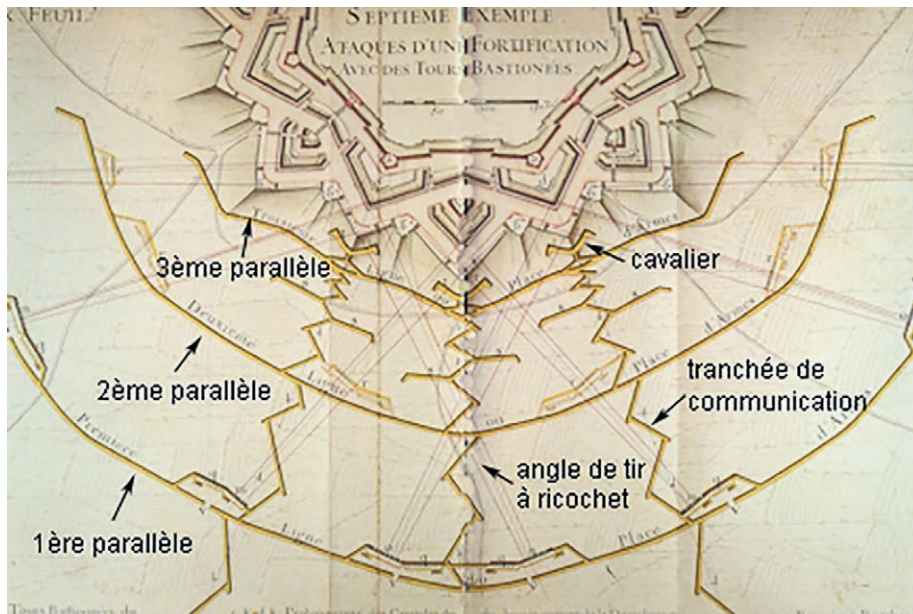
<sup>318</sup> Sébastien Le Prestre de Vauban, *De l'attaque et de la défense des places: Traité pratique des mines: et un autre de la guerre en général, par un Officier de distinction* (Leide [Leyden] 1740). (Further on, “Vauban”.)

<sup>319</sup> Vauban, p. 195.

**Table 3.4** A Vauban siege

To invest a place, to form the lines and to amass materiel	4 days
From the opening of the trenches to reaching the covered way	9 days
To capture the covered way and plan for the next step	4 days
To cross the ditch of a ravelin	3 days
To mine or shoot a breach in the ravelin	4 days
To capture the ravelin	3 days
To cross the main ditch to two bastions	4 days
To mine or shoot a breach in the main defense line	4 days
To defend and support the breach	2 days
For the turning over of the fortress after the capitulation	2 days
Allowance for errors, damage caused by sorties or valorous defense	4 days
<b>Total</b>	<b>43 days</b>

Source: Sébastien Le Prestre de Vauban, *De l'attaque et de la défense des places: Traité pratique des mines: et un autre de la guerre en général, par un Officier de distinction*, (Leide [Leyden] 1740), p. 192.



**Picture 3.5** The Vauban siege model. The picture shows how the siege army is working its way toward the fortress. The system consists of three parallel trenches, getting closer and closer to the fortress. The parallel trenches are connected by communication trenches, zigzagged to stop cannonballs from the fortress from sweeping the entire length of the trench. The text in the picture also refers to “cavaliers”. These would have been build-ups to protect the siege troops closest to the fortress. The “angle de tir à ricochet” describes how the siege batteries are shooting ricocheting cannonballs toward the fortress. The picture can be compared to the 1626 picture earlier in the text, and it can be seen that in the Vauban model, the fortress artillery now does not have the precise ending point of the trenches, closest to the fortress, to focus their fire on. (Source: [https://commons.wikimedia.org/wiki/File:Tranchées\\_parallèles\\_Vauban.jpg](https://commons.wikimedia.org/wiki/File:Tranchées_parallèles_Vauban.jpg), modified by Cyberprout, read December 31, 2016.)

The Vauban siege as described above is sometimes referred to as a “formal siege” or a siege *dans les forms*.<sup>320</sup> Focus on the Vauban model has inspired the idea that this model is a special type of siege, which deserves its own place in a structure. Ostwald went even further and recognized it, or siege types closely resembling it, as the only tactic worthy of the description “siege”. Apart from being in stark contrast to the etymological derivation of the word siege, ultimately coming from the Latin *sēdēs* meaning “seat”<sup>321</sup>, and then rather referring to a blockade, the disadvantages with Ostwald’s definition have been shown above. The proper way to regard a Vauban type of siege should be as a development of the breach- and-storm tactic.

The most serious consequences of the Vauban system would be military-political or strategic. Vauban claimed that any fortress with a garrison of 4,000 would fall after forty-three days of siege. Forty-three days was not much time in the seventeenth or eighteenth century, especially for such an empire as the Swedish, where it would take considerably longer than forty-three days to deploy a relief army, in most places. To base the defense of a province on fortresses, which would only last for forty-three days, would seem like a questionable decision. Vauban’s work was not published until 1740, but his basic ideas should have been known long before then. If nothing else, his rapid sieges of Philippsburg in 1688 and Ath in 1697 could not have been avoided by the military decision makers. The Swedish decision makers should have realized that one of the cornerstones of their defensive strategy – the fortresses – hung on weak hinges.

Despite the siege of Philippsburg in 1688, Dahlbergh, in 1698, could write, for example, that Narva would protect Ingria from any military threat (see Chapter 2.4). Another example of the strong reliance on fortification in Swedish defense philosophy was given in a royal decree of 1695. That decree began with an introduction, where the measures taken for the improvement of Swedish fortifications under the rule of Karl XI were praised. Then, which is highly interesting, the introduction required “[...] de emot desse tiders häftige och vehemente offensioner och mächtige angrepp kunna resistera samt defen-

---

<sup>320</sup> Ostwald, pp. 351 and 353.

<sup>321</sup> <https://en.wiktionary.org/wiki/siege>, read December 31, 2016.

sionen så inrättas, at de (warandes ifrån all succurs afstängde) måge igenom Guds bistond, kunna på sig sielfw bestå, [...]"<sup>322</sup>.

Here, a few alternatives are left open. The Swedish decision makers could have overestimated their ability to build fortresses that could overrule the logic of Vauban, or they could have underestimated the ability of their opponents to carry out sieges according to the logic of Vauban.

## RESOLUTIONS AND SIEGE COUNTERTACTICS

### *Introduction*

When a siege had begun, the outcome would hang in the balance until the fortress had fallen or the siege army had marched off. It should be noted that a siege could be resolved relatively undramatically by the siege army commander losing faith in his ability to conquer the fortress and marching off, or by his being ordered to another front by the decision makers in the attacking nation. If the siege army commander persisted in his efforts to conquer the fortress, a wide array of alternatives for resolving the siege battle were open. In this chapter, the major alternatives will be briefly described but, before addressing them, it should be noted that a siege battle could be unresolved by the end of the war and, if it was, the peace treaty could be seen as resolving the battle.<sup>323</sup> In these cases, the defender would always be the victor, since the besieger had obviously failed to conquer the fortress in the time span allowed him.

### *The defending nation resolving the siege battle*

The defending nation – supposedly having field army troops, ships, supplies, etc. at hand – could choose to support a besieged fortress. This was, however, a strategic decision. The defending nation could decide that the resources at hand were needed elsewhere, and thus, the besieged fortress would be left to its own devices. The ability of the defending nation to support a fortress, and the cost of doing so, would depend on the general accessibility of the fortress, i.e. the relative ease with which it could or could not be reached by supplies

---

<sup>322</sup> Sverige, Kungl. Maj:t, *Kongl. May:ts Fortifications Ordning: Hwarefter Fortifications-Arbetet wid Fästningarne böhr drifwas och wederbörande där wid skole hafwas sig at regulera och rätta*. Gifwen Stockholm den 3 Julii, 1695, p. 1)

Translation: “[...] they be able to resist against the fierce and vehement offensives and powerful attacks of these times, and the defenses be so arranged, that they (blocked from all support) with the help of God could themselves preserve [...]”.

<sup>323</sup> (Ståkeholm 1471), Lovén, p. 137.

and reinforcements. If it was decided to support a besieged fortress, the main options were as below.

If the siege had not yet begun, or if vital materiel like the siege artillery were on their way to the siege army, an attack on the approaching siege train could be efficient.<sup>324</sup> If the siege force supply lines were sensitive, attacks on them could yield significant results.<sup>325</sup>

The most efficient way to support a besieged fortress would be to send a relief army that simply defeated the siege army. An example showing the use of relief armies was the Dutch rebellion against Spain in the sixteenth and seventeenth centuries. During his fifty-eight years of service, Dutch military leader Maurice of Nassau relieved twelve fortresses under enemy siege.<sup>326</sup>

The defending nation could also choose to lay siege to an enemy fortress in order to raise the siege of a fortress of its own, or move an army in any other direction to force the enemy to divert the siege army in that direction.<sup>327</sup>

#### *The fortress commander resolving the siege battle*

The garrison commander normally had only one way to resolve the siege battle, by a sally, moving troops out to fight the besiegers outside the fortress. In case of a victory for the garrison commander, the siege battle would have been resolved. Sallies could, however, be dangerous, a fact that was underscored by Barthold Otto Smoll in his *Architecturae militaris* [...] of 1693. Smoll claimed that failed sallies, especially at the start of the siege, could result in the loss of the fortress<sup>328</sup>. The particular problem with sallies, from the defender's point of view, was getting out of, and back into, the fortress. Here, congestion could occur, which could delay building up the force getting out, and possibly create situations in which the sallying force was dangerously exposed to siege army counterattacks when getting in.<sup>329</sup> On rare occasions, the garrison commander

<sup>324</sup> (Limrick 1690), H. C. B. Rogers, *Artillery Through the Ages* (London 1971), pp. 50–51.

<sup>325</sup> (Candia 1645–1669). Guy Le Moing, *Les 600 plus grandes batailles navales de l'histoire* (Cedex 2011), pp. 218–225. (Further on, “Le Moing”.)

<sup>326</sup> Duffy, Part I, p. 101.

<sup>327</sup> Duffy, Part I, p. 159.

<sup>328</sup> Barthold Otto Smoll, *Architecturae militaris, eller, fortifications konstens korta manuductions och underwijsnings första deel. Hwad serdeles wijdh regular och irregular fortificationen, jempte attacken och defensen i acht tagas bör/medh figur och text på deht tidligste förklarar och demonstretat* (s. l. 1693), p. 55.

<sup>329</sup> Girs (1626), pp. 134–135.



could resolve the siege rapidly by flooding the area around the fortress. Such conditions, for example, existed in Holland.<sup>330</sup>

Left with no relief army, or other decisive action from the national level, and unable to defeat the siege force in sallies, the fortress commander would be led by the choices made by the siege army commander regarding tactics. Not commenting upon every possible variation of siege army tactics, notes on the more common ones will be made below.

### *Resolving the siege battle – storm or breach-and-storm*

In the case of storming but not breaching the walls, the garrison's most realistic countertactic would be to try to fight the attackers as they moved forward, mainly using cannons and muskets. Failing to stop the advancing enemies, the garrison would have to fight a hand-to-hand battle with the attacker (see below).

Confronted with breaching tactics based on gunpowder artillery or mines, the defenders had a number of principally different countertactics at their disposal. The principal countertactic would have been to eliminate the ability of the siege force to breach the walls. Miners could be attacked by countermining<sup>331</sup>. Gunpowder siege artillery could be fought by fortress counter-battery fire.<sup>332</sup> The next alternative would have been to repair the damage to the walls at the same rate as the damage was incurred.

However, reintegration of the walls called for materials and manpower; both could be scarce. Repairing walls was also heavy work. In a fortress where food was rationed, the garrison was simply not always fit enough to carry out repair work. Another alternative was to build a new wall behind the section of the original wall that was under attack. When the original wall finally fell, the attackers would find a new one behind it. This alternative was very efficient when employed.<sup>333</sup> An alternative was to dig a new ditch behind the wall that was under attack.<sup>334</sup> Construction of a new wall behind the old, however, also called for material and human resources and, thus, suffered from the same drawbacks as the repair alternative.

---

<sup>330</sup> Jeremy Black, *The Cambridge Illustrated Atlas of Warfare: Renaissance to revolution 1492–1792* (Cambridge 1996), p. 57.

<sup>331</sup> Paul Bentley Kern, *Ancient Siege Warfare* (Bloomington, Indiana 1999), p. 277.

<sup>332</sup> Smoll, p. 59.

<sup>333</sup> (Bohus 1671), Ludvig W:son Munthe, Del III:1, pp. 461–462.

<sup>334</sup> (Padua 1509), Hughes, p. 64.



If the wall was breached, the struggle had changed character. The battle was by no means lost for the defenders, but they were now fighting on new terms. Tactics for storming intact walls and storming breached walls involved a final battle, if the defenders could not stop the attackers at a distance. In such a battle, the attackers and the defenders met face-to-face, in the seventeenth century, mainly fighting with bayonet and sword<sup>335</sup>. Taking the siege battle to this stage involved considerable risks for both sides. The attacker could be beaten back, taking heavy losses<sup>336</sup> among his best troops, since they were regularly used to lead the storm<sup>337</sup>. The risk for the garrison commander was that his troops could be massacred or, at the very least, they could be taken as prisoners of war if the storm succeeded.<sup>338</sup> Before the storm, surrender on terms would often include safe conduct for the garrison. If a fortified city was defended, a successful storm would most likely result in the plunder of the city and possibly a massacre of civilians.<sup>339</sup>

It might appear as though the garrison had a considerable advantage in the final battle. The attacker would be channeled in one way or another, thus making the garrison confront a limited number of attackers at each moment. The defender could also make ample preparations, such as placing cannons to cover the breaches with fire. However, the attackers would be well rested and vastly superior in numbers. The garrison could be worn out and reduced by battle losses, disease and hardship. As a rule, the attacker would have the opportunity to feed new and well-rested troops into the storm, while the defenders could see their numbers being reduced every minute, with a minimum or no reinforcements coming to the breach. Thus, a storm would often mean more risks than possibilities for the defender. The risks for the defenders were increased by the slow rate of fire of eighteenth-century weapons. If cannons were set up to defend the breach, they might be able to fire a first salvo, but not always a second.

One factor, however, could be to the distinct advantage of the garrison – the location of the fortress. If the fortress had low local accessibility, i.e. was located on high ground, or was otherwise difficult to reach for attacking infantry, a storm would be highly dangerous for the attackers. They would then find it

---

<sup>335</sup> Brent Nosworthy, *The Anatomy of Victory: Battle Tactics 1689–1763*, (New York 1992), p. 110.

<sup>336</sup> (Hara 1637), Duffy, Part I, p. 242.

<sup>337</sup> David Chandler, *The Art of Warfare in the Age of Marlborough* (Staplehurst 1990), p. 265.

<sup>338</sup> (Würzburg 1631), Duffy, Part I, p. 179.

<sup>339</sup> (Narva 1581), Eirik Hornborg, *Kampen om Östersjön* (Stockholm 1945), p. 143.

difficult to continuously reinforce the first wave of attackers, and the storm could ultimately end in disaster for the besiegers. If the attackers broke through a defense in the breach, the defenders would face a very difficult situation. The attackers would no longer be channeled, and the defenders would have to fight under disadvantageous conditions. The attackers could spread out around the defenders and fight them from several directions, using their superiority in numbers to the fullest extent. Once the attackers had broken through the defenses, the fortress had ceased to fulfill its purpose, and the defenders would soon be overwhelmed.

Thus, any siege battle where the siege force used storming tactics would be resolved in a hand-to-hand battle. With the siege army winning, the fortress had fallen and the garrison faced an uncertain future. With the siege army losing, the battle was not necessarily the final one. The siege army commander had the choice of regrouping his forces and trying a new storm, hoping that it would constitute the final battle.

*Resolving the siege battle – not storming and not breaching*

The non-storming options were mainly blockade and bombardment. If the besiegers had chosen to bombard to break morale, the garrison commander had two major options. The first was to sally and destroy the bombarding batteries; the second was to destroy the enemy mortar batteries with counter-battery fire. In the history of sieges, there seems to be no example of a garrison commander successfully silencing enemy mortar batteries. In reality, the garrison commander could only try to reduce the effects of the mortar bombs by preventing and putting out fires. If the garrison's or the burghers' morale broke before the siege army for some reason gave up firing, the garrison commander would be forced to surrender<sup>340</sup>.

The essence of a blockade was to cut the fortress off from resupply and reinforcement operations. The technique was time consuming, but highly efficient. The supplies in any fortress would eventually run out, and the garrison would have to surrender. The defending side could try to resupply the fortress before it fell, and the attackers could try to stop the resupply operations. The key to the outcome, the *Schwerpunkt*, to use Carl von Clausewitz's word, could then be a battle for the supply lines. From the viewpoint of the defending nation, resupplying a fortress to save it would have been a very cost-effective solution. Food

---

<sup>340</sup> (Stettin 1677), Ludvig W:son Munthe, Del III:1, pp. 435.

for the garrison to survive another few months would cost little, compared to the cost of the loss of a fortress.

The problem was whether or not a resupply operation could be carried out in the face of the enemy? A fortress located on an inland plain with no water connections was a forlorn hope, as far as an unsupported resupply operation was concerned. Antoine de Ville had a discussion on this issue in his *Les Fortifications*, where he did not use the phrase “forlorn hope”, but described the problems in a way to inspire this conclusion.<sup>341</sup> It would be virtually impossible for a slow and bulky supply train to get through to a fortress in the face of a siege army. Any resupply operation on land would normally require the deployment of a superior relief army. In practice, a resupply operation would have to involve maritime transport.

If the fortress had access to a river or lake, the defending side could resupply the fortress with small craft.<sup>342</sup> The siege battle would then hinge on the ability of the siege force to cut off this transport lane. The attacking side could bring in ships or boats to stop this traffic<sup>343</sup>. In this case, the battle would depend on the ability of the defending side to organize naval assets that were strong enough to defeat the ships or boats of the attacking side.

If the siege force completely lacked naval resources, river or lake transports could still be blocked by engineering work<sup>344</sup>. The extent of this threat to the resupply operations was dictated by the engineering skills and resources of the siege force. In the case of narrow waters, there were numerous alternatives, if the siege force wanted to cut off the traffic. One way to block a waterway was to build a stable bridge across it<sup>345</sup>. Another way was to build or capture a fort controlling the waterway.<sup>346</sup>

There was, however, an alternative: if the waterways were cut off by engineering works, the defending side could try to “fight” supplies into the fortress. A typical example would be a besieging force having cut off a navigable river with a chain of boats. The boats were manned by infantry with light cannons, which could defeat any unarmed ship. The fortress was cut off. The defending side then sent a small man-of-war down the river. The

---

<sup>341</sup> de Ville, pp. 487–488.

<sup>342</sup> (Leyden 1574), Duffy, Part I, p. 72.

<sup>343</sup> (Niceaea 1097), Toy, p. 131.

<sup>344</sup> (Ostend 1601–1604), Duffy, Part I, p. 87.

<sup>345</sup> (Antwerp 1585) (La Rochelle 1627–1628), Duffy, Part I, p. 80.

<sup>346</sup> (Haarlem 1573), Duffy, Part I, p. 72.

artillery on the small man-of-war could destroy the boats from a distance but, the besiegers had no weapons to use which could affect the man-of-war. Most likely, the men on the boats would flee as soon as they realized what was happening.

Alternatively, they fought a battle they could not win. In any case, the row of blocking boats would be broken, and the supplies could then begin to flow into the fortress again. A struggle for the waterways could also materialize in the shape of duels between ships' artillery and besiegers' batteries protecting the blocking devices<sup>347</sup>. If the defending force could fight supplies into the fortress, the siege force would need a new means to stop the flow. In the case above, the siege force would need a man-of-war superior to the one deployed by the defenders.

Thus, if an interior waterway was leading up to the fortress, and the defending nation had the means to use it, the siege blockade battle would depend on the ability of the siege force to block this waterway. Engineering works could close the waterways, if there was no naval opposition on them. If the defending nation had fighting naval assets on the interior waterways, their ability to fight supplies through to the fortress would be decisive.

A fortress could have a high general accessibility for the defenders, most often access to the open sea, which would change the rules. Engineering work could no longer block the waterways. If the fortress had a sail-in function from the open sea, or a protected discharge place, and if the defending nation had control of the sea, supplies could flow into the fortress. The siege army could then do nothing but watch the stream of ships going into the fortress<sup>348</sup>. The prospect of starving the fortress to surrender would then be low.

If the siege force had any fighting naval assets, they could be used to block the supply route, as long as the defending nation sent unarmed ships. As soon as the defending nation had their transports escorted by stronger naval units, this hope would also wane for the siege force. The only possibility for a blockade to succeed against a fortress with access to the open sea would be to dominate the seas in question. Thus, the attacking nation must be superior at sea, as well as on land<sup>349</sup>.

---

<sup>347</sup> (La Rochelle 1627–1628), Duffy, Part I, p. 119.

<sup>348</sup> (Tarragone 1641), Le Moing, pp. 208–209.

<sup>349</sup> (Candia 1645–1669). Le Moing, pp. 218–225.

With an ensured route for resupply and reinforcements, a fortress could be defended for a long time. Without it, the possibilities of defending the fortress for an extended period of time against a superior enemy army force were limited. It would then be likely that the siege battle was resolved by the garrison surrendering for lack of supplies.

#### A NOTE ON SIEGE DURATION

Jamel Ostwald studied fortress warfare in the War of the Spanish Succession 1702–1715, which was fought in several theatres: Spanish Netherlands; France; Spain; Italy; and Germany. His study lists data for the duration of 105 sieges, from the days of investment to the days the sieges were over. The average duration of a siege was slightly over twenty-eight days. The shortest siege was one day, and the longest 249 days. Of the sieges: thirty-two lasted from 1–7 days; fifty-six from 4–45 days; thirteen from 54–97 days; and four over 100 days. The last were: the siege of Gibraltar in 1704, 249 days; the little-known siege of Verrua in Italy in 1704, 176 days; the siege of Alicante in Spain in 1709, 139 days; and the siege of Lille in France in 1708, 117 days.<sup>350</sup> In the four long sieges, all fortresses but Gibraltar finally surrendered. Lille and Verrua were inland fortresses<sup>351</sup>. Alicante was located by the sea, but sited high on a rock<sup>352</sup> with low local accessibility for the defender, as there was no sail-in function or protected discharge place.

#### SUMMARY

A siege battle could be resolved in many different ways. If resolved to the advantage of the besieger, it would have been due to the success of one of the tactics described above. If the battle was resolved to the disadvantage of the siege force, it would normally have been the result of a relief army arriving, the cutting off of siege force supply lines or the siege army withdrawing for some other reason.

Reinforcement and resupply operations could only be counted on to succeed if the fortress had access to open sea controlled by the defending nation and an entrance to a sail-in function or to a protected discharge place which

---

<sup>350</sup> Ostwald, pp. 341–343.

<sup>351</sup> Duffy, Part II, pp. 38 and 50 and George Hills, *Rock of Contention: A History of Gibraltar* (London 1974), p. 220.

<sup>352</sup> David Chandler, *The Art of Warfare in the Age of Marlborough* (Staplehurst 1990), p. 258.

could not be blocked by army forces. Thus, the resolution of a siege battle was not only in the hands of the garrison commander. He depended on strategic decisions made at the government level, and, not least, on the location of his fortress. The general logic of the outcome of a siege battle could be described as in Table 3.5 below.

**Table 3.5** Factors contributing to loss of fortress

	RELIEF ARMY	NO RELIEF ARMY
OPEN WATERWAYS	The fortification would be saved.	The fortification could be saved.
NO OPEN WATERWAY	The fortification would be saved.	The fortification would be lost.

The table above is a simplified picture. A fortification could always be saved by the besieging army giving up. The matrix also does not take into account the situation where the defending nation can cut the supply lines to the besieging force, which would normally save the fortification.

### 3.4 THREE LONG SIEGES IN EARLY MODERN TIMES

#### INTRODUCTION

As a further introduction to the topic of siege warfare, three of the longest sieges in early modern Europe are briefly presented below. The presentation includes the sieges of Candia in 1648–1669, Gibraltar in 1779–1783 and Cadiz in 1810–1812.

The selection is made on the basis of length, although these sieges also illustrate the importance of access to the open sea for a durable defense. The Spanish siege of Ostend, during the Dutch Rebellion in the seventeenth century, would have been the next to qualify for this sampling. This siege lasted from July of 1601 to September of 1604, thirty-seven months or just over three years. The siege of Ostend lasted longer than the siege of Cadiz. However, Cadiz is included instead of Ostend, since it adds an important dimension to the topic of the location of fortresses.

Two of the sieges presented here are outside the time span of this study. Thus, the Swedish decision makers in the seventeenth century would not have been aware of the two last examples. This aspect had to yield to the aspect that Gibraltar and Cadiz bring considerable clarity to the matter of location. Regarding the awareness of the Swedish decision makers in the seventeenth

century, just using Candia and Ostend as examples should have made matters clear enough.

In the following, the three fortifications will be analyzed along the lines suggested previously in this chapter, strength of the construction, access to drinking water, attacker's and defender's general accessibility and attacker's and defender's local accessibility. These are structural properties of a fortification. In an actual siege, matters of process – matters which could be varied within the structural framework – will also be considered. Here, the most important is garrison strength.

### CANDIA 1648–1669

**May of 1648–September of 1669. Under siege for twenty-two years and four months.**

The struggle for Candia, today's Heraclion, in Crete, was one of the final rounds in the contest between the failing Venetian Empire and the Ottoman Empire. Crete, after the Ottoman conquest of Cyprus in 1570, was the last major foothold for Venice in the east. The Christian victory in the naval battle of Lepanto in 1571 and instability in the Ottoman Empire delayed the next Ottoman move until 1645.<sup>353</sup>

Candia was located on the northern coast of the island of Crete. The city was located directly on the sea, with no army blockable passages to the harbor. Candia was built on flat land, with no terrain features to significantly enhance its defensive properties. The defenses were strong, with a protective system of casemates, shelters and galleries for the garrison.<sup>354</sup> The cornerstones in the works were seven impressive bastions, many of them with hornworks and ravelins.<sup>355</sup>

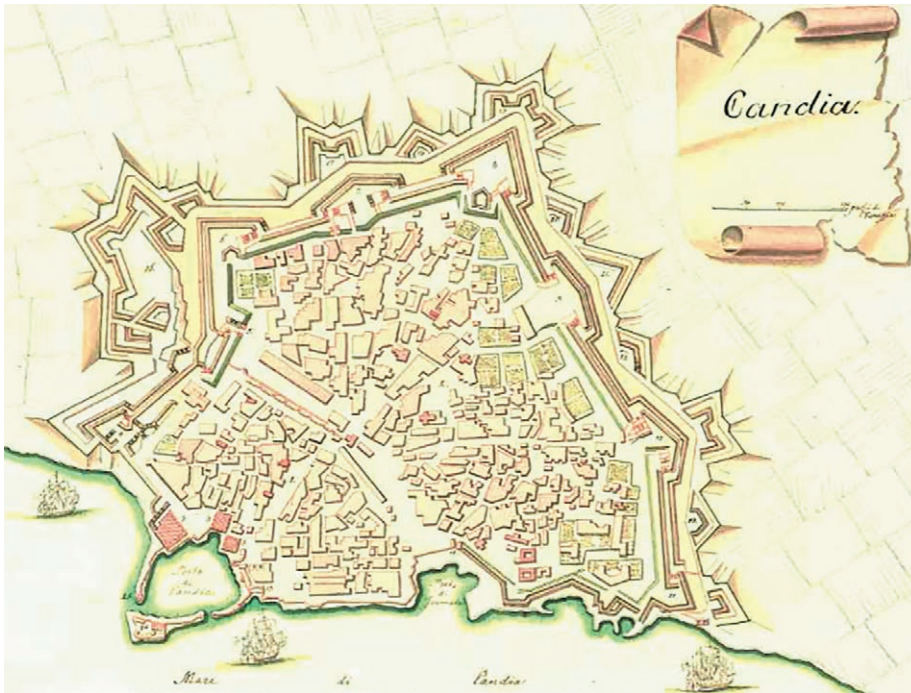
---

<sup>353</sup> Theocharis E. Detorakis, *History of Crete*, English translation by John C. Davis (Iraklion 1994), pp. 226–227. (Further on, “Detorakis”.)

<sup>354</sup> Duffy, Part II, p. 221.

<sup>355</sup> Dragos Cosmescu, *Venetian Renaissance Fortifications in the Mediterranean* (Jefferson, North Carolina 2016), pp. 94–96.





**Picture 3.6** The city of Candia (Heraclion) in Crete. The main bastions are clearly discernible in the picture. It is also clear that the city had a sail-in function which was difficult to block with army resources. (Source: Turkiet, Candia (Iraklion, Heraklion), nr. 002 01, Volume 13 Iraklion/Heraklion/Candia, 24 Turkiet med Balkan, Kreta och Cypren, Förteckning 406 Utländska stads- och fästningsplaner 1550–1989, Krigsarkivet.) (Detail)

On June 23, 1645, an Ottoman fleet of 100 men-of-war and 350 transports started to land 50,000 troops in Crete. Yusuf Pasha led the fleet, and Musha Pasha and Murat Aga the army. The outnumbered Venetian naval commander, Marino Capello, sat in Suda Bay, close by, and was in no position to influence the events. By the end of 1646, the Ottomans had taken control of western Crete. In 1648, the city of Canea on the northwest coast of Crete was captured after a two-month siege<sup>356</sup>. The siege of Candia, the major Venetian stronghold, began in May 1648. A storm was attempted on July 2, but it was repelled. The Ottomans cut off the external water supply and all overland communications.<sup>357</sup>

The Venetians were stronger at sea than the Ottomans; their struggle has been compared to a war between an elephant and a whale. The Venetians then

<sup>356</sup> David Eggenberger, *A Dictionary of Battles* (New York 1967), p. 75.

<sup>357</sup> Detorakis, pp. 229, 231, 235, 237 and 238.



adapted a strategy under which they tried to save Candia by blocking the Ottoman fleet by the Dardanelles. The blockade would stop the Ottomans from reinforcing and resupplying their siege army in Crete. In 1648, 1649 and 1651, the Venetians won considerable naval victories over the Ottomans, maintaining a blockade fleet off the Dardanelles.<sup>358</sup> However, in 1654, the Ottomans assembled a large fleet to break the blockade. They won the ensuing battle and could resupply their army in Crete.<sup>359</sup> The Venetians could soon resume the blockade of the Dardanelles and, in 1656, the blockade was almost total. The 1656 blockade caused severe suffering in Constantinople and in the Ottoman siege force in Crete.<sup>360</sup> However, the Ottomans defeated the blockade force in 1657, which instilled a hope of victory in the Ottomans.<sup>361</sup> The Ottoman victory allowed them to reinforce and resupply the siege force off Candia.<sup>362</sup>

Early on, the leading European nations started to take an interest in the battle. In 1650–1651, Spain sent money and eight men-of-war; in 1660, France sent 4,000 men. The French force, however, suffered severe losses in a sally and, in 1661, even more died as the plague broke out.<sup>363</sup>

In August of 1664, the Ottomans signed the Peace of Vasvar with Leopold I and the Holy Roman Empire, which freed up resources for the siege of Candia. As a response, the Venetians then recruited a force which arrived in Crete in February of 1666, but failed to bring about any change in the military situation. In 1666, the Ottoman leadership was changed. The former commander was recalled and beheaded. Grand Vezir Ahmet Köprülü was made new commander of Ottoman forces in Crete. The Venetians replied by sending the highly competent Francesco Morosini as their new commander. The siege now entered a more intense phase.<sup>364</sup> In the spring of 1667, Köprülü launched his offensive, newly reinforced by 40,000 men. Candia was now bombarded on a daily basis, destroying the city and causing panic among the inhabitants. Morosini carried out the defense with great skill, but in November of 1667, Colonel Andreas

---

<sup>358</sup> Le Moing, p. 219.

<sup>359</sup> Le Moing, p. 220.

<sup>360</sup> Eggenberger, p. 75.

<sup>361</sup> Le Moing, p. 223.

<sup>362</sup> Bigge, *Der Kampf um Candia in den Jahren 1667–1669*, Kriegsgeschichtliche Einzelschriften, Heft 26, (Berlin 1899), p. 118. (Further on, “Bigge”.)

<sup>363</sup> Detorakis, p. 238.

<sup>364</sup> Detorakis, p. 239.

Barotsis defected to the Ottoman side, bringing in-depth knowledge about the weak points of the fortifications.<sup>365</sup>

As the outcome hung in the balance, the Venetian navy defeated the Ottoman in the Battle of Frascia in May of 1668. The captured Ottoman ships were paraded in triumph off Candia.<sup>366</sup> The naval victory did not, however, stop the Ottoman attack. They now concentrated on two bastions, the Sabbionara in the west and the Sant' Andrea in the east, the ones closest to the shores.<sup>367</sup> The mine warfare got intense. During the last three years of the siege, not less than 1,364 mines were blown<sup>368</sup>.

By attacking the bastions by the sea, the Ottomans avoided much of the flanking fire which previously had been a problem for them. Thus, Candia was now under a serious threat of being captured. In the spring of 1669, Sabbionara was turned into rubble by mining and counter mining.<sup>369</sup> As the defensive works were reduced, the survival of the city would become more and more dependent on reinforcements to defend the damaged works and, possibly, to beat back a storm in a final battle.

Reinforcements were coming. In February of 1669, Emperor Leopold I sent 2,000 men, the Duke of Hannover 4,000, the Teutonic Order 200 and Venice 900.<sup>370</sup> In May, 2,500 Germans led by Count de Valdek arrived; in June 6,000 French led by the Duke of Navaille arrived in Crete. In the same month, 1,360 men from Bavaria and Strasbourg arrived. In June and July, hundreds of men were lost in a sally, and a naval bombardment of the Ottoman batteries ended with a capital ship lost.<sup>371</sup>

In August, the Duke of Navaille was weary of Candia and decided to leave with his troops. Their departure on August 20 spelled the end of the resistance in Candia. The garrison then numbered less than 4,000, and about 100 men were lost each day in the defense of the Sabbionara and Sant' Andrea bastions.<sup>372</sup> The last three years of the siege had seen sixty-nine Ottoman storms and eighty sallies from Candia.<sup>373</sup> Morosino now started to negotiate with Köprülü for sur-

<sup>365</sup> Detorakis, p. 240.

<sup>366</sup> Le Moing, p. 223.

<sup>367</sup> Duffy, Part II, p. 218.

<sup>368</sup> Bigge, p. 201.

<sup>369</sup> Duffy, Part II, p. 218.

<sup>370</sup> Detorakis, p. 241.

<sup>371</sup> Duffy, Part II, p. 219.

<sup>372</sup> Duffy, Part II, p. 221.

<sup>373</sup> Bigge, p. 201.

render. The surrender document was signed on September 16, 1669, and it went into immediate effect. The Venetian commander was given twelve days to evacuate the city. The siege had cost the Ottoman Empire 137,116 killed.<sup>374</sup> Christian losses have been estimated at 29,088.<sup>375</sup>

*Candia – conclusions*

The following could be concluded about Candia:

- It had a large garrison, although it fell to 4,000 by the end of the siege.
- The works were strong, with modern bastions.
- Lack of drinking water is not mentioned in connection with the siege.

The matters of accessibility can be summarized as below.

**Table 3.6** Candia accessibility

	General accessibility	Local accessibility
Ottoman (attacker)	Low	High
Venetian (defender)	High	High

Source: See above.

The attacker’s general accessibility was lowered by the defender’s strength at sea, and vice versa. The attacker’s local accessibility was high, due to the fact that Candia was not in a decisive way supported by terrain features. The defender’s local accessibility was also high, due to a sail-in function which could not be blocked with army resources.

The long siege of Candia is an example of how a fortification can be defended for an extended period of time, if the defending nation has naval superiority, and access to the city is not army blockable. However, the example of Candia also shows that no fortress can be defended forever against a skilled and determined besieger, unless the losses incurred during the siege are replaced. A third point is that a defensive strategy, based on cutting off the supply lines of the siege army, could be difficult to sustain in the long run. If the opposing navies are not totally disproportionate in strength, there is always a risk that the blockade can sometimes be broken.

<sup>374</sup> Detorakis, pp. 242–243.

<sup>375</sup> Bigge, 201.

## GIBRALTAR 1779–1783

**July of 1779–September of 1783. Under siege for four years and two months.**

In 1776, the American colonies rebelled against British rule. France soon sided with the Americans, and in June of 1779, Spain declared war on Great Britain.<sup>376</sup> In 1780, the Dutch Republic joined the anti-British coalition. The British were now fighting a coalition that strained British resources to and beyond their limits. Already in 1779, a Franco-Spanish fleet had appeared in the Channel, causing alarm in Great Britain<sup>377</sup>. The primary goal for the Spanish war effort was to recapture Gibraltar, which had been in the hands of the British since 1704.

Gibraltar is located on a peninsula, stretching out thirty kilometers into the Mediterranean from the Spanish mainland. The defensible part of the peninsula is defined by the Rock of Gibraltar, 420 meters high and bordering the flatlands north of it. On the western side, there was a piece of lowland between the rock and the shore, but on the east, it was completely inaccessible, not leaving room for three men to stand anywhere<sup>378</sup>. Just north of the Rock of Gibraltar, the peninsula is 900 meters wide.

The fortress had a sail-in function in the harbor on the western side. The natural properties were enhanced by fortification works, primarily from the Rock of Gibraltar to the sea on the western side and along the coast. The sensitive western and southern coastlines, at risk of enemy landings, were protected by bastioned walls<sup>379</sup>. The civilian population counted around 20,000 and were mostly Spaniards.<sup>380</sup> It may have cost Great Britain £200,000 a year to maintain Gibraltar, but, according to Canadian writer René Chartrand, it gave important commercial advantages for the British in the Mediterranean, as well as diplomatic and military influence.<sup>381</sup>

<sup>376</sup> H. J:dt, "Gibraltar och dess belägring 1779–1782", in *Tidskrift i Sjöväsendet*, Karlskrona 1882, p. 167. (Further on, "H. J:dt")

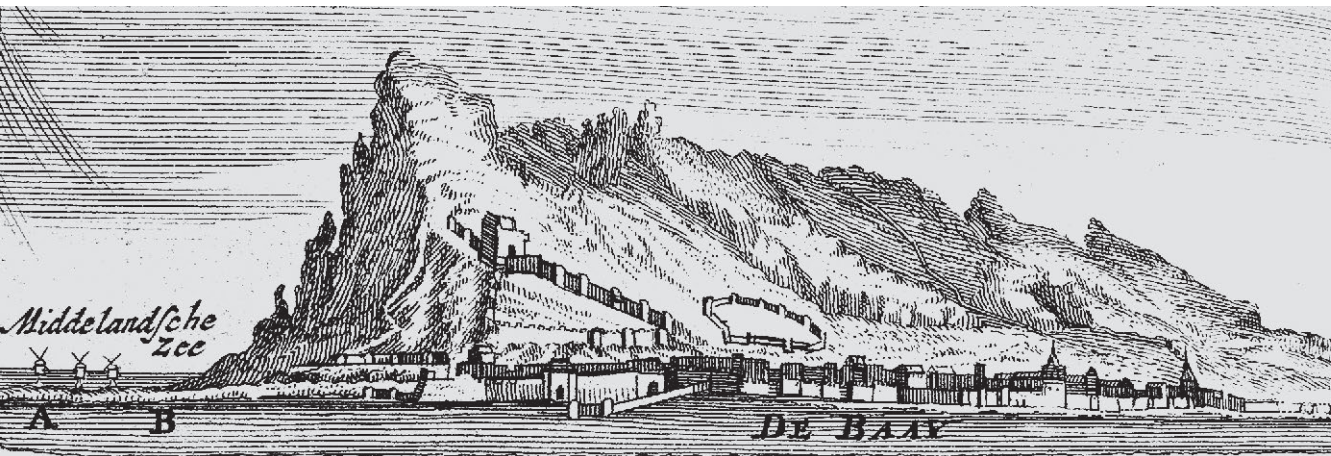
<sup>377</sup> N. A. M. Rodger, *The Command of the Ocean: A Naval History of Britain, 1649–1815* (London 2005), p. 343. (Further on, "N. A. M. Rodger")

<sup>378</sup> J. S. Dodd, *The Ancient and Modern History of Gibraltar, and the Sieges and Attacks it hath Sustained, with an accurate journal of the siege of the fortress by the Spaniards, from February 13, to June 23, 1727* (London 1781), p. [4].

<sup>379</sup> Tom Henderson McGuffie, *The Siege of Gibraltar, 1779–1783* (London 1965), pp.28–33. (Further on, "McGuffie".)

<sup>380</sup> H. J:dt, p. 163.

<sup>381</sup> René Chartrand, *Gibraltar 1779–83: The Great Siege* (Oxford 2006), p. 31. (Further on, "Chartrand".)



**Picture 3.7** The picture shows the immense problems of attacking Gibraltar from the mainland, seen as the low stretch of land to the left in the picture. (Source: *Kleyne en beknopte Atlas, of tooneel des oorlogs un Europa* (Amsterdam 1753, p. 69.) (Detail.)

In 1777, British General George Augustus Elliot had become the governor of the fortress. He had a reputation for military talent and endless energy. Taking up his post, he found the fortress in poor condition. Hardly anything had been done to remedy the damage from the last siege, in 1727. Urgent letters to London helped little. Elliot did, however, use the resources at hand to improve the works. When Spain declared war, the garrison consisted of 5,380 men; there was also a small flotilla. The fortress was considerably undergunned, counting only ninety-seven cannons<sup>382</sup>. Soon after the declaration of war, the flotilla would capture Spanish transports, laden with victuals and wine, which was a welcome addition in the warehouses.<sup>383</sup>

On July 14, 1779, a Spanish flotilla led by Admiral Don Barcelo appeared off Gibraltar, and the siege had begun. Toward the end of the month, the Spanish siege army arrived. It was led by Don Martin Alvarez de Sotomayor, an experienced soldier, counting 13,700 men. By September, Gibraltar was completely enclosed. The only way to bring in provisions was by small boats on dark nights. The rations were cut in half from the beginning of the siege. The Spanish strategy was to starve Gibraltar into submission.

In September, Spanish mortars opened fire. The Spanish bombs started fires in several places, and starvation and contagious diseases ravaged the city. The

<sup>382</sup> H. J:dt, p. 180.

<sup>383</sup> H. J:dt, pp. 166–167.

garrison counterfire was limited due to lack of gunpowder.<sup>384</sup> The situation was almost desperate, however, on January 25, 1780, a British fleet appeared off Gibraltar. The fleet consisted of eighteen ships of the line and a large number of transports<sup>385</sup>. The ships were a detachment from the British Channel Fleet, led by Admiral Rodney.<sup>386</sup> The decision to send the fleet and thus weaken the Channel defenses had not been an easy one to make. Some British ministers, among them John Montagu, Earl of Sandwich and the First Lord of the Admiralty, were against the decision. However, since the British public was deeply involved in defending Gibraltar, it was finally decided to temporarily reduce the Channel forces in favor of Gibraltar.<sup>387</sup> The blockading Spanish ships withdrew to the fortified harbor of Algeciras. Gibraltar was now resupplied and the garrison augmented by an infantry regiment. The psychological impact on the garrison was also significant; it showed that Gibraltar was not forgotten in Great Britain<sup>388</sup>. It took three weeks to discharge, and then Rodney left, much to Elliot's dismay. The fortress was soon blockaded by Barcelo again. There were now enough provisions in the warehouses, but the supply of fresh food was cut off. Scurvy spread, killing more people than the Spanish weapons.<sup>389</sup>

The year 1780 then passed. In 1781, Elliot's repeated calls for assistance led to the arrival of a new relief fleet. Now the entire Channel Fleet, twenty-eight ships of the line led by Admiral Darby, arrived in Gibraltar. The Spanish siege batteries tried to stop the British discharge, and although a few ships were somewhat damaged, the attempt failed.<sup>390</sup> The main reason for the Spanish failure to stop the discharge was that the transports could unload by the southern mole, which was out of reach for the Spanish batteries.<sup>391</sup> The resupply operation was again carried out at high risk. While Darby and his ships were away from the Channel, three French fleets left harbor. They sailed for the West Indies, the East Indies and one went after an important convoy coming from St. Eustatius in the West Indies.<sup>392</sup>

---

<sup>384</sup> H. J:dt, pp. 168–169.

<sup>385</sup> N. A. M. Rodger, p. 344.

<sup>386</sup> H. J:dt, p. 170.

<sup>387</sup> N. A. M. Rodger, p. 343.

<sup>388</sup> McGuffie, p. 64.

<sup>389</sup> H. J:dt, p. 170.

<sup>390</sup> H. J:dt, p. 172.

<sup>391</sup> Chartrand, p. 41.

<sup>392</sup> N. A. M. Rodger, p. 350.



Beginning to doubt the likelihood of the blockade tactic succeeding, the Spaniards turned to bombardment. Most houses were destroyed, but the civilians fled to the protected southern part of the peninsula. The garrison, having bombproof shelters, lost only seventy men. After six weeks of bombardment, the Spanish also lost faith in their bombardment tactic, and turned to storming instead. They started to dig their trenches toward the city. Elliot did, however, observe that the Spanish guards were lax, and he ordered a sally.

On the night to May 27, 1780, 2,500 soldiers left Gibraltar. They returned in the morning, having lost five men dead but having totally destroyed considerable parts of the Spanish siege works<sup>393</sup>. In February of 1782, the Spanish had restored the old siege works and now kept a better guard. The latter eliminated the option of a sally, but Elliot had the works bombarded with red-hot shot, which caused terrible Spanish losses. The Spanish siege was now losing its pace.<sup>394</sup>

Having run out of ideas, the besiegers offered a prize to the engineer who could come up with the best solution. The winner was celebrated French engineer Chevalier Michaud d'Arçon<sup>395</sup>. He recommended floating batteries – converted ships of the line – which would be fire protected. The French king put ten ships of the line at their disposal, and the reconstruction work began. The attack from the floating batteries would be combined with the fire from 1,200 cannons shooting from land. In the morning of September 13, 40,000 men on ten floating batteries, fifty ships of the line, fifty mortar ships and forty cannon sloops were to attack the 6,900 defenders. Soon a devastating artillery duel started up.

The outcome seemed to hang in the balance when smoke and fire started to emerge from the Spanish main battery on land. At the same time, a red-hot shot had started a fire on one of the floating batteries. This was where chaos in the Spanish naval force began. The Spanish sailing ships began to withdraw. At 2 o'clock in the morning, British Captain Curtis sallied with twelve cannon sloops from Gibraltar, attacking the slow-moving floating batteries which were now in a difficult position. During the night, eight of the floating batteries blew up. Meanwhile, the Spanish land batteries kept up their fire.

---

<sup>393</sup> Chartrand, p. 44.

<sup>394</sup> H. J:dt, pp. 164–175.

<sup>395</sup> McGuffie, p. 150.

In the morning, when informed of the defeat of their floating arm, the siege force ceased fire for good. A new British resupply fleet, led by Lord Howe, was underway. The Spanish left a blockading force, in case Gibraltar would have to surrender before it arrived. In the middle of October, this hope was also foregone, although it was not a clear-cut case. The warehouses in Gibraltar were empty, and Howe led thirty-five ships of the line. Spanish Admiral Córdoba waited for him with forty-six ships. Showing great tactical skill, Howe would, however, get his transports into Gibraltar<sup>396</sup>. Elliot would later return to Great Britain to a hero's welcome.<sup>397</sup>

In the end, Great Britain had to grant independence to the North American colonies, which was confirmed in the Treaty of Paris on September 3, 1783. On the same day, Great Britain signed peace treaties with her other enemies at Versailles. Florida was ceded to Spain but Gibraltar remained in British hands. The British losses in the defense of Gibraltar were 300 killed by weaponry, 1,000 dead from diseases and 350 struck from the lists because of illness, disability and desertion. Of the dead from disease, around 500 had died from scurvy.<sup>398</sup> Several of the British casualties had been incurred when their own cannons exploded.<sup>399</sup>

*Gibraltar – conclusions*

The following could be concluded about Gibraltar:

- It had a large garrison, although it verged on medium size until reinforcements arrived.
- The works were strong enough. The works on the sections not fortified by nature did not invite to a storming of unbreached walls.
- Lack of drinking water is not mentioned in connection with the siege.

The matters of accessibility can be summarized as below.

**Table 3.7** Gibraltar accessibility

	General accessibility	Local accessibility
Spanish (attacker)	High	Low
British (defender)	High	High

Source: See above.

<sup>396</sup> N. A. M. Rodger, pp. 355–356.

<sup>397</sup> H. J:dt, p. 176–184

<sup>398</sup> Chartrand, p. 86.

<sup>399</sup> McGuffie, p. 21.



The attacker's general accessibility was high, due to open land communication. The defender's general accessibility was also high, due to sea lanes which could be kept open. The attacker's local accessibility was low, one could say very low, due to terrain features which made attacks on the fortification difficult. The defender's local accessibility was high due to a sail-in function which could not be blocked by army units.

The defense of Gibraltar offers an example of when a fortress could be defended for a long time, if the defenders were resupplied and reinforced. Elliot led the defense with utmost skill and determination, but much of the basis for the outcome could be found in the location of Gibraltar. The besiegers had no means of closing the sea lanes, except for defeating the British fleet. Then the high rock offered a formidable defense. There were weaknesses in the fortifications, like the fact that the rock did not completely cover the peninsula in the west, and the peninsula was susceptible to landings at the western and southern parts. However, these weaknesses were compensated by man-made fortification. Gibraltar, thus, formed a fortification that could be defended for a long time, with limited losses in the garrison.

## CADIZ 1810–1812

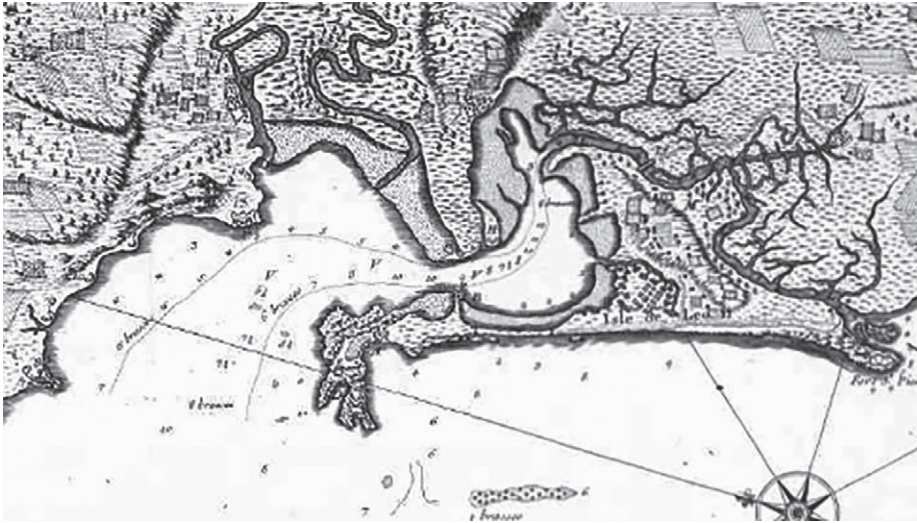
**February 5, 1810–August 25, 1812. Under siege for two years and six months.**

The French Revolution in 1789 led to a major European conflict which was to last until 1815. Napoleon Bonaparte gradually took charge of the French war effort, making himself Emperor of France in 1804. In 1795, Spain sided with the French. In 1807, when the Spanish government allowed a French army to march through its land for Portugal, the temperature was rising. In 1808, Napoleon forced the Spanish king to abdicate in favor of Joseph Bonaparte, Napoleon's brother. French armies soon invaded Spain to keep Joseph on the throne.<sup>400</sup> Joseph rapidly established himself in the northern parts of Spain, but the push south did not come until January 11, 1810, when 60,000 French troops marched on Andalusia. The main units in the force were I, IV and V Corps. Marshal Soult was in overall command of the troops. Seville, the capital of Andalusia, was soon captured, and it was there that Joseph temporarily halted the offensive. Seville had previously been the capital of the Spain opposed to Joseph and the government had fled to Cadiz.

---

<sup>400</sup> Angus Konstam, *Historical Atlas of the Napoleonic Era* (London, 300), pp. 99 and 100.

On February 3, Spanish General José Maria de la Cueva, Duke of Albuquerque, threw himself into Cadiz with 10,000 men. The city had previously been manned with just volunteer battalions. When the French I Corps of 23,000 men, led by Marshal Victor, arrived off Cadiz two days later, they found the city works well defended.<sup>401</sup>



**Picture 3.8** Cadiz. The fortified city was located on the western spit of the island of Leon, in the center of the picture, separated from the mainland by a river. (Source: *Plan de la Baye et Ville de Cadis, de la Riviere de St Lucas de Barameda de ses enviro*, nr. 6, Volume 7 Cadiz, 22 Spanien, Förteckning 406 Utländska stads- och fästningsplaner 1550–1989, Krigsarkivet.) (Detail.)

Cadiz is located on the western spit of the large island of Leon, separated from the Andalusian mainland by the Santi Petri River, some 300 meters wide. North of Cadiz there is a large bay cut in two by a peninsula pointing south, creating the Inner Harbor and the Outer Harbor. This peninsula presented the closest mainland feature of Cadiz. The point of the peninsula was fortified with the fortress of Matagorda and two other works, San Jose and San Luis. On the Leon side of the strait there was the Puntales Castle. In the larger Outer Harbor there was the ruined castle of Santa Catalina. Making work more difficult for a besieger was the fact that the mainland adjacent to the island of Leon consisted

<sup>401</sup> Michael Glover, *The Peninsular War 1807–1814: A Concise Military History* (London 1974), pp. 117–119. (Further on, “Glover”.)

of salty marshes.<sup>402</sup> In times when no cannons were effective beyond 2,000 meters, the fortified city of Cadiz was difficult to damage.<sup>403</sup>

As can be seen in the picture above, the waterways to open sea were most difficult to block with army resources. Siege force artillery could dominate the Inner and Outer Harbors, but it would be impossible for land-based artillery to interfere with discharging on the southern side of the island. Any attempts to reach the western side with cannons would, at best, be ineffectual.

The waters around Cadiz were dominated by the British Mediterranean Fleet, which was under the command of Collingwood since the Battle of Trafalgar in 1805<sup>404</sup>. As a local defense force, there were several Spanish and four British ships of the line in the proximity<sup>405</sup>. During the second week of February, one Portuguese and two British battalions arrived to bolster the defenses of Cadiz.<sup>406</sup> The British also sent sixty-three-year-old Tomas Graham, a distinguished soldier, to take charge of British troops in Cadiz.<sup>407</sup>

Arriving off Cadiz, Marshal Victor was faced with a problem. Not only was the city of Cadiz almost impregnable, it had to be attacked either across water or across the island of Leon. Even an attack across Leon would present problems, as Albuquerque had built batteries to command the Santi Petri River<sup>408</sup>. In British writer Michael Glover's opinion, it was simply not possible for the French to take Cadiz with military means, once it was garrisoned. It is not difficult to adhere to this conclusion<sup>409</sup>.

Victor and Soult did not, however, give up. They called for assistance from the French fleet in Toulon, disregarding the fact that the British had naval superiority in the Mediterranean. Napoleon did not even answer their request.<sup>410</sup> Left to their own devices, Victor and Soult started to work on the almost hopeless task of capturing Cadiz. They brought up a large quantity of artillery. Cadiz

<sup>402</sup> Charles Oman, *A History of the Peninsular War, September 1809 to December 1810: Ocana, Cadiz, Bussaco, Torres Vedras* (London 2004) (Originally published in 1908), Part III, map between pp. 149 and 150. (Further on, "Oman Part III")

<sup>403</sup> Oman, Part III, p. 145.

<sup>404</sup> N. A. M. Rodger, *The Command of the Ocean: A Naval History of Britain, 1649–1815* (London 2005), p. 549.

<sup>405</sup> Oman, Part III, p. 146.

<sup>406</sup> Glover, p. 119.

<sup>407</sup> James P. Herson, Jr., "For the Cause": *Cadiz and the Peninsular War: Military and Siege Operations from 1808 to 1812* (Master's thesis, The Florida State University 1992), p. 51. (Further on, "Herson".)

<sup>408</sup> Oman, Part III, p. 145.

<sup>409</sup> Glover, p. 119.

<sup>410</sup> Oman, Part III, p. 148.

soon became what American writer James P. Herson, Jr. called the “cannon capital” of the Spanish Peninsula, with the largest concentration of artillery there. The French brought 472 cannons, the British almost 150 and the city of Cadiz had 731 cannons above the caliber of 6 pounds.<sup>411</sup>

Soult had mortars of extreme calibers made in the foundries of Seville, to subdue Cadiz, but the bombardments never became effective. According to British historian Oman, in the initial bombardment only one bomb hit Cadiz, and a dog was the sole victim. Other researchers agree that the bombardment had very little effect. Later in his work, Oman claimed that the number of killed and injured after months of shelling in Cadiz could be counted on the fingers of two hands.<sup>412</sup> Herson saw the fire and the Cadiz counterfire mainly as a giant waste of gunpowder.<sup>413</sup>

In an attempt to gain superiority on the inner waterways and to provide mobile fire support, the French built the Cadiz Lines Flotilla. Its crew consisted of about 1,500 men.<sup>414</sup> This force would, however, make few and insignificant marks in history. The French never fought the battle for the inner waterways.

The siege developed slowly. The only point where the forces could reach each other was at the strait between the Inner Harbor and the Outer Harbor. The French had occupied the mainland fortress of Matagorda, previously destroyed by the defenders. Ineffectual artillery duels were now fought between the Matagorda position and the Puntales fortress on the island of Leon. On March 15, 1810, Graham launched an attack on Matagorda, recapturing the fortress. In April of the same year, the French recaptured it. Since it was difficult to maintain a mainland position against the French army, Graham decided to let it remain in French hands.<sup>415</sup>

Graham spent his time bolstering the defensive works on the island of Leon, making them more and more impregnable. He also had a rocket attack launched against the point where the French were building their boats. The attack was a failure, resulting in only one boat burned.<sup>416</sup> The siege arrived at a stage where boredom and monotony were becoming the more dangerous enemies.<sup>417</sup>

---

<sup>411</sup> Herson, pp. 86–87.

<sup>412</sup> Charles Oman, *A History of the Peninsular War, October 1811 to August 31 1812: Valencia, Cuidad Rodrigo, Badajoz, Salamanca, Madrid* (London 1996) (Originally published in 1914), Part V, p. 108. (Further on, “Oman, Part V”.)

<sup>413</sup> Herson, p. 74.

<sup>414</sup> Digby Smith, *The Greenhill Napoleonic Wars Data Book* (London 1998), p. 389.

<sup>415</sup> Herson, pp. 59 and 65.

<sup>416</sup> Herson, p. 87.

<sup>417</sup> Herson, p. 91.

In February of 1810, Victor had just 19,000 men outside Cadiz. Many of these men were engineer troops and siege artillery men, of little use in a field battle. At the same time, the Cadiz garrison counted 20,000 Iberians and almost 5,000 British. In the beginning of March, 1811, a major sally was launched from Cadiz. A total of 13,000 men were shipped out to fall in the back of the French, and an almost equal force attacked the French lines from the city. In the ensuing Battle of Barossa, the Spanish troops left the British to fight alone. Although the battle turned into a minor British victory, the sally failed to drive off the French and Cadiz was still under siege.<sup>418</sup>

By September of 1811, a new enemy appeared – yellow fever. The French lost 500 men to the disease, but the losses in Cadiz seem to have been limited. The main consequence for the defense of Cadiz was that communications were made difficult, since all ships coming from Cadiz were quarantined on their arrival at their destination.<sup>419</sup>

The resupply operations to Cadiz do not stand out clearly in history. It can thus be assumed that Cadiz was resupplied on a more continuous basis, perhaps not much different from peacetime trade. It can also be assumed that the supplies coming into Cadiz primarily arrived from the North African markets. It was here that Collingwood resupplied the British Mediterranean Fleet<sup>420</sup>. The defense of Cadiz was more of an economic effort than a military, which was observed by American researcher Herson. He noted that the British government spent thirteen million pounds on Cadiz during the siege, which was a sizeable proportion of the fifty-four million pounds spent in total for the British Peninsular War.<sup>421</sup>

In 1812, the siege of Cadiz was affected by events elsewhere. Napoleon was preparing his attack on Russia and reduced his army in Spain. At the same time, the British expeditionary force, led by General Sir Arthur Wellesley, later known as the Duke of Wellington, became more successful. During the latter part of August, the French started what British historian Oman called “an orgy of destruction” in their works off Cadiz.<sup>422</sup> On August 25, 1812, the siege of Cadiz was finally lifted.<sup>423</sup>

---

<sup>418</sup> David Gates, *The Spanish Ulcer: A History of the Peninsular War*, (London 1986), p. 249.

<sup>419</sup> Herson, p. 129.

<sup>420</sup> N. A. M. Rodger, *The Command of the Ocean: A Naval History of Britain, 1649–1815* (London 2005), p. 550.

<sup>421</sup> Herson, p. x. and p. 155.

<sup>422</sup> Oman, Part V, p. 539.

<sup>423</sup> Digby Smith, *The Greenhill Napoleonic Wars Data Book* (London 1998), p. 389.

*Cadiz – conclusions*

The following could be concluded about Cadiz:

- It had a large garrison, although it arrived at the last moment.
- The works were strong.
- Lack of drinking water is not mentioned in connection with the siege.

The matters of accessibility can be summarized as below.

**Table 3.8** Cadiz accessibility

	General accessibility	Local accessibility
French (attacker)	High	Low
Spanish/British (defender)	High	High

Source: See above.

The attacker’s general accessibility was high due to open land communication. The defender’s general accessibility was also high, due to open sea lanes. The attacker’s local accessibility was low, one could say extremely low, due to terrain features which made attacks on the fortification difficult. The defender’s local accessibility was also high due to a sail-in function which could not be blocked with army resources.

The siege of Cadiz is an example of how a strong location, combined with command of the adjacent waters, makes a fortress very difficult to conquer. The main French hope to capture the city rested on an attack on a weak garrison. This hope was destroyed by Albuquerque throwing his army into the city.

No fortress is impregnable. The waterways around the fortress were obviously the key to the battle. Had they been able to cut off the supply of men, money and supplies, the French would most likely have won in the long run. The waterways were also the key to French siege options. Being able to ship troops around freely, they could have launched forces on the island of Leon, beyond the obstacles of the marshes and the Santi Petri River, and launched their siege attacks from closer to the city. Now, this option was not open to them. The siege, thus, turned into a wasteful series of futile efforts.

## CONCLUSIONS

First, the general properties of the three fortresses could be considered together as in the tables below.

**Table 3.9** Fortress properties

	Drinking water	Works	Garrison
Candia	Yes	Strong	Strong
Gibraltar	Yes	Strong	Strong
Cadiz	Yes	Strong	Strong

Source: See above.

It is clear that the three fortresses in all respects were strong, not suffering from lack of drinking water. That would have been a first prerequisite for a successful defense over an extended period of time. Then the accessibility is compared below.

**Table 3.10** Accessibilities

ATTACKER'S	ATTACKER	General accessibility	Local accessibility
Candia	Ottoman	Low	High
Gibraltar	Spanish	High	Low
Cadiz	French	High	Low
DEFENDER'S	DEFENDER		
Candia	Venetian	High	High
Gibraltar	British	High	High
Cadiz	Spanish/British	High	High

Source: See above.

The major differences among the three fortifications presented are that Candia fell while Gibraltar and Cadiz held. At Cadiz, it was almost impossible for the besiegers to reach the defenders. At Candia, located on flat ground with three land fronts, the struggle got furious. This pattern then suggests that a low attacker's local accessibility is advantageous for a durable defense. A location on an island, close enough to the mainland to make the presence of the garrison felt, but distant enough to make breaching and storming difficult, is a good situation, provided the defending side can control the waters.

It can thus be claimed that history shows examples of fortresses, situated in the right place and properly supported by the defender's navy, which could be defended for a long time against an otherwise superior adversary. Any breach



in the conditions above would place the fortress at risk, since the besieging army unit then could launch an efficient blockade and with time force the fortress to surrender due to starvation. A special factor in the siege of Candia was that the besiegers also depended on the waterways for their reinforcement and resupply. Thus, the defenders had the rare opportunity to win the siege battle, by cutting off the besieger's supply routes, which almost succeeded.

## 4. SIEGES 1702–1710

### 4.1 INTRODUCTION

#### *Introduction*

In this chapter, the Swedish defensive siege battles from 1702 to 1710 will be presented, in order to establish whether or not there were serious flaws built into the Swedish fortification system before the outbreak of the Great Northern War. A brief overview of the Swedish defensive fortress warfare from the beginning of the war in 1700 to and including 1701 is given in Chapter 2.5 The Great Northern War. During those first two years of the war, Swedish defensive fortress warfare was mainly successful because the two major fortresses of Riga and Narva could be defended until relief armies arrived. Thus, it can be claimed that the Swedish fortification system served its purpose well in the initial phases of the war, and flaws in the fortification system were only revealed to a limited extent. In order to investigate the main question of this work – if there were such flaws in the fortification system – the period of 1702 to and including 1710 needs to be studied.

This study includes all major Swedish defensive siege battles after 1701 up until September 29, 1710, and the fall of the fortified city of Reval in Estonia. The main objective is to illustrate the significance of the location of the fortresses, and/or other inherent weaknesses in the Swedish fortification system created before the war.

The general idea is to describe the siege battles as they transpired. These descriptions serve to indicate possible flaws in the fortification system, since these flaws would generate problems for the defenders, which, in the end, would lead to the fall of the fortification. If a fortification fell, it could be due to a built-in flaw in the system, which the garrison commander, regional authorities or national authorities would find difficult to remedy short term. The fall of a fortification could also be due to a process error, for example, a garrison commander giving up a perfectly defensible fortress after suffering a morale breakdown. In such a case, the loss of a fortress would not necessarily indicate a serious inherent flaw in the Swedish fortification system.

In the presentation of the sieges, the naval, regional and national levels are also observed, where relevant. In several cases, the process of the siege was too fast for the regional or national level to react. In the more prolonged sieges, the matter was, as a rule, dealt with on the national level. The observation of the regional and national levels is aimed at further investigating the importance of location, observing the issues arising for the decision makers on the national level in each siege. The analytical tool used in this chapter will be the same as in Chapter 3.4 Three Long Sieges in Early Modern Times.

The sieges are mainly presented according to the same structure. The long sieges of Narva and Ivangorod 1704, Riga 1709–1710 and Viborg 1710 are exceptions. Here the structure is expanded to present the sieges on a monthly basis.

#### *The fortifications in Livonia*

Overviews are rare in the otherwise large number of sources from the Great Northern War. However, one document describing the manning of Swedish fortifications in Livonia in 1699 has survived to our day. Since this document gives a good picture of the building blocks of the Swedish defensive system in Livonia and serves as an introduction, it is presented below. It should be noted that the manning figures reflect peacetime garrisons.

A few further comments could be made regarding the table above. Riga, Nymünde (Neumünde), Pernau and Dorpat will be seen below. Cobron was a satellite fortification of Riga. Kokehusen (Kokenhusen) was damaged in 1701 and did not play a further role in fortress warfare. Marienburg has a heading of its own below, but Nyenhusen (Neuhausen), Rumeln (Rummeln) and Werbeck (Wardebäck) do not. The last three fortifications were old castles, most likely used as observation points in 1699.

**Table 4.1** The garrisons in Livonia in 1699

GARRISON/REGIMENT	Alternative name of regiment (in Swedish)	Men	Subtotal
<b>THE GARRISON OF RIGA</b>			
Count Dahlbergh's regiment	Guvernementsregementet i Riga	1,050	
Baron Sop's regiment	Garnisonsregementet i Riga	1,034	
Von Funcken's regiment (2 comp.)	Åbo läns infanteriregemente	152	
Von Campenhausen's regiment	Österbottens regemente	984	
Creutz's regiment (troops left)	Björneborgs regemente	20	3,240
<b>THE GARRISON OF NYMÜNDE</b>			
Von Budberg's regiment (4 comp.)	Nylands infanteriregemente	560	
<b>THE GARRISON OF PERNAU</b>			
Skytte's regiment (4 companies)	Livländskt infanteriregemente*	663	
<b>THE GARRISON OF DORPAT</b>			
Skytte's regiment (4 companies)	Livländskt infanteriregemente*	501	
<b>OTHER GARRISONS</b>			
Cobron		57	
Kokehusen		92	
Nyehusen		19	
Marienburg		13	
Rumeln		11	
Werbeck		9	
Work detachments		20	
<b>TOTAL</b>		<b>5,185</b>	

\*Also known as "Kolonialregementet" [The Colonial Regiment].<sup>424</sup>

Source: *General Extract öfwer Lijfländske Guarnizonernas General Munster Rullor Anno 1699*, Volym 1 Generalförslag öfver svenska hären 1636–1724, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p. The alternative names of the regiments are based on Lars-Erik Höglund and Åke Sallnäs, *Stora Nordiska Kriget: Fanor och uniformer* (Karlstad 2000), pp. 106,<sup>425</sup> 150, 151, 152 and 155.

Comment: The document seems to have been written in October of 1699, since documentation on deaths ends in September of 1699. The information above is an extract from the source.

<sup>424</sup> Herman Müllern, "Kolonialförband i stormaktstidens svenska krigsmakt", in *Aktuellt och historiskt; Meddelanden från Militärhistoriska avdelningen vid Kungl. Militärhögskolan*, Stockholm 1965, p. 134. (Further on, "Müllern, Kolonialförband".)

<sup>425</sup> The notion of Sop (Soop) as the commander of the Riga Garrison Regiment ["Garnison-regementet i Riga"] constitutes a bit of a problem. Sallnäs (p. 106) has C. G. Frölich as the commander in the year 1700. Soop in this case would have been Erik Knutsson Soop (1643–1703), major general of the infantry and vice Ggvernor of Riga in 1680, also given as the commander of a dragoon regiment. (N., "Soop, Erik Knutsson", in *Svenskt biografiskt lexikon*, Part 18, (Stockholm 1850), p. 373.) According to another article in *Svenskt biografiskt lexikon*, Carl Gustaf Frölich became governor of Riga on March 10, 1701 and commander of the Riga Garrison Regiment, however without specifying the date for the latter appointment. (Sven Grauers, "Carl Gustaf Frölich", in *Svenskt biografiskt lexikon*, Part 16, (Stockholm 1964–1966), p. 630.) It can thus be assumed that Erik Knutsson Soop was in command of the regiment in late 1699, and that Carl Gustaf Frölich assumed the command sometime between March 10, 1701 and Soop's death in 1703.

## 4.2 MENZEN 1702 – Livonia (today’s Mõniste in the extreme south of Estonia)

**Under siege August 5/6 to 6/7, 1702 (2 days). Surrendered.**

### *Introduction*

When Karl XII and his main army left Swedish Livonia in July of 1701 to engage Saxon troops, Russian pressure on the Swedish Baltic Provinces increased. It started with raiding, but with time, the weakest and most exposed Swedish fortifications would be under attack. Menzen was the first Swedish fortification permanently lost to enemy forces. The Menzen manor house was first mentioned in 1542, when it belonged to a noble family. Our knowledge about the building is limited, especially since the manor house was completely destroyed in a twentieth-century war.<sup>426</sup> The picture below comes from a map dated to the seventeenth century. It represents another Livonian manor house, Cawalecht. The picture might provide an idea of what Menzen looked like: a larger house, most likely of stone, and some smaller buildings, most likely of wood. As will be understood from the description of the siege, the defenses of the manor were improved by palisades and a moat. As a fortress, Menzen must be considered small and weak.



**Picture 4.1** The picture above, representing the manor house Cawalecht in Livonia, comes from an older map and could provide insight on what Menzen would have looked like in 1702. It is striking that the buildings seem to be located for everyday convenience rather than for defensive purposes. (Source: Geografisk karta over området Dorpat – Randen-floden Pedde – Talkhof i Livland. 1600-talet?, nr 42:00001 (nr 15 in manual system), 1 Ritningar (Huvudserie), # Kartor och ritningar, 720085 Bergshammarsamlingen, Riksarkivet.) (Accessible via the manual system: Östersjöprovinserna – Livland, Kartsamlingen, Riksarkivet.) (Detail.)

<sup>426</sup> <https://www.visitestonia.com/sv/moniste-herrgardspark#historia-kultur>, read July 31, 2016.

Menzen was strategically located on the northern arm of the road coming into Swedish Livonia from Russian Pskov (see map in Chapter 4.3 Marienburg). With ease, the Russians could reach the fortification by road. The manor house was located on plane ground with no specific terrain features to enhance its defensive properties. On the map below, it can be seen that Menzen was almost on the road, with the small Schwartzbeck River behind it. It was, for all practical purposes, an inland fortification, although the Schwartzbeck River was a tributary river to the Ah River, which flowed out to the Baltic Sea.



**Picture 4.2** The picture shows the location of the fortified Menzen (“Menzenhof”). It was on open ground with the small Schwartzbeck River behind it. (Source: *Charta öfver hertigdömmet Liflandh, omkring 1700*, nr 317, 1 Lantmäteriets leverans 1850, 2 Kartor rörande Finland och Sveriges forna provinser 1623–1805, 420571 Lantmäteristyrelsen 1623–1974, Riksarkivet.) (Detail.)

#### *Earlier research and sources*

Earlier research on the siege of Menzen is limited. A substantial work on the war in Livonia in 1701–1702 was authored by Swedish historian Otto Sjögren in the late nineteenth century. Sjögren studied regional military commander Wolmar Anton von Schlippenbach’s archive and published a dissertation in 1883 on the Swedish defense of Livonia in 1701 and 1702.<sup>427</sup> In 1896, Sjögren also published an article about the Swedish Livonian army in *Historisk Tidskrift*. That article dealt very briefly with fortress warfare.<sup>428</sup>

<sup>427</sup> Otto Sjögren, *Försvarskriget i Lifland 1701 och 1702*, PhD-dissertaion, (Stockholm 1883). (Further on, “Sjögren, *Försvarskriget*”).

<sup>428</sup> Otto Sjögren, “W. A. v. Schlippenbachs lifländska här”, in *Historisk Tidskrift* 1896, p. [293]–320.

Tsar Peter's diary is a Russian source for these events. Adam Lewenhaupt, in his work on Karl XII's officers, referred to a report from garrison commander Gotthard Wilhelm von Yxkull<sup>429</sup> which, however, has proven difficult to find. The Swedish National Archives houses a number of letters from the garrison commander to von Schlippenbach. However, none of them deal directly with the siege.<sup>430</sup>

### *The garrison*

Menzen was defended by Lieutenant Colonel Gotthard Wilhelm von Yxkull and a free corps of 250 men hired at his own expense. This force was supplemented by soldiers from a battalion of country militia, and von Yxkull counted 430 men at the beginning of the siege. This information is based on Otto Sjögren's dissertation from 1883.<sup>431</sup> The figure 430 conflicts significantly with the number of prisoners taken by the Russians at the end of the siege, see below. Thus, it can be assumed that Sjögren's figure is too high, as the Swedish losses most likely had been limited.

### *Prior to the siege*

In July 1701, Karl XII had crossed the Düna River and left Swedish Livonia. Responsibility for the mobile land warfare now turned to Colonel Wolmar Anton von Schlippenbach and his Army of Dorpat. In September of 1701, von Schlippenbach repelled a Russian attack led by Field Marshal Count Boris Petrovich Sheremetov in the triple Battle of Rappin, Casaritz and Raугe. After the battle, von Schlippenbach was promoted to major general. However, on December 30, Sheremetov defeated von Schlippenbach in the Battle of Erestfer. In the beginning of 1702, von Schlippenbach expected a full-scale Russian attack at first grass for the horses. He now counted about 6,000 men in his army.

The Russians launched their attack, and about 24,000 Russian troops under Sheremetov crossed the Swedish border on July 16/17<sup>432</sup>. On July 18/19, Sheremetov defeated von Schlippenbach in the Battle of Hummelshof. After the defeat, von Schlippenbach retreated to the city of Pernau with his remaining forces of about 3,000. Sheremetov had the country around Hummelshof

---

<sup>429</sup> Lewenhaupt, Del 2, "Yxkull, Gotthard Willhelm", p. 786.

<sup>430</sup> Von Yxkull to von Schlippenbach, several letters, Volym M 1414, B. Brev till W. A. Schlippenbach 1702, 72 Schlippenbachska samlingen, Riksarkivet.

<sup>431</sup> Sjögren, *Försvarkriget*, pp. 51, 53 and p. 53 note 2.

<sup>432</sup> Grigorjev and Bespalov, p. 109.



ravaged after the battle. On August 2/3, Sheremetov's spies reported the presence of Swedish troops at Menzen and Marienburg.<sup>433</sup>

### *The siege*

Sheremetov sent Colonel Wadbolskoy, leading a regiment, toward Menzen. Arriving there on August 5/6, Wadbolskoy thought he could not capture the fortress with only one regiment. He sent a message to Sheremetov, describing the situation. On August 6/7, Sheremetov and the Russian main force arrived at Menzen. The Russians then opened fire with artillery. The artillery fire made it possible for the Russian dragoons to advance toward the palisades and cut them down. They then filled the moat and directed their fire against the wooden buildings in the Menzen complex. The Swedes then surrendered unconditionally.<sup>434</sup>

In his dissertation of 1883, Otto Sjögren ascribed the command of the siege to Russian Colonel Rudolf Felix Bauer, leading the Russian reserve army at Petsjory<sup>435</sup>. This is in contrast to the description offered in Tsar Peter's diary, which is followed here, although Bauer was present.<sup>436</sup> Sjögren's dissertation also stated that Menzen was bravely defended until September 2, 1702, claiming that G. W. von Yxkull wrote his last letter from Menzen to von Schlippenbach on September 2.<sup>437</sup> The wording in Tsar Peter's diary could be understood as Menzen falling on the same day as Sheremetov arrived there.<sup>438</sup> Sjögren's argument about a letter of September 2 is, however, problematic.<sup>439</sup> The solution seems to be presented in Sjögren's article in *Historisk Tidskrift* 1896, where he states that von Yxkull's last letter to von Schlippenbach was dated on August 6.<sup>440</sup> The problem could have been solved here, but the actual letter adds to the confusion.

The last preserved letter from Menzen is actually dated September 2, 1702, seemingly penned by von Yxkull's hand. Then, on the letter is the notation "pres. Pernau 6 August", meaning that it was presented in Pernau on August 6. It looks like Sjögren in his 1896 article mistook this date for von Yxkull's date,

<sup>433</sup> Tsar Peter's diary, pp. 51–52.

<sup>434</sup> Tsar Peter's diary, p. 52.

<sup>435</sup> Sjögren, *Försvarkriget*, p. 52.

<sup>436</sup> Grigorjev and Bespalov, p. 112.

<sup>437</sup> Sjögren, *Försvarkriget*, p. 52.

<sup>438</sup> Tsar Peter's diary, p. 52.

<sup>439</sup> 72 *Schlippenbachska samlingen* (Index in bound volume), Riksarkivet, p. 42.

<sup>440</sup> Otto Sjögren, "W. A. v. Schlippenbachs lifländska här", in *Historisk Tidskrift* 1896, p. 319.

which obviously is incorrect. The solution closest at hand is that von Yxkull happened to write “September” instead of “August” when he dated the letter. This solution fits well with the content of the letter, and if it was written on August 2, it could have arrived in Pernau to be presented to von Schlippenbach around the 6<sup>th</sup>.

The fact that von Schlippenbach did not mention Menzen in his reports to the Chancellery [“Kanslikollegium”], for the period including September 2, supports the assumption that Menzen was not defended until then.<sup>441</sup> Sjögren’s 1883 version of the events then spread to Ludvig W:son Munthe and his work on the history of Swedish fortification, quite obviously relying on Sjögren’s dissertation in his description of the 1702 siege of Menzen.<sup>442</sup>

A final question on the matter would be whether or not it was unrealistic for Sheremetov to capture Menzen in one day. The answer would be that it was not. Sheremetov could have his artillery ready to fire in less than a few hours, since digging for batteries most likely was not needed. While the artillery was getting ready, other troops could cut fascines to fill the moat. The course of events could then have developed fast, until the heavily outnumbered von Yxkull realized that resistance was futile, and the consequences of a storm were undesirable. On the contrary, it would have been almost a miracle if the small garrison could have resisted a superior enemy in a makeshift fortification, obviously not enjoying an attacker’s low local accessibility.

### *After the Siege*

The Russians captured 158 men and four cannons after the surrender,<sup>443</sup> von Yxkull and his men were brought to Russia as prisoners of war.<sup>444</sup>

### *Menzen – conclusions*

The following could be concluded about Menzen:

- It had a small garrison, under 1,000 men.
- The works were weak.
- Lack of drinking water is not mentioned in connection with the siege.

<sup>441</sup> Von Schlippenbach to Kanslikollegium, August 12, 1702; August 26, 1702; September 22, 1702; and September 28, 1702, Volume 3 ½, E. Inkomna handlingar, E VIII Skrivelser i krigsären den 1700–1712, 1411 Kanslikollegium 1584–1801, Riksarkivet, passim.

<sup>442</sup> Ludvig W:son Munthe, Del III:2, p. 424.

<sup>443</sup> Tsar Peter’s diary, p. 52.

<sup>444</sup> Sjögren, *Försvarskriget*, p. 53.

Matters of accessibility can be summarized as below.

**Table 4.2** Menzen accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. The defender's general accessibility was low, since Russian troops would reduce the value of the roads, and there was no usable waterway to this inland fortification. The attacker's local accessibility was high, due to the fact that Menzen was not supported in a decisive way by terrain features. The defender's local accessibility was of no practical interest, since there was no waterway to the fortress, although it can be concluded that it was low. There was no other way to bring supplies and reinforcements into the fortress than to send a relief army to defeat the Russian siege forces.

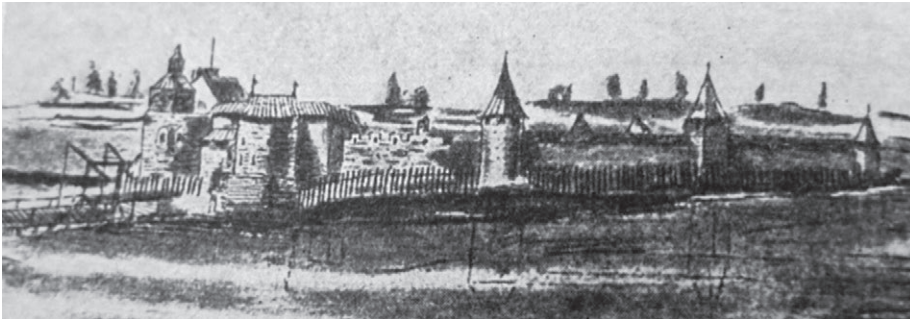
The attacker's tactic is not clear-cut. Their removal of the palisades indicates a storm against unbreached walls. At the same time, they aimed at the defender's morale by directing their artillery fire against the wooden buildings in the Menzen complex. It seems reasonable to classify the basic Russian tactic as "storming unbreached walls", since such a move was obviously prepared. In reality, von Yxkull surrendered before this tactic had worked through.

Von Yxkull cannot be burdened with any process errors, since the garrison would not have stood a chance in the longer run against a determined enemy. Since the fortress was captured in two days, the only way to save it would have been to defeat the siege force before it reached Menzen. The outcome of the siege opened up more Swedish Livonian land to Russian ravaging and made a dent in the Empire.

### 4.3 MARIENBURG 1702 – Livonia (today’s Alūksne in Latvia) Under siege from August 14/15 to 21/2, 1702 (8 days). Surrendered.

#### *Introduction*

Having captured Menzen (see Chapter 4.2 Menzen), the Russians turned against Marienburg. Marienburg was a medieval castle, built by the Teutonic Order in 1342. The purpose of the fortification was to improve defenses along the eastern border of the Order. The works were improved at the end of the seventeenth century by construction of ravelins and earthen walls outside the medieval ones.<sup>445</sup> Despite these improvements, the fortress must be considered small and weak.



**Picture 4.3** The picture above shows Marienburg from the northwest in 1661. The general impression is one of a run-down medieval construction with limited defensive properties. Outside the walls, the palisades are clearly seen. (Source: Armin Tuulse, Drawing by Storno in 1661, *Die Burgen in Estland und Lettland*, (Dorpat 1942), p.148. Tuulse referred to “Meyerbergs Reisebeschreibung” [Augustin Mayerberg (1612–1688), *Voyage en Moscovie d’un ambassadeur, conseiller de la chambre impériale, envoyé par l’empereur Leopold au czar Alexis Mihalowics, grand duc de Moscovie*. (Leide 1688).] (Detail.)

The castle was located on the largest island in Lake Alūksne.<sup>446</sup> The fortification did not control all land on the island, and it was located about 200 meters from the opposite shores. The island was about 500 meters long.<sup>447</sup> This location created a water obstacle for the attacker, although the advantage was

<sup>445</sup> Armin Tuulse, *Die Burgen in Estland and Lettland* (Tartu 1942), pp. 147–148.

<sup>446</sup> Armin Tuulse, *Die Burgen in Estland and Lettland* (Tartu 1942), pp. 147–148.

<sup>447</sup> *Marienburg. Mit der Situation*, Volume 29 Marienburg, 28 Östersjöprovinserna (de baltiska staterna), Förteckning 406 Utländska stads- och fästningsplaner 1550–1989, Krigsarkivet.

reduced by the facts that the fortification did not cover the entire island, and that it was relatively close to the adjacent shores.

Marienburg was strategically located on the eastern Livonian road system, on the southern arm of the road leading into Swedish Livonia from the Russian city of Pskov (see Picture 4.4 below). Thus, Russian forces advancing overland could reach it with ease. Lake Alüksne had a river flowing out from its eastern side, finally connecting to the Düna River. This connection would have increased Russian accessibility to Marienburg, but from a Swedish point of view, Marienburg will be considered as an inland fortress, not having any connection to navigable water.<sup>448</sup>



**Picture 4.4** The map above shows the significance of the location of Marienburg. There was a road leading in from Russian Pskov (Pleskow) to Swedish Livonia by Neuhausen. The southern arm, on which Marienburg was located, led directly to Riga. Menzen (see Chapter 4.2 Menzen) was located on the upper arm of the road system. (Source: *Estland och en del af Lifland*, nr 61b, Volume 32, *Ryssland, detaljkartor, Förteckning 403 Utländska kartor 1632–1931*, Krigsarkivet.) (Detail.)

<sup>448</sup> *Charta öfver heitigdömmet Liflandh, omkring 1700*, nr 317, 1 Lantmäteriets leverans 1850, 2 Kartor rörande Finland och Sveriges forna provinser 1623–1805, 420571 Lantmäteristyrelsen 1623–1974, Riksarkivet.

*Earlier research and sources*

The siege of Marienburg is little studied. It is covered in Otto Sjögren's dissertation of 1883 (see Chapter 4.2 Menzen) and in Tsar Peter's diary. There are a number of letters regarding Marienburg in 1702, written by the garrison commander and maintained in the Swedish National Archives, however, none of them describe the actual siege<sup>449</sup>.

*The garrison and artillery*

The castle is listed in a table of Livonian garrisons for the year 1699 (see Table 4.1). The fortress had a small garrison of about a dozen men and obviously served as an observation post.<sup>450</sup> In 1701, the garrison was increased, and Major Florian Thilo von Thilaw was made commander. Lieutenant Colonel Henrik Johan von Brandt and his troops, a detachment of the Ösel dragoons and country militia, were also stationed there.<sup>451</sup> Another unit can be identified: the Colonial Regiment [“Kolonialregementet”], which had one company in the fortress.<sup>452</sup> Just prior to the siege, there were important changes in the garrison (see below), and none of the sources used for this study specified the total number of soldiers in Marienburg at the beginning of the siege. Judging from the number of prisoners taken by the Russians after the siege, the garrison probably numbered just over 350 men at the beginning of the siege. The artillery counted twenty-two pieces under the command of Ensign Wulf<sup>453</sup>.

*Prior to the siege*

For the general development on the Livonian front, see Chapter 4.2 Menzen. In the days just prior to the Battle of Hummelshof on July 19, 1702, von Schlippenbach had ordered Lieutenant Colonel von Brandt to leave Marienburg and join him. Von Brandt proceeded with his mounted men toward von Schlippenbach's army, but left his infantry with von Yxkull in Menzen (see Chapter 4.2 Menzen).

---

<sup>449</sup> Thilo von Thilaw to von Schlippenbach, Volym M 1414, B. Brev till W. A. Schlippenbach 1702, 72 Schlippenbachska samlingen. Riksarkivet, s. p.

<sup>450</sup> *General Extract öfwer Lijfländske Guarnizonernas General Munster Rullor Anno 1699*, Volym 1 Generalförslag öfver svenska hären 1636–1724, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p.

<sup>451</sup> Sjögren, *Försvarskriget*, p. 12.

<sup>452</sup> Müllern, ”Kolonialförband”, p. 134.

<sup>453</sup> Ulfhielm, ”Karl XII:s tid”, p. 384.

After von Brandt left, Major Florian Thilo von Thilaw was in command of the fortification.<sup>454</sup> Von Brandt arrived in the small city of Wolmar on July 26.<sup>455</sup> There he was defeated in the first half of August by a force under Major General von Werden, which was detached from the invading Russian army.<sup>456</sup>

### *The siege*

The Russians arrived to face Marienburg on August 14/15. A number of batteries were built, from which bombs were thrown and breach shooting began. At each brigade, the work on building pontoons was started.

On August 20/21, Major General von Werden returned from Wolmar. It is not completely obvious how to interpret the chronology presented in Tsar Peter's diary. However, it seems that the Russians launched an attack using their pontoons on the 20<sup>th</sup>/21<sup>st</sup>, and that this attack was met by devastating artillery fire from Marienburg. On the following day, the 21<sup>st</sup>/22<sup>nd</sup>, Marienburg surrendered on terms of safe conduct for soldiers and civilians.<sup>457</sup>

Regarding Otto Sjögren and Russian Colonel Bauer's role in the siege, see comment in Chapter 4.2 Menzen.<sup>458</sup> While the Russians moved on Marienburg, the regional military commander von Schlippenbach sat in Pernau. In his reports to the Chancellery ["Kanslikollegium"], he explained his lack of activity with difficulties in obtaining supplies for his troops and with the inexperience of his cavalry. In a report of August 26, he expressed more optimism, though, stating that his troops were marching out of Pernau, and that there was hope for revenge on the Russians.<sup>459</sup>

### *After the siege*

Before surrendering, a few Swedes had laid a mine in the castle. When the Russians entered the fortress, it was set off by Ensign Wulf and fire worker Anders Gottschlich. The castle was severely damaged.<sup>460</sup> This action was considered deceitful by the Russians, and the remaining garrison, eleven officers and 356 men, were made prisoners of war. Thirty-two civilians and twen-

---

<sup>454</sup> Sjögren, *Försvarskriget*, p. 52.

<sup>455</sup> Sjögren, *Försvarskriget*, p. 51.

<sup>456</sup> Tsar Peter's diary, p. 52.

<sup>457</sup> Tsar Peter's diary, pp. 53 and 54.

<sup>458</sup> Sjögren, *Försvarskriget*, p. 52.

<sup>459</sup> Von Schlippenbach to Kanslikollegium, August 12, 1702 and August 26, 1702, Volume 3 ½, E. Inkomna handlingar, E VIII Skrivelser i krigsärenden 1700–1712, 1411 Kanslikollegium 1584–1801, Riksarkivet, s. p.

<sup>460</sup> Ulfhielm, "Karl XII:s tid", p. 384.



ty-two cannons were also brought off.<sup>461</sup> At least one of the prisoners was subsequently sold as a slave. Lieutenant Christian von Schader of the Wolmar country militia battalion, according to Lewenhaupt's work on Karl XII's officers, was sold as a slave to the Tatars.<sup>462</sup> Having captured Marienburg, Sheremetov had the fortifications completely destroyed and left Swedish Livonia.<sup>463</sup>

### *Marienburg – conclusions*

The following could be concluded about Marienburg:

- It had a small garrison, under 1,000 men.
- The works were improved medieval ones, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.3** Marienburg accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. The defender's general accessibility was low, since Russian troops would reduce the value of the roads and there was no usable waterway to this inland fortification. The attacker's local accessibility was lowered by the fact that Marienburg was located on an island, but not enough to classify the attacker's local access as anything other than high. No height or other terrain features enhanced the defensive properties of the fortification. The defender's local accessibility was of no practical interest, since there was no navigable waterway to the fortress, although it can be concluded that it was low.

The attacker's tactic is not clear-cut. The preparations of pontoons indicate a storm against unbreached walls. In reality, Marienburg surrendered before

<sup>461</sup> Tsar Peter's diary, p. 54.

<sup>462</sup> Lewenhaupt, Del 2, "von Schader, Christian", p. 590.

<sup>463</sup> Von Schlippenbach to Kanslikollegium, September 22, 1702, Volume 3 ½, E. Inkomna handlingar, E VIII Skrivelser i krigsåren 1700–1712, 1411 Kanslikollegium 1584–1801, Rikssarkivet, s. p.

this tactic had worked through. It seems reasonable to classify the basic Russian tactic as storming unbreached walls, since such a move was prepared.

Thilo von Tilaw cannot be burdened with any process errors, since the limited garrison had little hope of defending itself against a determined enemy in the long run. A regional relief force would have been the only salvation for Marienburg. The outcome of the siege opened up more Swedish Livonian land to Russian ravaging and made another dent in the Empire.

#### 4.4 NÖTEBORG 1702 – Ingria (today's Shlisselburg in Russia)

**Under siege September 27/28 to October 11/12, 1702 (16 days). Surrendered.**

##### *Introduction*

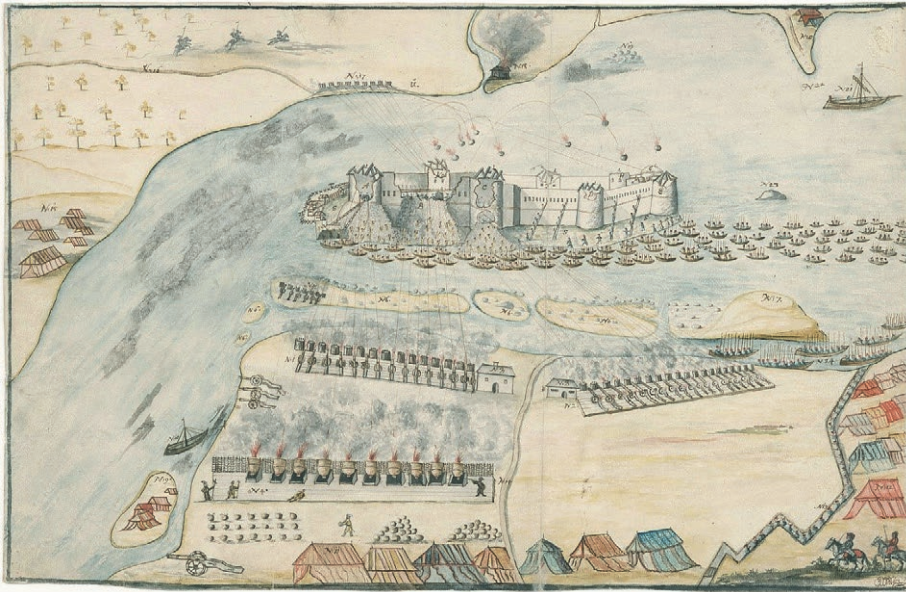
When Menzen and Marienburg in Swedish Livonia were captured (see Chapters 4.2 and 4.3), Nöteborg in Ingria was next. Now, Dahlbergh's 1698 statement that the Russians wanted to conquer Ingria at any cost (see Chapter 3), was being proved. The first Nöteborg fortification seems to have been founded during the struggles between the Swedes and Russians in the thirteenth century. The island was important for controlling the Neva River. In the peace treaty of 1323, Nöteborg became Russian; in the Peace of Stolbova in 1617, it became Swedish.<sup>464</sup>

In 1700, Nöteborg was basically a medieval fortress, with high walls and towers. In the latter part of the seventeenth century, repairs had been carried out, but no major improvements had been made.<sup>465</sup> Nöteborg was located on an island, where the Neva River originates at Lake Ladoga. The fortress covered most of the island, making it difficult for an attacker to gain a foothold on it. Large parts of the fortress were, however, within reach of artillery on adjacent land. The only road leading up from the Russian city of Ladoga passed by Nöteborg. Nöteborg had no sail-in function; neither did the site offer a protected discharge place.

---

<sup>464</sup> Jacob Bles, "Fästningen Nöteborg under svenskt välde", in *Norrlands Försvär: Årsskrift utgiven av Föreningen för Norrlands fasta försvar*, Stockholm 1937, pp. 77 and 85. (Further on, "Bles, Nöteborg?").

<sup>465</sup> Ludvig W:son Munthe, Del III:2, pp. 424–425.



**Picture 4.5** The picture above shows Nöteborg by the end of the siege. It was basically a medieval construction with towers and high walls. The picture was produced for the Swedish investigation after the fall of the fortress. (Source: [Nöteborgs fästnings belägring av ryssarna och kapitulation 1702 27/9 – 13/10 Samtida.] 1702–1702, nr 0011\_00001, ~Kartor och ritningar, XXIII Karl XII:s krig. Stora Nordiska kriget 1700–1720, 2 Krigshistoriska samlingen 1500t–1800t, Riksarkivets ämnessamlingar 754 Militaria, Riksarkivet.) (Detail)

The location on an island enhanced the defensive properties of Nöteborg, although not dramatically, as it was within reach of potential battery sites on land and it could be stormed by using small boats. The Russians could reach Nöteborg with relative ease. There was a road leading out of the city of Ladoga, and Lake Ladoga provided for sea transport from Russian ports. Swedish forces could also reach Nöteborg with relative ease. There was a road coming up from the fortress of Nyenskans on the Gulf of Finland, there was the navigable Neva River coming up from the Gulf of Finland, and there was the possibility of shipping men and supplies on Lake Ladoga from Swedish shores. Command of Lake Ladoga would then affect the ability to reach Nöteborg, but was not decisive.



**Picture 4.6** The picture above shows the location of Nöteborg, on a small island in the mouth of the Neva River on Lake Ladoga. (Source: *Fält Charta eller Topographisk Delineation öfwer Nöteborgs Situation* (26 juli 1699), Nr 008, 36 Nöteborg, 28 Östersjöprovinserna, Förteckning 406 Utländska stads- och befästningsplaner 1550–1989, Krigsarkivet.) (Detail.)

#### *Earlier research and sources*

The fall of Nöteborg led to the publication of an official Swedish eight-page pamphlet in 1702, which has become an important source.<sup>466</sup> The most extensive Swedish primary source was created after the siege, by the investigation into the garrison commander's conduct, which created material of about 500 pages.<sup>467</sup> Tsar Peter's diary is a Russian source for the events.

Modern research is represented by Ludvig W:son Munthe, who wrote a text based on contemporary sources for the siege.<sup>468</sup> In 1937, Jacob Blees wrote an article about Nöteborg as a Swedish fortress, which briefly dealt with the 1702 siege.<sup>469</sup> The siege is also covered in Grigorjev's and Bepalov's work of 2012. In it, there are references to Russian sources, although not specifically which ones.

<sup>466</sup> Sverige, Kungl. Maj:t, *Berättelse, om det förnämsta, som wijd Nöteborgs belägring af ryssen, sig tilldragit hafwer, in til den 12 octobr. 1702, då fästningen medh accord öfwer gick* (Stockholm, tryckt i kongl. boktr. hos sal. Wankijfs enkia, 1702). (Further on, "Swedish Report 1702".)

<sup>467</sup> *Om Nöteborgs kapitulation m m 1702*, Volym M 1376, 3 Kriget i Östersjöprovinserna 1700–1711, XXIII Karl XII:s krig. Stora Nordiska kriget 1700–1720, 2 Krigshistoriska samlingen 1500t–1800t, Riksarkivets ämnessamlingar 754 Militaria, Riksarkivet.

<sup>468</sup> Ludvig W:son Munthe, Del III:2, pp. 424–427.

<sup>469</sup> Blees, "Nöteborg", pp. 75–95.

*The garrison and artillery*

Lieutenant Colonel Gustaf Wilhelm von Schlippenbach, an uncle of the more well-known Major General Wolmar Anton von Schlippenbach – Commander of the Swedish Army of Dorpat – was in charge of the fortress.<sup>470</sup> The size of the garrison at the beginning of the siege is unclear. However, Swedish prewar planning indicated a garrison of 150 men<sup>471</sup>. One figure available for the 1702 garrison states that eight days into the siege, there were 225 healthy men<sup>472</sup>. In their work of 2012, Grigorjev and Bepalov stated that the garrison counted 450 officers and men.<sup>473</sup> This figure seems reasonable, since the garrison was reinforced by 240 men prior to the siege.<sup>474</sup> It is unclear where these troops came from. However, the official Swedish report mentions the presence of Major [Robert<sup>475</sup>] Charpentier. At the time, he served in the Tavastehus Double Infantry Regiment,<sup>476</sup> which is why it can be assumed that at least some of the troops came from this unit. There was also one company from the Colonial Regiment [“Kolonialregementet”] there<sup>477</sup>.

The Artillery Plan of 1695 listed the following artillery for the fortress: forty 6-pounder, fifty 3-pounder, six 24-pounder and six 18-pounder cannons. In addition, there should have been six mortars and sixteen howitzers. Of the large number of 3-pounders, some were intended to arm strugs for fighting at sea. The 24-pounders and 18-pounders were to be used against adjacent islands, where the planners assessed that a besieging force could establish batteries.<sup>478</sup> This artillery park adds up to 102 cannons, six mortars and sixteen howitzers. These figures match quite well with the number of pieces captured by the Russians after the siege, 128 cannons, one mortar and nine howitzers<sup>479</sup>.

<sup>470</sup> Ludvig W:son Munthe, Del III:2, p. 425 and Grigorjev and Bepalov, p. 118.

<sup>471</sup> *Förslag på garnisonerne huru starke dhe effter 1670 åhrs stat böhre wara och huru starke dhe befinnes efter sist inkom. förslagh*, Volym 1 Generalförslag öfver svenska hären 1636–1724, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p.

<sup>472</sup> Swedish Report 1702, p. 2.

<sup>473</sup> Grigorjev and Bepalov, p. 115.

<sup>474</sup> *Appendix 2*, in *Om Nöteborgs kapitulation m m 1702*, Volym M 1376, 3 Kriget i Östersjöprovinserna, XXIII Karl XII:s krig. Stora Nordiska kriget 1700–1720, 2 Krigshistoriska samlingen 1500t–1800t, Riksarkivets ämnessamlingar 754 Militaria, Riksarkivet, p. 58.

<sup>475</sup> Lewenhaupt, Del 1, “Charpentier, Robert”, p. 116.

<sup>476</sup> Swedish Report 1702, p. 4.

<sup>477</sup> Herman Müllern, “Kolonialförband i stormaktstidens svenska krigsmakt.”, in *Aktuellt och historiskt; Meddelanden från Militärhistoriska avdelningen vid Kungl. Militärhögskolan* 1965, p. 134.

<sup>478</sup> Bestyckningsplan 1695, pp. 50 and 51.

<sup>479</sup> Tsar Peter’s diary, p. 70.

*Prior to the siege*

Tsar Peter had three forces to consider if attacking Ingria, the Swedish Lake Ladoga Flotilla under von Numers, the Army of Dorpat in the south under von Schlippenbach and the Army of Narva in the north under Cronhiort (see Chapter 2.5 The Great Northern War).

The defeat of von Schlippenbach's Army of Dorpat at Hummelshof in July of 1702 had opened up for further Russian offensives (see Chapter 4.2 Menzen). On June 15/16, von Numers's flotilla was attacked by small Russian vessels and suffered losses. On August 29, von Numers's flotilla was again attacked and suffered even heavier losses. The Swedish flotilla was then reduced to low efficiency, and it soon left the lake, anchoring at Viborg on September 29.<sup>480</sup> Cronhiort's Army of Narva counted around 5,000 men. At the beginning of 1702, they were in a fortified camp around Nyenskans, with a detachment sent out to Ingrishof on the south side of the Neva River. On August 12, a Russian force led by General Apraksin defeated this detachment, while Cronhiort remained at Nyenskans with his main force.<sup>481</sup>

By the end of July or beginning of August, Tsar Peter, sitting in Archangelsk, ordered General Repnin to march to the city of Ladoga with his division.<sup>482</sup> Preparations for the campaign had begun already in June, and the Russians dispatched artillery to Nöteborg on July 28. Tsar Peter then left Archangelsk on August 5 and arrived in the city of Ladoga on September 5. Here he met up with General Repnin.<sup>483</sup>

Apart from Repnin's division and Tsar Peter's guards, the siege force had been reinforced by the cavalry and one regiment of infantry from Sheremetov's army in Pskov. The total size of the Russian siege army is not stated in Tsar Peter's diary. The strength has been estimated to be 35,000 men<sup>484</sup>. Grigorjev and Bespalov mentioned figures of 16,505 infantry and some 4,000 cavalry, with 10,000 men directly involved in the siege.<sup>485</sup> The official Swedish report of the siege quoted a Russian statement according to which there had been 35,000 Russians at Nöteborg, 6,000 at Loppis, 12,000 at Wassilkowa and 8,000 Cossacks. Loppis and Wassilkowa were located southeast of Nöteborg by Lake

---

<sup>480</sup> Ericson Wolke, *Rysshärjningar*, pp. 103–106 and Grigorjev and Bespalov, pp. 113–114.

<sup>481</sup> Arnold Munthe, Del I, pp. 125–126.

<sup>482</sup> Arnold Munthe, Del I, p. 127,

<sup>483</sup> Grigorjev and Bespalov, p. 116 and Tsar Peter's diary, p. 61.

<sup>484</sup> Arnold Munthe, Del I, p. 127,

<sup>485</sup> Grigorjev and Bespalov, p. 116.



Ladoga. According to the same report, the siege was led by Tsar Peter, Field Marshal Sheremetov, General Repnin, General Apraksin and General Chambers.<sup>486</sup>

On September 25, the Russians marched. They camped for the night about twenty kilometers from Nöteborg. For lack of horses, the artillery was towed by men. On the following day, 400 soldiers from the guards were sent to take up a post by Nöteborg, which would be done without losses. During the night, the Russians off Nöteborg were discovered by two patrolling Swedish boats, and the garrison was alarmed by the ensuing fire fight.<sup>487</sup>

### *The siege*

On September 27/28, Russian forces approached Nöteborg and started digging trenches. The following day, several Swedish boats arrived from Karelia, bringing men and supplies to the fortress. The Russians were obviously unable to stop this shipment. The Russians then tightened their grip. By the end of September, fifty boats were brought to the Neva River west of Nöteborg to block reinforcements. These boats were brought on Lake Ladoga and pulled overland for the last stretch past Nöteborg. Also, nineteen 18-pounders, twelve 12-pounders and twelve mortars arrived and were placed in batteries.

Cronhiort tried to reinforce the garrison, sending 500 men overland to the fortress. This force was defeated by the Russians on October 2, but Major Hans Georg von Leijon of the Nyland Infantry Regiment<sup>488</sup> and fifty grenadiers managed to get into Nöteborg. They made a difference because the garrison now only counted 225 men in fighting condition<sup>489</sup>. The Russian batteries worked on the towers and the walls, which began to crack.

By the beginning of October, the Russians prepared to storm. On the 7<sup>th</sup>, there was a call for volunteers for the attack. A large number of men responded to the call. Two days later, ladders were distributed in the Russian camp. The Russian breach shooting continued and the losses suffered in the Russian batteries were low,<sup>490</sup> indicating that the Nöteborg counter-battery fire was not effective. According to Russian statistics, the Russians shot 8,145 cannonballs and 2,581 bombs against Nöteborg, using 174,840 pounds of powder<sup>491</sup>.

---

<sup>486</sup> Swedish Report 1702, p. 7.

<sup>487</sup> Tsar Peter's diary, pp. 61 and 62.

<sup>488</sup> Lewenhaupt, Del 2, "Leijon, Hans Georg", p. 386.

<sup>489</sup> Swedish Report 1702, p. 2.

<sup>490</sup> Tsar Peter's diary, pp. 65–67.

<sup>491</sup> Tsar Peter's diary, p. 72.



In the first hours of October 11/12, a large firebomb was shot into Nöteborg and at 4 o'clock in the morning, the storming began. The defense was organized so that Major von Leijon and ninety-five men defended one breach, and Major Robert Charpentier and seventy-five men another. Both of them were responsible for the third breach; the Swedish reserve was made up of four soldiers<sup>492</sup>.

At 6 o'clock that morning, a stubborn defense and lack of space for the attackers outside the walls had made the first storm fail. The fact that the Russian ladders were too short contributed to their failure. However, a new Russian attack followed, lasting until 10 o'clock in the morning. This attack also failed and the Russians were on the verge of aborting the storm<sup>493</sup>. However, there was a third attempt. At 3 o'clock in the afternoon, von Schlippenbach had the *chamade* beaten. Now only twenty-five of von Leijon's ninety-five men remained at their posts, the others were dead or wounded<sup>494</sup>. In the evening, the surrender document was signed.<sup>495</sup>

#### *After the siege*

On October 13/14, the Swedish force marched out. There were eighty-three healthy soldiers (four of them Finnish grenadiers) and 156 sick or wounded. According to the articles of surrender, they were all free to leave. Tsar Peter was quite happy to have captured his first major Swedish fortress, which was renamed Schlüsselburg, the "Key Fortress"<sup>496</sup>.

In Sweden, the news of the fall of Nöteborg caused great concern. It now seemed likely that Nyenskans also would fall, and that the Russians would soon have access to the Baltic Sea. The Defense Commission ordered von Numers out into the Gulf of Finland to stop the Russians from reaching open water. They also wrote a memorandum on the improvement of defenses in the Stockholm archipelago.<sup>497</sup>

#### *Nöteborg – conclusions*

The following could be concluded about Nöteborg:

- It had a small garrison, under 1,000 men.

---

<sup>492</sup> Swedish Report 1702, pp. 3–4.

<sup>493</sup> Grigorjev and Bespalov, p. 120.

<sup>494</sup> Swedish Report 1702, p. 5.

<sup>495</sup> Tsar Peter's diary, pp. 67–69 and 72. Ludvig W:son Munthe, Del III:2, p. 427 did, probably by error, date the surrender to September 12.

<sup>496</sup> Tsar Peter's diary, p. 69.

<sup>497</sup> Ludvig W:son Munthe, Del III:2, p. 427.

- The works were medieval, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.4** Nöteborg accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high due to the proximity of Russian bases and the road system. It was further increased by the ability to use Lake Ladoga for transports.

The defender's general accessibility was low, since Russian troops would reduce road utility, and the Russians controlled Lake Ladoga and could block the Neva River. The attacker's local accessibility was lowered by the fact that Nöteborg was located on an island, but not enough to classify the attacker's local accessibility as anything other than high. No height or other terrain features decisively enhanced the defensive properties of the fortress.

The defender's local accessibility was low, since there was no sail-in function or protected discharge place in or by the fortress.

The attacker's tactic was to storm against breached walls. Gustaf Wilhelm von Schlippenbach cannot be burdened with any process errors, since the limited garrison had little hope of defending itself against a determined enemy in the long run. A regional relief force would have been the only salvation for Nöteborg. The outcome of the siege gave Russia a foothold on the sensitive Neva River, which reached the Baltic Sea.

#### 4.5 NYENSKANS 1703 – Ingria (in St. Petersburg in today's Russia)

**Under siege from April 25/26 to May 1/2, 1703 (7 days). Surrendered.**

##### *Introduction*

After the fall of Nöteborg in 1702, an attack against the adjacent Nyenskans was expected in the same year. However, it would take until the early spring of 1703 until the Russians struck there.

During the struggles between the Swedes and the Russians in the early fourteenth century, the location was fought over. In the peace of 1323, the Neva River fell outside the Swedish territory. In the Peace of Stolbova 1617, Ingria and the Neva River area became Swedish. In 1632, Gustav II Adolf issued a letter which is seen as the foundation for the city of Nyen. The city, and a star redoubt built there, were destroyed during a war with Russia in 1656, but were soon rebuilt.<sup>498</sup>

In 1700, the rebuilt Nyenskans was a five-bastion fortification, which was protected by a dry moat and a covered way.<sup>499</sup> The works could have been quite impressive. Specific information on the actual size of them is lacking, but Grigorjev and Bespalov cited a Russian source, saying that the wall was nineteen meters high<sup>500</sup>. This is very high, and subsequent events create the idea that the walls were difficult to storm.

Nyenskans was located almost on the point of a peninsula created some twenty kilometers upstream from the Gulf of Finland by the confluence of the Ohta River, then by the Swedes called “Svartbäcken”, and the Neva River.<sup>501</sup> The fortification was located on a navigable river with a connection to open sea. This made it theoretically possible for Swedish ships to reach the fortress. However, the river entrance was army blockable. After their conquest of Nöteborg, the Russians could reach Nyenskans using the Neva River or the road which ran parallel to it. There was no road leading directly from Russian territory to Nyenskans. There was no sail-in function or protected discharge place, as any spot where ships could discharge was within reach of siege artillery. Sited on a peninsula, the fortification was protected by water on two sides, but the fortress could still be stormed with relative ease, as one side offered land access.

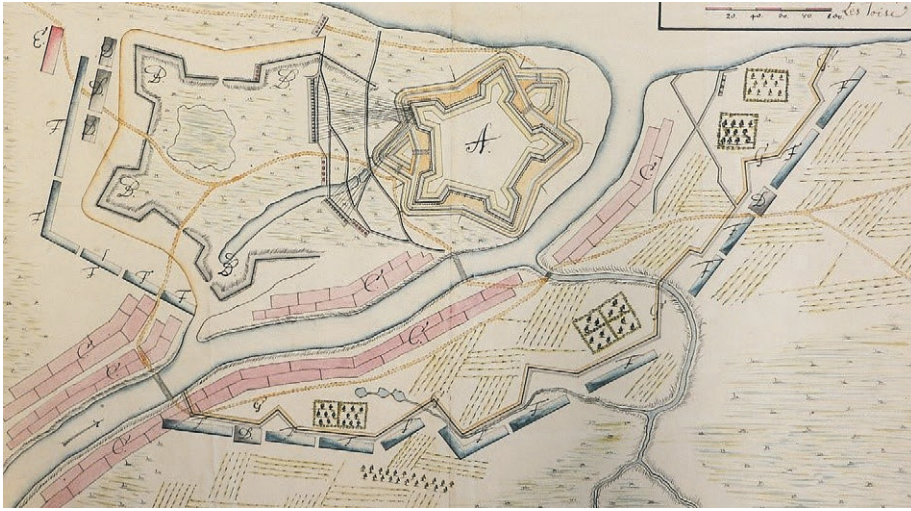
---

<sup>498</sup> Carl von Bonsdorff, *Nyen and Nyenskans. Historisk skildring*, (Helsingfors 1891), pp. 1–10 and 25–26. (Further on, “von Bonsdorff”)

<sup>499</sup> Ludvig W:son Munthe, Del III:2, pp. 433–434.

<sup>500</sup> Grigorjev and Bespalov, p. 126.

<sup>501</sup> Arnold Munthe, Del I, p. 153.



**Picture 4.7** Two fortifications can be seen in the picture above, the Nyenskans core fortress “A” and the never completed city works to the left of the core fortress. Civilian buildings can be seen along the river. (Source: *Demonstration Du Siege de Nienschantz asiegé par les troupes de sa Majesté Czariene le 24 April 1703 et rendu par accord le premier de mai*, nr 46, Volume 11 *Stora nordiska kriget, Förteckning 425 Sveriges krig, Krigsarkivet.*) (Detail.)



**Picture 4.8** From the picture above, it can be seen that Nyenskans was located deep in a system of islands and waterways, the latter army blockable. (Source: *General Charta öfwer Ingermanland. Åhr af copierat här widh Kongl Landt mäterij contoret, effter höga höga Kongl Senatens orders af d 9 maj 1712*, nr 30, 1 *Lantmäteristyrelsens leverans 1850*, 2 *Kartor rörande Finland och Sveriges forna provinser 1623–1805*, 420571 *Lantmäteristyrelsen 1623–1974*, Riksarkivet.) (Detail.)

*Earlier research and sources*

An important source to the siege is a report written by fortress commander Johan Apolloff, *Relation om dedt wedh Nyen Skantz belägringh passerat*<sup>502</sup> [Report on what did come to pass at the siege of the Nyen Redoubt]. The report is somewhat lacking in detail, but gives an overview of the development during the siege. The siege is covered in Tsar Peter's diary. In his work on the history of the Swedish fortification, Ludvig W:son Munthe dedicated three pages, mainly based on Apolloff's report, to Nyenskans<sup>503</sup>. In 1891, Carl von Bonsdorff's *Nyen och Nyens skans – Historisk skildring* [Nyen and the Nyen Redoubt – Historical Account], was published.<sup>504</sup> Von Bonsdorff covered several aspects of Nyen's history, but was brief on the siege. In modern research, there is an article by Jacob Blees published in 1938, "Fästningen Nyenskans och Nyen" [The Fortress Nyenskans and Nyen]<sup>505</sup>. The siege is also covered in Grigorjev's and Bespalov's work.<sup>506</sup>

*The garrison and artillery*

The sickly Colonel Johan Apolloff was commander of the fortress.<sup>507</sup> At the beginning of the siege, the garrison was estimated to have 700 men, although Apolloff said nothing about the strength of the garrison at the beginning of the siege.<sup>508</sup> The garrison seems to have come from various units. Some of them might have come from the Viborg Double Battalion, of which Apolloff was in command<sup>509</sup>. In his report, Apolloff mentioned flags from the Åbo Double Regiment, Horn's hired infantry regiment [the Narva Garrison Regiment] and Captain Ekström's company,<sup>510</sup> where the last unit most likely was a part of Horn's regiment<sup>511</sup>. It can thus be assumed that the garrison, to some extent, came out of these units. Apolloff also mentioned the presence of Captain Schülman and

<sup>502</sup> Johan Apolloff, *Relation om dedt wedh Nyen Skantz belägringh passerat*, Wiborg May 18, 1703, Volym 12 Vederbörande auctoriteters skrivelser till defensionskommissionen 1700–1706, Avskriftssamlingen, Krigsarkivet, pp. 77–86. (Further on, "Apolloff")

<sup>503</sup> Ludvig W:son Munthe, Del III:2, pp. 433–435.

<sup>504</sup> von Bonsdorff, see reference above.

<sup>505</sup> Jacob Blees, "Fästningen Nyenskans och Nyen", in *Norrlands försvar: Årsskrift utgiven av Föreningen för Norrlands fasta försvar*, Stockholm 1938, pp. 67–96. (Further on, "Blees, Nyenskans")

<sup>506</sup> Grigorjev and Bespalov, pp. 126–129.

<sup>507</sup> Ludvig W:son Munthe, Del III:2, p. 433 and Apolloff, p. 9.

<sup>508</sup> Blees, "Nyenskans", p. 90 and Apolloff, passim.

<sup>509</sup> Sallnäs, p. 150.

<sup>510</sup> Apolloff, p. 83.

<sup>511</sup> Lewenhaupt, Del 1, "Ekström, Håkan", p. 172.

dragoons. Via Lewenhaupt's work on Karl XII's officers, this name leads us to the Ingrian Dragoon Regiment.<sup>512</sup>

According to the Armament Plan of 1695, the fortress should have eight 24-pounders, eight 18-pounders and twenty-four 12-pounders. A strong artillery was devised for city works which were never built.<sup>513</sup> According to Swedish sources, Nyenskans had fifty-six cannons and one 24-pounder mortar at the beginning of the siege. Most pieces were old and of varied calibers, except for seven 18-pounders and twenty 12-pounders.<sup>514</sup> According to Tsar Peter's diary, the Russians captured seventy-five cannons and three mortars after the siege.<sup>515</sup> There is a difference between the Swedish and Russian figures which, however, could be explained by definitions.

### *Prior to the siege*

From the fall of Nöteborg in 1702, Tsar Peter worried about a declaration of war from the Ottoman Empire and a possible attack from Poland.<sup>516</sup> During the winter, Russian forces attacked Swedish Karelia. The Swedes retreated, and the Russians soon turned away. During the winter, the Russians also prepared a number of ships and boats. On March 21/22, Field Marshal Sheremetov was ordered to move his troops from winter quarters to Schlüsselburg (Nöteborg). The final march on Nyenskans began on April 23/24. Tsar Peter followed Sheremetov, who led the same corps that had been besieging Nöteborg the previous year. On the 24<sup>th</sup>/25<sup>th</sup>, the Russian army was approaching Nyenskans, and Sheremetov sent 2,000 infantry on boats in advance to capture a post by Nyenskans.<sup>517</sup> By then, most civilians had left Nyen, many of them having fled already in 1702.<sup>518</sup>

Apolloff had a working intelligence and reconnaissance system. On March 25, a farmer reported that the Russians with their cavalry had crossed the river by Nöteborg on the 22<sup>nd</sup>, with the infantry following on the 23<sup>rd</sup> and 24<sup>th</sup>. The Russian artillery was loaded onto barges. During the night of the 25<sup>th</sup>, the crew of a boat patrolling the Neva River reported that the Russians were approaching.<sup>519</sup>

---

<sup>512</sup> Apolloff, p. 77 and Lewenhaupt, Del 2, "Schulman, Fredrik Wilhelm", p. 608.

<sup>513</sup> Bestyckningsplan 1695, p. 48.

<sup>514</sup> Ulfhielm, "Karl XII:s tid", p. 387.

<sup>515</sup> Tsar Peter's diary, p. 79.

<sup>516</sup> Arnold Munthe, Del I, pp. 152–153.

<sup>517</sup> Tsar Peter's diary, pp. 75–76.

<sup>518</sup> von Bonsdorff, p. 39.

<sup>519</sup> Apolloff, p. 77.



*The siege*

The Russian advance party arrived off Nyenskans during the night of the 25<sup>th</sup>/26<sup>th</sup>. They drove a Swedish detachment of dragoons into the fortress, and then some of the Russians stormed the core fortress. The attack was beaten back by the Swedes.<sup>520</sup>

During April 26/27, the Russian main force arrived off Nyenskans, cutting the place off completely. Trenches were dug under the leadership of General Engineer Lambert. In the following days, barges from Nöteborg arrived, bringing siege artillery. The Russian artillery counted at least twenty-four 24-pounders and thirteen mortars.<sup>521</sup> When the artillery had arrived, Tsar Peter led an expedition down the Neva River with ten companies on sixty boats. His objective was to cut off the mouth of the river to hinder Swedish relief attempts.<sup>522</sup>

On April 29/30, the Russians built batteries and started arming them. On the following day, April 30/May 1, Apolloff was urged to surrender. He refused, and a bombardment began. In fourteen hours, 1,075 bombs were thrown into the fortress. The bombs penetrated the casemates which had been assumed to be bombproof, and destroyed just about everything else in the fortress. The bombardment broke Swedish morale. Apolloff's report describes how groups of desperate soldiers came up to him and called for surrender. Having called a vote among the officers, at 5 o'clock in the morning on May 1/2, Apolloff ordered the *chamade* to be beaten. By 10 o'clock in the evening, the surrender document was signed, and the Russian Guard's regiments entered the fortress. The Swedish garrison was given safe conduct to leave.<sup>523</sup>

*After the siege*

The Russians razed Nyenskans and began the construction of a new fortification on Junisaari [Jänissaari], an islet some five kilometers down the Neva River from Nyenskans, which, for all practical purposes, was the foundation of today's St. Petersburg.<sup>524</sup>

There had been no Swedish attempts to send a relief army to Nyenskans. One of the few to show concern for Nyenskans was Lindhielm, Provincial Governor of the Viborg Province. Lindhielm had written to Cronhiort about a re-

---

<sup>520</sup> Apolloff, pp.77-[78] and Tsar Peter's diary, p. 76.

<sup>521</sup> Apolloff, p. [80] and Tsar Peter's diary, p. 77.

<sup>522</sup> Tsar Peter's diary, p. 77.

<sup>523</sup> Tsar Peter's diary, pp. 78-79 and Apolloff, p. [82].

<sup>524</sup> Ludvig W:son Munthe, Del III:2, p. 435.



lief operation for Nyenskans, but did not receive an answer. Lindhielm then complained to the Defense Commission, which ordered Cronhiort to assist Nyenskans. By the time the Defense Commission order got to Cronhiort, the fortress had already fallen.<sup>525</sup>

#### *Nyenskans – conclusions*

The following could be concluded about Nyenskans:

- It had a small garrison, under 1,000 men.
- Due to the inferiority of the bombproof shelters, the works are considered weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.5** Nyenskans accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. It was further increased by their ability to use Lake Ladoga and the Neva River for transports. The defender's general accessibility was low, since Russian troops reduced the value of the roads, controlled Lake Ladoga, and could block the Neva River.

The attacker's local accessibility was lowered by the fact that Nyenskans was located on a peninsula, but not enough to classify the attacker's local accessibility as anything other than high. No height or other terrain features enhanced the defensive properties of the fortification. The defender's local accessibility was low, since there was no sail-in function or protected discharge place in or by the fortification.

The first siege force tactic was to storm unbreached walls, which did not work. The besiegers then changed their tactic to breaking the defender's morale by bombardment. The morale-breaking tactic was rapidly successful and led to the surrender of the fortress.

Gustaf Wilhelm von Schlippenbach cannot be burdened with any process errors, since the limited garrison had little hope of defending itself against a deter-

<sup>525</sup> Ludvig W:son Munthe, Del III:2, p. 436.

mined enemy in the long run. A regional relief force would have been the only salvation for Nyenskans. The outcome of the siege gave Russia access to the Baltic Sea. The Swedish Empire would soon have not just one, but two naval powers to fight.

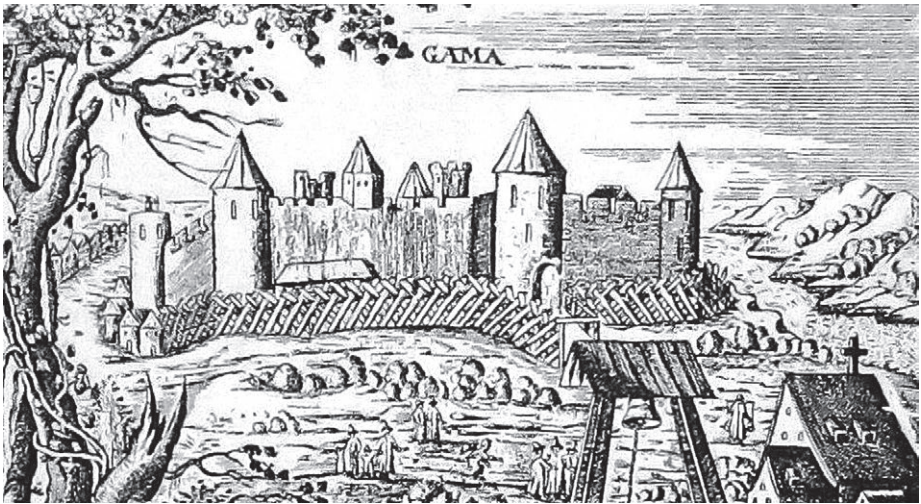
#### 4.6 JAMA 1703 – Ingria (today’s Kingisepp in Russia)

**Under siege from May 8/9 to 14/15, 1703 (7 days). Surrendered.**

##### *Introduction*

Having captured the fortress of Nyenskans in the spring of 1703 (see Chapter 4.5), the Russians proceeded to secure the southern mainland of Swedish Ingria. Here there were two fortifications: Jama and Koporie (see Chapter 4.7).

Jama, also called Jamo, was a medieval type of fortification (see picture below) which had fallen to Sweden with the Peace of Stolbova in 1617. It had not been prioritized for modernization while in Swedish hands.<sup>526</sup> The fortress must be considered small and weak. The fortress was in deep inland by the Luga River, not far from the Russian border.



**Picture 4.9** The picture above is one of the few existing pictures of the old fortification of Jama. (Source: Otto Sjögren, *Karl XII och hans män: Bilder från vår sjunkande storhetstid*, (Stockholm 1925), p. 353. The picture is originally from Adam Olearius, *Offt beehrte Beschreibung der neuen orientalischen Reise* (Schleswig 1647), nr 8<sup>527</sup>.) (Detail.)

<sup>526</sup> Ludvig W:son Munthe, Del I, p. 275.

<sup>527</sup> Magnus Perlestam, "Belägringen av Jamo fästning", in *Karolinska förbundets årsbok* Stockholm 2013, p. 177.

*Earlier research and sources*

The siege of Jama is relatively well covered in modern research. Swedish historian Magnus Perlestam has written an article about it in *Karolinska förbundets årsbok*.<sup>528</sup> He also observed the siege in his book *Lydnad i karolinernas tid* [Obedience in the Caroleans' Times].<sup>529</sup> Perlestam focused on the judicial consequences of the surrender, which are outside the scope of this study, but still provide an important understanding of fortress warfare.

Ludvig W:son Munthe, in his work on the history of Swedish fortification, dedicated less than half a page to the siege.<sup>530</sup> Otto Sjögren, in his work on the history of the Great Northern War, described the siege on half a page<sup>531</sup>. Both writers quoted original letters to the Defense Commission, two from Major General Henning Rudolf Horn in Narva of May 29 and June 1, 1703 (see below) and a letter from Cronhjelm dated June 6, 1703. The last letter has not been recovered for this work.

Tsar Peter's diary briefly mentioned the siege, giving few details about it.<sup>532</sup> However, the Grigorjev and Bepalov work offers brief but useful information based on Russian Colonel Sjuvalov's diary.<sup>533</sup>

As a primary source, the documents from the court-martial of the fortress commander are important.<sup>534</sup> It should be noted that these documents are not catalogued in the computer system at the Swedish National Archives and have to be accessed via the paper/manual system. There are also two other letters from Major General Horn dated May 15 and 18, 1703, which are of interest, see below.

<sup>528</sup> Magnus Perlestam, "Belägringen av Jamo fästning", in *Karolinska förbundets årsbok* Stockholm 2013.

<sup>529</sup> Magnus Perlestam, "Belägringen av Jamo fästning", in *Karolinska förbundets årsbok* Stockholm 2013, p. [175]–178 and Magnus Perlestam, *Lydnad i karolinernas tid* (Lund 2008), pp. 67–71.

<sup>530</sup> Ludvig W:son Munthe, Del III:2, pp. 436–437.

<sup>531</sup> Sjögren, Karl XII, p. 354.

<sup>532</sup> Tsar Peter's diary, p. 86.

<sup>533</sup> Grigorjev and Bepalov, p. 132.

<sup>534</sup> Generalauditörshandl. No 42, 9/7 1703, Generalauditörens handlingar 1643–1703, 101 Justitierevisionen, Riksarkivet. (Further on, "Generalauditören".)



**Picture 4.10** The map above shows the locations of the old fortifications of Jama and Koporie. They were both located deeply inland but by rivers. Jama was located by the Luga River and Koporie by the Koporka River. Since the rivers were easily blocked by superior army forces, these fortresses were, for all practical purposes, cut off from the open sea. (Source: General Charta öfwer Ingermanneland. Ähr af copierat här widh Kongl Landt mäterij contoret, efter höga höga Kongl Senatens orders af d 9 maj 1712, nr 30, 1 Lantmäteristyrelsens leverans 1850, 2 Kartor rörande Finland och Sveriges forna provinser 1623–1805, 420571 Lantmäteristyrelsen 1623–1774, Riksarkivet.) (Detail)

### *The garrison, artillery and supplies*

Nils Phaler was in command of the force at Koporie in May of 1703, since his predecessor Captain Sattler had just recently died.<sup>535</sup> Phaler was a captain in the

<sup>535</sup> Horn to the Defense Commission, May 18, 1703, Volume 106 Militära befälhavare: Narva, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer (ÄK), Riksarkivet, s. p. [1].



Nyland's Double Regiment,<sup>536</sup> although he is listed as captain [“sekundkapten”] in the Björneborg Infantry Regiment in Lewenhaupt's work on Karl XII's officers.<sup>537</sup> The garrison consisted of 135 men in good health.<sup>538</sup>

In his work on the history of Swedish fortification, Ludvig W:son Munthe claimed that Phaler counted forty men and eight cannons.<sup>539</sup> Nils Phaler was under the command of Major General Henning Rudolf Horn in Narva.<sup>540</sup> There were a few hundred barrels of cereal in the fortress magazines.<sup>541</sup>

### *Prior to the siege*

After the conquest of Nyenskans, Tsar Peter ordered Major General Christian von Werden to lay siege to Jama. He was given an infantry force to complete this mission.<sup>542</sup> Swedish sources claim that von Werden counted twenty regiments in his force.<sup>543</sup> On their way, the Russians broke up the bridges across the Luga River, thus making it more difficult for Swedish reinforcements to move from Narva.<sup>544</sup>

### *The siege*

The Russian colonel mentioned above described the siege in brief but distinct terms: the Russians arrived on May 8/9; on the following day, the digging of redoubts began; on May 12/13, a mortar bombardment began; and on May 14/15, the place was taken over by the Russians, and the Swedes were allowed to depart.<sup>545</sup> This brief description of events is supported by a letter from Horn in Narva to the Defense Commission.<sup>546</sup> Ludvig W:son Munthe filled in, stating that Phaler surrendered without withstanding a storm, firing a shot or losing a man.<sup>547</sup>

<sup>536</sup> Litt B: Report regarding the surrender of the fortress Jamo. Transcript by Auditor Cado, Generalauditören, s. p. [3].

<sup>537</sup> Lewenhaupt Del 2, “Phaler, Nils”, p. 507.

<sup>538</sup> Litt B: Report regarding the surrender of the fortress Jamo. Transcript by Auditor Cado, Generalauditören, s. p. [3].

<sup>539</sup> Ludvig W:son Munthe, Del III:2, p. 436.

<sup>540</sup> Sjögren, *Karl XII*, p. 202.

<sup>541</sup> Jörgen Johan Lodhe, Court minutes May 25–28, 1703, Generalauditören, s. p. [4].

<sup>542</sup> Tsar Peter's diary, p. 86.

<sup>543</sup> Litt B: Report regarding the surrender of the fortress Jamo. Transcript by Auditor Cado, Generalauditören, s. p. [2].

<sup>544</sup> Ludvig W:son Munthe, Del III:2, p. 436.

<sup>545</sup> Grigorjev and Bespalov, p. 132. Dates are assumed to be in Russian style.

<sup>546</sup> Horn to the Defense Commission, May 18, 1703, Volume 106 Militära befälhavare: Narva, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer (ÄK), Riksarkivet, s. p. [1].

<sup>547</sup> Ludvig W:son Munthe, Del III:2, p. 436.

The court-martial documents add a few insights, where a letter from Phaler to the King dated June 20, calling for mercy after the verdict, is important. At the beginning of the siege, Ensign Köster and preacher Jacob Majdelin deserted to the Russians, followed by thirty or forty civilians. There was some unrest in the garrison, where the commander afterward claimed that the troops had been rebellious, while the court-martial documents indicated the rebellious tendencies had been limited.

Apart from these more factual statements, the letter seems to reveal Phaler's motives for surrendering. He pointed out that the castle was in poor condition, and that there was no hope of relief. He expanded on the latter matter, claiming that the fall of Nyenskans had made it impossible for the army in Finland to support the struggle in southern Ingria. He concluded that the best option was to give the old works over to the enemy and save the troops by getting safe conduct to Narva.<sup>548</sup> Various other claims made by Phaler are analyzed in Magnus Perlestam's work mentioned above. It should also be noted that the Russians built two batteries, one for mortars and one for 6-pounder or 8-pounder cannons.<sup>549</sup>

There were no attempts to relieve Jama, except for a May 11 letter from Horn to von Schlippenbach, commander of the Army of Dorpat. Horn claimed that the Russian force besieging Jama only consisted of infantry, and of this infantry, only two regiments had experienced soldiers. The others were newly recruited men with Russian officers. Horn then suggested that von Schlippenbach should send 2,000 cavalry and dragoons to Narva, where they should be reinforced with infantry and artillery. This force could then attack the besiegers at Jama. Otto Sjögren, in his book on the Great Northern War, pointed out that even if von Schlippenbach could have organized such a force, it would never have made it to Narva in time.<sup>550</sup>

After the siege, the Swedish garrison commander and Ensign Lange were arrested when they arrived in Narva. Horn expressed his contempt for the garrison commander in a letter to von Schlippenbach of May 18.<sup>551</sup> Tsar Peter had the fortress renamed Yamburg, and it became an important base for raiding

---

<sup>548</sup> Phaler to the King, June 20, 1703, *Generalauditören*, s. p. [1-3].

<sup>549</sup> Litt B: Report regarding the surrender of the fortress Jamo. Transcript by Auditor Cado, *Generalauditören*, s. p. [2].

<sup>550</sup> Sjögren, *Karl XII*, p. 352.

<sup>551</sup> Sjögren, *Karl XII*, p. 353.

into Swedish territory.<sup>552</sup> Horn reported on the loss of the fortress in a post-script to a letter of May 15 to the Defense Commission. He concluded that the Russians now had free passage on the Luga River, up to the Baltic Sea.<sup>553</sup>

### *Jama – conclusions*

The following could be concluded about Jama:

- It had a small garrison, under 1,000 men.
- The works were medieval, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.6** Jama accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. The defender's general accessibility was low, due to the fact that Russian troops reduced the value of the roads, and that they could block any river transport with army means.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The defender's local accessibility was of no interest, since there was no practical waterway to the fortress, although it can be concluded that it was low.

The attacker's tactic is somewhat unclear, and the development of the siege in 1703 can be interpreted in several different ways. It seems, however, that the Russians prepared to breach and storm, although the fortress surrendered before the walls were breached or stormed.

Despite Major General Horn being dissatisfied with the defense of Jama, Phaler cannot be burdened with any process errors, since the limited garrison had little hope of defending itself against a determined enemy in the long run.

<sup>552</sup> Tsar Peter's diary, p. 86.

<sup>553</sup> Horn to the Defense Commission, May 15, 1703, Volume 106 Militära befälhavare: Narva, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer (ÄK), Riksarkivet, s. p. [3].



A regional relief force would have been the only salvation for Jama. The fall of the fortress provided Russia with a forward base in Ingria.

#### 4.7 KOPORIE 1703 – Ingria (today’s Kopore in Russia)

**Under siege May 23 to 26, 1703 (4 days). Surrendered.**

##### *Introduction*

After the fall of Nyenskans in the spring of 1703, the small fortifications of Jama (see Chapter 4.6) and Koporie were the next to be attacked by Russian forces. Koporie was an old medieval-type fortification, first mentioned in 1240.<sup>554</sup> In 1617, the fortress became Swedish in the Treaty of Stolbova. Koporie was repaired but not prioritized for modernization like, for example, Narva.<sup>555</sup> Koporie must then be considered a small and weak fortification.



**Picture 4.11** *The picture above is one of the few known illustrations of what Koporie could have looked like in 1703. (Source: Otto Sjögren, *Sveriges historia*, Del I, (Stockholm 1925), p. 399.) (Detail.)*

Koporie was located deeply inland in Ingria by the far end of the Koporka River. The picture above reveals that Koporie had a bit of a height advantage. The river gave Koporie a theoretical access to open sea, as it connected to the Gulf of Finland. This access to open sea, however, was quite theoretical, since army forces with ease could stop any transport on the river (see map in Chapter 4.6 Jama).

<sup>554</sup> <https://en.wikipedia.org/wiki/Koporye>, read May 23, 2017.

<sup>555</sup> Ludvig W:son Munthe, Del I, p. 275.

### *Earlier research and sources*

The siege of Koporie in 1703 is little studied. Ludvig W:son Munthe, in his work on the history of Swedish fortification, dedicated less than half a page to the siege.<sup>556</sup> Otto Sjögren, in his history of the Great Northern War, described the siege on half a page.<sup>557</sup> Both writers quoted original letters to the Defense Commission, two from Major General Henning Rudolf Horn in Narva of May 29 and June 1, 1703 and one from Cronhjelm of June 6, 1703. The former contains very little information on the siege of Koporie and the last one has not been recovered for this study.

Tsar Peter's diary mentioned the siege in very brief terms, giving only a few details about it<sup>558</sup>.

### *The garrison and artillery*

The Swedish garrison counted eighty men. Four cannons were in working condition at the surrender.<sup>559</sup> The garrison was under the supreme command of Major General Henning Rudolf Horn in Narva.<sup>560</sup>

### *Prior to the siege*

After the capture of Nyenskans, Tsar Peter dispatched Marshal Sheremetov with a large part of the siege army to capture Koporie. The commander of Koporie had orders from his superior, Major General Henning Rudolf Horn in Narva, to fight to the last man.<sup>561</sup> The fortress was stocked with 1,000 barrels of cereal.<sup>562</sup>

### *The siege*

The Russians arrived off Koporie on May 23, calling for a surrender of the fortress. As the commander refused to surrender, the digging of trenches and a mortar bombardment began. Breach shooting also began to break down the walls. On May 28, the fortress surrendered on safe conduct to Narva for the garrison. At that time, fifty men in the fortress were in fighting condition.<sup>563</sup>

---

<sup>556</sup> Ludvig W:son Munthe, Del III:2, pp. 436–437.

<sup>557</sup> Sjögren, *Karl XII*, p. 354.

<sup>558</sup> Tsar Peter's diary, p. 86.

<sup>559</sup> Ludvig W:son Munthe, Del III:2, p. 437.

<sup>560</sup> Sjögren, *Karl XII*, p. 202.

<sup>561</sup> Ludvig W:son Munthe, Del III:2, p. 437 and Sjögren, *Karl XII*, p. 354.

<sup>562</sup> Horn to the Defense Commission, June 1, 1703, Volume 106 Militära befälhavare: Narva, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer (ÄK), Riksarkivet, s. p.

<sup>563</sup> Ludvig W:son Munthe, Del III:2, p. 437.

*After the siege*

In Ingria, now only Narva and Ivangorod remained as Swedish fortresses. The land, including Estonia, now lay open for Russian ravaging. The Russians proceeded over Vask-Narva, at the southern end of the Narva River, into Estonia. Here they occupied the old Wesenberg Castle and from there sent out parties to ravage. In September of 1703, Ober Phalen, Fellin, Wolmar, Walk, Wenden, Karkus and Erla were among the places burned.<sup>564</sup> Wolmar Anton von Schlippenbach's army was too weak to resist the Russians and withdrew behind the walls of Reval.<sup>565</sup>

*Koporie – conclusions*

The following could be concluded about Koporie:

- It had a small garrison, under 1,000 men.
- The works were medieval, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.7** Koporie accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. The defender's general accessibility was low, due to the fact that Russian troops reduced the value of the roads, and that they could block any river transport with army means.

The attacker's local accessibility was high, since the height advantage of the fortress was limited, and no other terrain features enhanced the defensive properties. The defender's local accessibility is of no interest, since there was no practical waterway to the fortress, although it can be concluded that it was low.

<sup>564</sup> Julius Mankell, *Anteckningar rörande finska arméens och Finlands krigshistoria: Särskildt med afseende på krigemellan Sverige och Ryssland åren 1788–1790 samt 1808–1809* (Stockholm 1870), Del I, pp. 185–186.

<sup>565</sup> O. S., "Wolmar Anton von Schlippenbach", *Svenskt biografiskt lexikon, Ny följd*, Del 9, (Stockholm 1883), p. 357.

There was no other way to bring supplies and reinforcements into the fortress than to send a relief army, which could defeat the Russian siege forces.

The Russian tactic was obviously to storm breached walls. When faced with a superior enemy, the fortress surrendered after the breach shooting had begun, but before the storm. Thus, the breach-and-storm tactic could be considered to have been decisive.

The commander cannot be burdened with any process errors, since the limited garrison had little hope of defending itself against a determined enemy in the long run. A regional relief force would have been the only salvation for Koporie. The outcome strengthened the Russian grip on Ingria.

#### 4.8 NARVA AND IVANGOROD 1704 – Ingria (today's Narva in Estonia)

**Narva: Under siege from April 26/27 to August 9/10, 1704 (106 days).  
Surrendered.**

**Ivangorod: Under siege from April 26/27 to August 16/17, 1704 (113 days).  
Surrendered.**

#### INTRODUCTION

Having conquered Nyenskans in 1703 (see Chapter 4.7), the main Russian forces, in the spring of 1704, turned against Dorpat in Swedish Livonia and Narva and the adjacent Ivangorod in Swedish Ingria. Narva and Ivangorod essentially formed a single defensive unit. This is especially true regarding relief expeditions. Relieving Narva would also mean relieving Ivangorod. The Russian spring campaign of 1704, thus, can be described as two sieges. The siege of Dorpat, beginning on June 4/5, 1704, is treated in the following Chapter 4.9. As the siege of Narva/Ivangorod was considerably longer than the previous sieges, more actors were involved, not the least of which was the Swedish Defense Commission. Therefore, this chapter will be considerably longer than the previous ones, reflecting on the increased complexity of the siege.

Narva, the main city in the Swedish province of Ingria, today an important city in Estonia, came under Sweden in the Peace of Teusina in 1595.<sup>566</sup> Narva

---

<sup>566</sup> Ulf Sundberg, *Sveriges krig 1249–1610: Freder och stillestånd*, Del 4, (Stockholm 2010), p. 257.

and Ivangorod were central to Swedish defense planning in the east. In his report on Swedish fortifications from 1698, Erik Dahlbergh described Narva as “[...] den mycket importante orthen [...]”<sup>567</sup>. The importance stemmed from trade and wealthy burghers. The other fortresses in Ingria, Nöteborg, Nyenskans, Jama and Koporie, were of low priority, which left Narva as the anchor of the Swedish defense of Ingria. The size of the garrison is an indicator of the importance of a fortress. Looking at garrison plans for the second half of the seventeenth century, only Malmö, Landskrona and Helsingborg in Skåne, by then newly conquered land, and Wismar, Stralsund and Stettin, in the German possessions, and Riga in Livonia, had stronger garrisons than Narva.<sup>568 569</sup>



**Picture 4.12** The picture above is from Gabriel Bodenehr’s dictionary of fortresses from the 1720s. It clearly shows the defensive properties of Narva and Ivangorod. Narva had steep ground to the south of the city, making an attack there difficult. On the Ivangorod side and halfway around the city, there was the Narva River. The parts not protected by nature were covered by strong fortifications. The wall is clearly visible in the picture, and the bastions can be vaguely seen. However, the ground in front of the strong works gently slopes upward, but not dramatically. Ivangorod is different. Here the medieval works do not give the impression of a strong fortress, but the high location makes it forbiddingly difficult to shoot breaches in the walls and to storm. (Source: Stephen L. Kling, Jr., (ed.), *Great Northern War Compendium*, Volume One, (St. Louis, Missouri 2015), p. 112.) (Detail.)

<sup>567</sup> Dahlbergh 1698, s. p. [25]. Translation: “[...] the very important place [...]”

<sup>568</sup> *Guarnisonernes besättning widh underskrefne orther uti fred- och ofredlige tider. Hwar efter vårt Krigz- och Cammar Collegium sigh hafwa att rätta*, Carl Gustaf, Giötheborgs den 7 maj 1658, Volym 1 Generalförslag öfver svenska hären 1636–1724, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p.

<sup>569</sup> *Förslag på garnisonerne huru starke dhe efter 1670 års stat böhre wara och huru starke dhe befinnes efter sist inkom. förslagh*, Volym 1 Generalförslag öfver svenska hären 1636–1724, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p.

*Narva and Ivangorod*

The city of Narva is located on the western bank of the Narva River. Although it could geographically be perceived as belonging to the Swedish province of Estonia, it belonged to Swedish Ingria.<sup>570</sup> The city was founded in the thirteenth century. Later, Narva belonged to the Teutonic Order. As a Teutonic city, it was right on their border with Russia and heavily fortified. Narva was conquered by Tsar Ivan IV of Russia in 1558. In 1581, Swedish forces captured the city and, from then, it remained in Swedish hands.

Adjacent to Narva, on the eastern bank of the Narva River, the fortress of Ivangorod is located. It was built by Tsar Ivan III of Russia in 1492 to stop Swedish communication with the Teutonic Narva. The Peace of Stolbova in 1617 made Ivangorod Swedish. Narva and Ivangorod were briefly besieged by the Russians in 1658, during Karl X Gustav's Russian war.<sup>571</sup>

Narva is accessible from the Gulf of Finland via the Narva River, at a distance of about thirteen kilometers. However, the entrance could only be passed by ships with a limited draught; other ships had to have their cargo reloaded onto smaller ships at the mouth of the river. According to Arnold Munthe, the critical draught was 7.5 feet, or about two meters.<sup>572</sup> This was most likely a high estimate as garrison commander Horn in a letter to the War College [“Krigskollegium”] specified that supplies sent to Narva should not go on ships with more than a six-foot draught; otherwise the cargo had to be reloaded.<sup>573</sup> The city of Narva is also accessible from Lake Peipus via the Narva River, at a distance of about sixty kilometers. Most likely, even small ships would not be able to sail the river all the way to Narva but would need to be towed. All in all, bringing cargo from the Gulf of Finland to Narva was a time-consuming process, which was also highly sensitive to enemy interference.

Looking at the road system, it becomes clear that Narva was important. Narva was at the junction of two major roads coming in from the east to cross

<sup>570</sup> Compare map: *General Charta öfwer Ingermanneland. Åhr af copierat här widh Kongl Landt mäterij contoret, effter höga höga Kongl Senatens orders af d 9 maj 1712*, nr 30, 1 Lantmäteristyrerelsens leverans 1850, 2 Kartor rörande Finland och Sveriges forna provinser 1623–1805, 420571 Lantmäteristyrelsen 1623–1974, Riksarkivet.)

<sup>571</sup> J. F. N., “Narva”, in *Nordisk familjebok*, Part 19, (Stockholm 1913), columns 471–472 and L. W:son M., “Ivangorod”, in *Nordisk familjebok*, Part 12, (Stockholm 1910), columns 1115–1116.

<sup>572</sup> Arnold Munthe, Del I, p. 245.

<sup>573</sup> Horn to Krigskollegium, Januari 28, 1704, Volume 68 (NAD) 1704 (manual system), c. Krigskollegij brevböcker, E. Inkomna handlingar, Förteckning 1, Krigskollegium Krigskollegij kansli 1631–1865, Riksarkivet, p. 2333.



the Narva River. There was a road northeast of Narva, but it ended on the coast, farther east of Narva.<sup>574</sup>

Narva was a fortified city. A plan adopted in the latter part of the seventeenth century called for eight large bastions and one half-bastion. In 1700, the walls connecting the bastions were complete, as were the Honor, Gloria, Fama and Victoria bastions. The Triumph bastion was almost completed, and work on Fortuna had begun. The Justitia and Pax bastions were not completed.<sup>575</sup>

Despite the fact that parts of the fortifications were not complete, Ludvig W:son Munthe, in his work on the history of the Swedish fortification, considered Narva to be in a fairly good defensive condition. What was not complete had been reinforced by makeshift measures.<sup>576</sup> Sten Karling, in his study of the buildings in Narva, commented on the strength of the Narva bastions. He claimed that Dahlbergh's designs of the high bastions had made a contribution to the state of the art of fortification<sup>577</sup>. It should also be noted that the incomplete works were located where the terrain made an attack more difficult.

There was one important weakness in the site and construction of Narva: there was no well in the city. All water had to be fetched from the Narva River, which, in times of war, became a dangerous operation.<sup>578</sup>

The fortress of Ivangorod, seen in contemporary pictures, was a medieval fortification, built high up on a rock. In 1697, the fortress was considered to be in a good operational condition<sup>579</sup>.

<sup>574</sup> *Tractat Charta eller Chorographisk Delineation öfwer Narwens Situation Opsatt och förfärdigat A:o 1699, Narwen d. 27 Augusti. A:o 1699. C. M. Stuart*, nr 28, Volume 9 *Stora nordiska kriget 1699–1721, Förteckning 425 Sveriges krig 1521–1864*, Krigsarkivet.

<sup>575</sup> Sten Karling *Narva. Eine baugeschichtliche Untersuchung*, (Kungl. Vitterhets historie och antikvitets akademien Stockholm 1936), pp. 292–293. (Further on, “Karling“.)

<sup>576</sup> Ludvig W:son Munthe, *Del III:2*, p. 440.

<sup>577</sup> Karling, p. 292.

<sup>578</sup> Sjögren, *Karl XII*, p. 176.

<sup>579</sup> Ludvig W:son Munthe, *Del III:2*, p. 232.





**Picture 4.13** The open Baltic Sea is in the upper left corner. The locations of Narva and Ivangorod are by an army blockable river connected to the open sea. The distance from the mouth of the Narva River to the fortress is about thirteen kilometers. (Source: *Tract Charta eller Chorographisk Delineation öfwer Narwens Situation Opsatt och förfärdigat A:o 1699, Narwen d. 27 Augusti. A:o 1699. C. M. Stuart, nr 28, Volume 9 Stora nordiska kriget 1699–1721, Förteckning 425 Sveriges krig 1521–1864, Krigsarkivet.*) (Detail.)

### Earlier research and sources

One work that treats the siege of Narva and Ivangorod in Swedish is an article of eight pages by Lenny Stackell in the periodical *Norrlands försvar* from 1936.<sup>580</sup> Stackell relied to a great extent on Hansen's book (see below). Another

<sup>580</sup> L. Stackell, "Kring tvenne Narvasegrar: Några tidsbilder från stora nordiska kriget", in *Norrlands försvar: Årsskrift utgiven av Föreningen för Norrlands fasta försvar*, s. l. 1935, pp. 41–50. (Further on, "Stackell, Narva".)

er work is an article on the garrison commander by Sven Grauers, “Henning Rudolf Horn – Narvas försvarare” [Henning Rudolf Horn – The Defender of Narva], published in *Karolinska förbundets årsbok* 1973<sup>581</sup>. The Swedish writers Ludvig W:son Munthe,<sup>582</sup> Arnold Munthe,<sup>583</sup> Gustaf Adlerfelt,<sup>584</sup> Anders Fryxell,<sup>585</sup> Hans Ulfhielm<sup>586</sup> and Otto Sjögren<sup>587</sup> spent some five to twenty pages on the sieges of Narva/Ivangorod and Dorpat, since they ran parallel.

Among non-Swedish sources, there is Tsar Peter’s diary, where twenty-two pages deal with the sieges of Narva, Ivangorod and Dorpat.<sup>588</sup> From recent times, there is Grigorjev’s and Bespalov’s work, covering the siege in a short chapter.<sup>589</sup> Another recent work on the siege is a paper published by Estonian Kaur Lillipuu, covering the sieges in 1700 and 1704.<sup>590</sup> There are important works in German. One is Heinrich Johann Hansen’s *Geschichte der Stadt Narva* published in 1858.<sup>591</sup> Another is F. G. von Bunge’s and C. J. A. Vaucker’s *Archiv für die Geschichte Liv-, Esth- und Curlands* published in 1851.<sup>592</sup> Both of these works publish diaries kept in Narva under the siege. A third is Sten Karling’s general study of the buildings in Narva published in 1936, where the fortifications are treated in one chapter<sup>593</sup>. There is also a recent work by Dirk-Gerd Erpenbeck und Roland Seeberg-Elverfeldt, *Narva 1581–1721: Quellen zur Geschichte der Stadt in schwedischer Zeit* (Dortmund 1993), which has not been used for this study as it did not offer any direct benefits for a student of the siege of 1704.

The official Swedish discussions are found in the minutes of the Defense Commission for 1704.<sup>594</sup> It should be noted that the Council, or the Senate, did

<sup>581</sup> Sven Grauers, “Henning Rudolf Horn – Narvas försvarare“, in *Karolinska förbundets årsbok* 1973, pp. [7]–28.

<sup>582</sup> Ludvig W:son Munthe, Del III:2, pp. 437–451.

<sup>583</sup> Arnold Munthe, Del I, pp. 238–256.

<sup>584</sup> Adlerfelt, pp. 197–217.

<sup>585</sup> Fryxell, Part 22 (Stockholm 1856), pp. 38–45.

<sup>586</sup> Ulfhielm, “Karl XII:s tid“, pp. 388–394.

<sup>587</sup> Sjögren, *Karl XII*, pp. [405]–425.

<sup>588</sup> Tsar Peter’s diary, pp. 93–114.

<sup>589</sup> Grigorjev and Bespalov, pp. 138–148.

<sup>590</sup> Kaur Lillipuu, *Põhjasõja-aegsete Narva piiramiste (1700 ja 1704 analüüs vaubani piiramisteooria seisukohast*, Academic Paper Tallinna Ülikool, Ajaloo Instituut 2014.

<sup>591</sup> Heinrich Johann Hansen, *Geschichte der Stadt Narva* (Dorpat 1858).

<sup>592</sup> F. G. von Bunge and C. J. A. Vaucker *Archiv für die Geschichte Liv-, Esth- und Curlands*, Band VI, (Reval 1851). (Further on, “*Archiv für die Geschichte*”).

<sup>593</sup> Karling, pp. 289–295.

<sup>594</sup> Defensionskommissionen Protokoll, 1704, Volym 2, I Huvudserien, A Protokoll, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer (ÄK), Riksarkivet.

not deal with defense matters during the siege of Narva. Karl XII had not yet made the Council responsible for handling urgent matters (see below).

There are preserved letters to and from regional commanders Maydell in Finland and von Schlippenbach in Estonia, and Governor Carl Gustaf Frölich in Riga and Governor General Axel Julius De la Gardie in Estonia. These are found in various archive collections, mainly in incoming letters to the Defense Commission, to the Chancellery [“Kanslikollegium”] and to the War College [“Krigskollegium”]. Letters from the commander of the garrison, Henning Rudolf Horn, exist in several archives, where *Livonica II*, a collection of documents from the Swedish provinces in the east,<sup>595</sup> and *Militaria*, *Krigshistoriska samlingen*, *Karl XII:s krig. Stora Nordiska kriget 1700–1720*, *Kriget i Östersjöprovinserna*,<sup>596</sup> hold files with his letters. Some of Horn’s letters were written in lemon juice (see below). These were most likely disposed of when they could no longer be read.

Naval commander Vice Admiral De Prou played a role in the siege. His letters to the Admiralty are found in the Admiralty letter book from 1704, material containing 2,474 pages, although with an index.<sup>597</sup> De Prou also wrote a journal from his expedition, which includes his outgoing letters. The journal is preserved at the Swedish Military Archives [“Krigsarkivet”].<sup>598</sup>

### *The garrisons, artillery and supplies*

Major General Henning Rudolf Horn was the commander of the fortress in 1704. He had been in command since 1695 and had led the city through its

<sup>595</sup> Volume 200 H. R.Horn 1702–1704, III Skrivelser från vice guvernörer, kommandanter samt andra tjänstemän, officerare och garnisonen i Narva, D Ingermanland, 1 Skrivelser till Kungl. Maj:t från myndigheter, korporationer, städer och enskilda 1561–1720, 2402 *Livonica II*, Riksarkivet. (Further on, “*Livonica II*”).

<sup>596</sup> Volym M 1377 *Strödda handlingar och brev*, 3 *Kriget i Östersjöprovinserna*, XXIII *Karl XII:s krig. Stora Nordiska kriget 1700–1720*, 2 *Krigshistoriska samlingen 1500t–1800t*, Riksarkivets ämnessamlingar, 754 *Militaria*, Riksarkivet. (Further on, “*Militaria Riksarkivet*”).

<sup>597</sup> *Ink. handl. från ämbetsverk etc*, Volym 28, (NAD) 1704, Äldre n:r 82 (manual system), Ser. c., E II *Inkomna handlingar från ämbetsverk m. fl. myndigheter samt enskilda*, 1 *Kansliet, Förteckning 500 Amiralitetskollegium*, Flottans arkiv, Krigsarkivet. (contains 21 letters from De Prou) (Further on, “*Admiralty letters 1704*”).

<sup>598</sup> Jacob De Prou, 1704: *Amiralen Jacob de Prou expedition*, Volume 1 *Amiralen Jacob de Prou expedition*. Registratur, 33 *Sjöexpeditioner, eskaderchefer 1642–1814*, *Företeckning 503a Amiralitetskollegiets med efterföljares kontor, Arméns flotta, loggböcker, rullor m. m.*, Flottans arkiv, Krigsarkivet, p. 8–9. (Further on, “*Amiralen Jacob De Prou expedition*”).

Jacob De Prou wrote his name “De Prou” although posterity often writes it “de Prou”. Compare for example De Prou to the Defense Commission May 17, 1704, Volume 122, II *Skrivelser från myndigheter och enskilda*, E *Inkomna handlingar*, 243 *Defensionskommissionen 1700–1714*, 31 *Äldre kommittéer*, Riksarkivet, s. p.

successful defense in the year 1700, when Narva endured a siege, before a relief army led by Karl XII arrived on November 20.

According to Tsar Peter's diary, the Narva garrison counted 4,555 men at the beginning of the siege, 3,175 infantry, 1,080 cavalry and 300 artillery men.<sup>599</sup> Ludvig W:son Munthe, in his work on the history of the Swedish fortification, stated that on June 1, 1704, the garrison counted 3,830 infantry and 1,283 mounted men, for a total of 5,113. This figure originates from a letter from Horn to the Defense Commission of June 1, 1704.<sup>600</sup> Lieutenant Colonel Johan Kynnaire was in charge of the fortress artillery.<sup>601</sup> Horn did not specify which regiments his garrison came from. In Table 4.8 below, the set-up presented by Swedish history writer Sallnäs is shown.

**Table 4.8** The Narva garrison in 1704

Unit	ist strength
Garrison Regiment of Narva, Major General Henning Rudolf Horn	1,400 men
Estonian infantry regiment (parts), C. A. De la Gardie	1,000 men
Country militia regiment, Jerwiska, Colonel Otto Rehbinder	1,000 men
Country militia regiment, Wieriska, Colonel Wilhelm Henrik Hastfehr	1,000 men
Country militia regiment (companies), Harriska, Colonel Bogislaus von der Pahlen	1,000 men
Tavastehus, Viborg's and Nyslott's "tremänningsinfanteriregemente", Colonel Jürgen Johan Lode	1,019 men
Åbo Double Cavalry Regiment, Colonel Carl Pereswetoff-Morath	667 men
Total:	7,086 men

Source: Lars-Erik Höglund and Åke Sallnäs, *Stora Nordiska Kriget: Fanor och uniformer* (Karlstad 2000), pp. 107, 109, 118 and 128.

The table of regiments above gives a total list strength of 7,086 men. Von der Pahlen's regiment did not actually get into the city (see below), which is why 1,000 men could be deducted. Then, most likely, several of the regiments did not reach list strength, which is why the table of regiments, in combination with the figure of 5,113 given by Horn on June 1, 1704, would provide a reasonably good picture of the strength of the garrison at the beginning of the siege.

The last known artillery report from Narva before the war referred to the situation on January 1, 1699. According to the report, there were twenty-five bronze cannons of various calibers, of which nine were above eighteen pounds,

<sup>599</sup> Tsar Peter's diary, p. 111.

<sup>600</sup> Ludvig W:son Munthe, Del III:2, p. 447 and Sjögren *Karl XII*, p. 408.

<sup>601</sup> Ulfhielm, "Karl XII:s tid", p. 393.

153 pieces for firing scrap, twenty field pieces, fifty 24-pounder iron cannons, ninety-two 18-pounder iron cannons, sixty-two 12-pounder iron cannons, thirty-nine smaller iron cannons, thirty-seven mortars and four howitzers.<sup>602</sup> The artillery inventory then added up to 445 pieces. It can be concluded that Narva did not suffer from any shortage of artillery.

For Ivangorod, the artillery inventory from January 1, 1699 shows that there were twenty-three 22-pounder cannons and thirty 18-pounder cannons, along with five mortars and several smaller cannons.<sup>603</sup> Lieutenant Colonel Magnus Stiernstråhle was in command of the fortress in the spring of 1704. The garrison counted 200 men.<sup>604</sup>

The large garrison created a supply challenge. A hard-working man would require almost two kilos of food every day to maintain strength and health. This means that the garrison would need approximately nine tons of food per day or 270 tons per month. In 1704, barrels and “läster” were used as measurements. A barrel corresponded to 146 liters. There were two types of “läster”, the common one and the ship’s. Here, it assumed that the ship’s “läst” would be the one more often used. It corresponded to 3,516 liters. If, for simplicity, it is assumed that two liters of food would suffice for a soldier, disregarding the fact that most food stuffs had a specific weight lower than one, the garrison would consume approximately three ship’s “läster” of food every day or ninety “läster” per month. A larger merchant ship would carry thirty or forty “läster”<sup>605</sup>.

## PRIOR TO THE SIEGE

### *The Russians*

Having received an ambassador from the Ottoman Empire in February of 1704, Tsar Peter left Moscow for St. Petersburg; he arrived there on March 19/20. On his way, he inspected new vessels built at Olonetz.<sup>606</sup> Swedish history writer

---

<sup>602</sup> *Narvens Artollerie Inventarium, 1 Januari A: 1699*, Volume 1 Inventarier och förslag från fästningar 1697–1699, III:a Förslag, G: Räkenskaper, Förteckning 3 Krigskollegium Artilleridepartementet, Krigsarkivet, s. p.

<sup>603</sup> *Inventarium ofwer all Ammunition Stycker och Materialer som widh Ivangorodz Artollerie...*, 1 Januari A: 1699, Volume 1 Inventarier och förslag från fästningar 1697–1699, III:a Förslag, G: Räkenskaper, Förteckning 3 Krigskollegium Artilleridepartementet, Krigsarkivet, s. p.

<sup>604</sup> Stackell, “Narva”, p. 50.

<sup>605</sup> De Prou to the King, June 18, 1704, *Amiralen Jacob De Prou’s expedition*, p. 215.

<sup>606</sup> Tsar Peter’s diary, p. 96.

Wikander estimated the Russian forces in the Pskov-Ladoga-Novgorod area to be 60,000 men at the early stages of the war.<sup>607</sup>

In the beginning of May, Tsar Peter went to Kronslott where he oversaw the arming of the fortress with cannons. He then presented his plan for the year of 1704. One force would attack Karelia and another, led by Field Marshal Count Boris Petrovich Sheremetov, would leave winter quarters in Pskov and attack Dorpat.<sup>608</sup> Prior to Peter's presentation of his plan – unclear when – Major General Count Fedor Matvejevitj Apraksin had been sent with five regiments of infantry and two regiments of cavalry to the mouth of the Narva River, to block Swedish shipments to Narva.<sup>609</sup> Earlier Swedish research has claimed that Apraksin blocked the Narva River from the beginning of the year.<sup>610</sup> However, subsequent events make that less likely (see below).

### *Narva*

During the year of 1703, the vicinity of Narva was raided by Russian units of up to 1,000 men.<sup>611</sup> By the late fall of 1703, a Russian *coup de main* against Narva, during one of the dark nights, was dreaded by the defenders. At the same time, supplies in Narva were running dangerously low. Refugees from the countryside made the supply situation even worse. It was also difficult to find housing for the refugees, and disease began to spread due to the unsanitary conditions people were living under.<sup>612</sup>

Horn feared that the Russians would use the waterway from Nyen to move a siege force to Narva. He reminded von Schlippenbach about this possibility, and von Schlippenbach wrote to the King and the Defense Commission to get naval support to the Gulf of Finland as soon as the ice broke.<sup>613</sup>

### *The naval situation*

In the beginning of 1704, Sweden clearly dominated the waters of the Baltic Sea. Sweden was then at peace with Denmark, the only nation with a fleet that could rival the Swedish in the Baltic Sea. By the end of 1704, the backbone of the

---

<sup>607</sup> Wikander, p. 62.

<sup>608</sup> Tsar Peter's diary, pp. 92–94.

<sup>609</sup> Tsar Peter's diary, p. 96.

<sup>610</sup> Arnold Munthe, Del I, p. 241, Sjögren, *Karl XII*, p. 396 and Ludwig W:son Munthe, Del III:2, p. 446.

<sup>611</sup> Stackell, "Narva", pp. 41–42.

<sup>612</sup> Sjögren, *Karl XII*, pp. 393–396.

<sup>613</sup> Sjögren, *Karl XII*, pp. 393–396.



Russian Navy was made up of ten frigates, armed with 6-pounder cannons<sup>614</sup>. These ships had very little fighting value when confronted with 18-pounder or 24-pounder ships. However, there had been a considerable construction program for smaller vessels in Russia.<sup>615</sup>

There were no Swedish men-of-war of frigate size, or larger, permanently stationed north of Karlskrona in 1704. Any large naval unit, needed elsewhere, had to be dispatched from there.<sup>616</sup> The flotilla under the command of Vice Admiral Gideon von Numers, which had cruised in the Gulf of Finland in 1703, had returned to Karlskrona to winter.<sup>617</sup> In the spring of 1704, a naval force under Vice Admiral Jacob De Prou left Karlskrona for the Gulf of Finland.<sup>618</sup>

The Swedish flotilla on Lake Peipus, named *Dorptska skeppsflottan* [The Dorpat Fleet of Ships], in the beginning of 1704 consisted of thirteen small ships, the largest of them was brigantine size, carrying fourteen cannons, and the smallest was armed with four cannons. This force was under the command of Captain (“kommendör”) Löschern von Hertzfeld<sup>619</sup>. The flotilla was stationed in Dorpat during the winters and sailed down the Embach River in the spring, to enter Lake Peipus.<sup>620</sup>

### *The regional level*

Major General Wolmar Anton von Schlippenbach in Reval, commander of the local field army, the Army of Narva, had a force commented on below. In Finland, Lieutenant General Georg Johan Maydell, supreme commander in Finland since April 5, 1703, stood with a field force of about 5,000 men.<sup>621</sup>

Before the mail service for the year began, von Schlippenbach wrote two letters to the Chancellery [“Kanslikollegium”]. One, undated, warned of a Russian spy in Stockholm.<sup>622</sup> The other, dated February 20, warned of Carl Gustav Skytte, commander in Dorpat, and his “[...] elacka procedure [...]” [mean proceedings], revealing that the atmosphere between these two men

<sup>614</sup> Tredera and Sozaev, pp. 141–144.

<sup>615</sup> Tredera and Sozaev, p. [362].

<sup>616</sup> Ericson Wolke, *Rysshärjningar*, p. 100.

<sup>617</sup> Arnold Munthe, Del I, p. 165.

<sup>618</sup> *Amiralen Jacob De Prous expedition*, pp. 8–9.

<sup>619</sup> Arnold Munthe, Del I, p. 239.

<sup>620</sup> Ericson Wolke, *Rysshärjningar*, pp. 110–111 and Arnold Munthe, Del I, pp. 238–239.

<sup>621</sup> Arnold Munthe, Del I, pp. 242–243.

<sup>622</sup> Von Schlippenbach to Kanslikollegium, undated, Volym 3 ½, 1702–1704, VIII Skrivelser i krigsärenden 1700–1712, E Inkomna handlingar, 1411 Kanslikollegium 1584–1801, Riksarkivet, s. p. (Further on, “Kanslikollegium letters”.)



was not good.<sup>623</sup> On April 20, von Schlippenbach wrote a new letter, stating that mail service now had resumed. He also reported that the Russian troops stationed at Novgorod had been moving toward the border. He meant that it was still to be seen what their intentions were, but that Narva could be in danger. Von Schlippenbach called for divine intervention and hoped for the best.<sup>624</sup>

On April 30, von Schlippenbach wrote to the King. From the content of the letter, it can be understood that von Schlippenbach had many enemies who tried to smear his reputation. Von Schlippenbach asked the King not to listen to these people. In his letter, he presented his army in total (see below), and von Schlippenbach seemed to have been satisfied with his achievements. He pointed out that his recent recruiting had filled the regiments, and also saved many those men from starving to death, but that the recruiting had also made him enemies, unspecified how. It seems his critics had questioned the quality of his troops, and von Schlippenbach asked for an officer to come over from Sweden to evaluate his forces, apparently convinced that such an inspection would come out in his favor.<sup>625</sup> In the letter, von Schlippenbach described his forces as in Table 4.9 below.

---

<sup>623</sup> Von Schlippenbach to Kanslikollegium, February 20, 1704, Kanslikollegium letters, s. p.

<sup>624</sup> Von Schlippenbach to Kanslikollegium, April 20, 1704, Kanslikollegium letters, s. p.

<sup>625</sup> Von Schlippenbach to the King, April 30, 1704, Militaria Riksarkivet s. p.

**Table 4.9** The Army of Dorpat on April 30, 1704

	In garrison	In the field
<b>INFANTRY IN DORPAT</b>		
Colonel Skytte's regiment	1,000	-
Colonel Tiesenhausen's regiment	700	-
Lieutenant Colonel Hastfehr's battalion	400	-
Lieutenant Colonel Taube's battalion	400	-
Colonel Wrangel's battalion	400	-
<b>Total</b>	<b>2,900</b>	<b>-</b>
<b>DISPATCHED TO NARVA</b>		
Colonel Rehbinder's regiment	1,000	-
Colonel Pahlen's regiment	1,000	-
<b>Total</b>	<b>2,000</b>	<b>-</b>
<b>IN REVAL</b>		
Colonel De la Gardie's regiment	500	500
Colonel Mellin's regiment	800	-
Colonel Lieve's [Lieven] regiment	400	600
Colonel Stakelberg's regiment	300	500
<b>Total</b>	<b>2,000</b>	<b>1,600</b>
<b>IN PERNAU</b>		
Colonel Nieroth's regiment	300	500
Colonel Schwengeln's regiment	400	400
Colonel Mengden's regiment	500	500
<b>Total</b>	<b>1,200</b>	<b>1,400</b>
Lieutenant Colonel Liphard's battalion	-	350
<b>TOTAL</b>	<b>8,100</b>	<b>3,350</b>
<b>CAVALRY AND DRAGOONS</b>		
The Swedish Noble Banner	-	100
The Estonian Noble Banner	-	500
The "Stiftiska" Noble Banner [Ösel]	-	300
Åbo Regiment	-	1,000
Karelian Regiment	-	1,000
Colonel Wennerstedt's dragoons	-	300
Karelian Dragoons	-	300
Major General Schlippenbach's regiment	-	600
Colonel Schlippenbach's squadron	-	400
Various units	-	1,080
Dispatched to Dorpat	200	-200
<b>TOTAL</b>	<b>200</b>	<b>5,380</b>
<b>ARMY TOTAL</b>	<b>8,300</b>	<b>8,730</b>

Source: Von Schlippenbach to the King, April 30, 1704, Schlippenbachs skrivelser till Kungl. Maj:t, Volym M 1377, 3 Kriget i Östersjöprovinserna 1700–1711, XXIII Karl XII:s krig. Stora Nordiska kriget 1700–1720, 2 Krigshistoriska samlingen 1500t–1800t, Riksarkivets ämnesamlingar 754 Militaria, Riksarkivet, s. p.

Von Schlippenbach, thus, commanded a force of about 17,000 men. Of these, about half were in the fortresses of Dorpat, Reval and Pernau or dispatched to Narva, leaving him with the much less impressive force of 8,730 men to act in the field. The quality of von Schlippenbach's army is an issue. There is a letter from von Schlippenbach which does not contain a direct statement on his troops, but sheds some light on the conditions under which von Schlippenbach was living. This was a letter of recommendation for a lieutenant in Colonel Baron Hans Hindrich von Liewen's regiment, dated Reval February 18, 1706. The lieutenant was going to Finland to recruit non-commissioned officers for the regiment as "[...] slike subjecte här rare äro." [the like subjects here are rare.]<sup>626</sup>. The letter tells us that it was difficult to find people suitable as non-commissioned officers in Estonia, which would have been a serious problem for anyone building an army there.

### *Sweden*

The Swedish main army, led by Karl XII, had wintered in northern Poland, where it stayed until the beginning of June, 1704. It then began to slowly march south, toward Warsaw. When marching, the army counted around 31,000 men.<sup>627</sup> Around 17,000 Swedish troops had been stationed in core Sweden in 1700<sup>628</sup>. Most likely, there were still 17,000 soldiers there in 1704.

With Karl XII's absence from Sweden, the Defense Commission handled matters regarding the defense of the nation. Participating in the meetings of the Defense Commission during 1704 were Counts Johan Gabriel Stenbock, Fabian Wrede, Didrich Wrangel and Gabriel Falkenberg.<sup>629</sup>

Narva was not frequently on the agenda of the Defense Commission. Before April, the only mention of the city concerned ships destined for Narva, discussed in the meeting of February 22.<sup>630</sup> Narva was next observed on March 18. A January 27 letter from Horn was read. Horn reported on his problems in getting provisions from Reval, due to lack of transport and other obstacles. He also found it difficult to get the officers, from the four regiments under his command, to return to Narva. Horn reported that the garrison suffered from

---

<sup>626</sup> Von Schlippenbach to the provincial governors in Finland, February 18, 1706, Wolmar von Schlippenbach, *Skrivelser med mera daterade 1704–06*, Autografsamlingen, Kungliga Biblioteket, Stockholm, s. p.

<sup>627</sup> Fryxell, *Del 21* (Stockholm 1856), p. 241.

<sup>628</sup> Wikander, p. 46.

<sup>629</sup> Minutes of the Defense Commission of 1704, Volume 2, *passim*.

<sup>630</sup> Minutes of the Defense Commission of Februari 22, 1704, Volume 2, s. p.

disease and that several men had died. Further, Horn wanted ammunition and some Swedish troops. The Commission decided to send letters to De la Gardie regarding the necessity of bringing supplies to Narva, and to De la Gardie and von Schlippenbach regarding discipline in the army. The Commission also ordered that von der Pahlen's regiment, then in Dorpat, be transferred to Narva under escort of units from von Schlippenbach's army. The Commission also decided to send a battalion of Colonel Köhler's regiment, [Västgöta "tremänningsregemente"], to reinforce the Narva garrison. This unit was to leave Sweden for Narva at first open water.

Later in the meeting, the Commission returned to the matter of Narva. They concluded that neither Lieutenant General Maydell nor Major General von Schlippenbach would be able to relieve Narva "på en lång tid" [for a long time].<sup>631</sup>

## THE SIEGE

### INTRODUCTION

It is not obvious how to define the beginning date for the siege of Narva/Ivanogorod. According to the definition suggested in Chapter 3, a siege would begin when there was a siege army stopping regular communication with the fortress. For reasons shown below, this can be assumed to have occurred at Narva/Ivanogorod on April 27, 1704. The first events were centered on a Russian force under Major General Apraksin and a Swedish naval force. Therefore, this section will begin with "The Russians and the naval situation".

### APRIL OF 1704

#### *The Russians and the naval situation – April*

The Swedish naval flotilla, destined for the Gulf of Finland in 1704, consisted of the ships *Wachtmeister*, *Stralsund*, *Reval*, *Falken*, *Snarsven* and *Ruscenfelt* (*Ruschenfelt/Kveckenfelt*), the brigantines *Castor*, *Kräftan*, *Skorpion*, *Göja*, *Jungfrun* and *Väduren*, the bomb vessel *Vulcanus* (two mortars of sixty pounds) and the

---

<sup>631</sup> Minutes of the Defense Commission of March 18, 1704, Volume 2, s. p.

galleys *Miöhunden* and *Strövaren*.<sup>632</sup> The first units to leave Karlskrona were the frigate *Snarsven* (20) and the brigantines *Jungfrun* (14) and *Våduren* (14), under the overall command of Lieutenant [“kapten”] Herman Schnack. His mission was to escort merchants going from Reval to Narva. Schnack arrived in Reval on April 11. No ice had stopped him, but it was cold in Reval, and there was plenty of snow. Schnack was told that a southerly wind had driven the ice away from Reval five days prior to his arrival. It had then been more than half a meter thick.

On the same day Schnack arrived, three galiots came from Stralsund. They were laden with malt owned by the Swedish government.<sup>633</sup> In the harbor, there were two ships from Lübeck loading rye. The governor general, De la Gardie, was not aware of any direct Russian threat to Narva. Schnack was to take two regiments aboard, Rehbinders’ and von der Pahlen’s, totaling 1,700 men, which were to reinforce the garrison at Narva. On De la Gardie’s orders, Schnack dispatched Lieutenant [“överlöjtnant”] Skruuf with the brigantine *Jungfrun*, to reconnoiter the ice on the northern shores of the Gulf of Finland.<sup>634</sup>

Schnack wrote a new report to the Admiralty in an undated but interesting letter. Skruuf had returned from Finland and reported that the sea was covered with ice out to about thirty kilometers from shore. Schnack drew the conclusion that a northerly wind could create a difficult ice situation in the southern part of the gulf. Schnack had also received a letter from Narva; he was not happy with its contents. The letter was vague on enemy activity and said nothing about the ice situation. When writing his report, Schnack had sent a letter to Horn, in which he called for precise information on the ice and the enemy. Schnack was also concerned about small Russian vessels, which could block traffic on the Narva River.<sup>635</sup>

On April 26, Schnack reported to the Admiralty that he safely had arrived at the Narva River on the 22<sup>nd</sup>. His frigate and the two brigantines had escorted

<sup>632</sup> De Prou, *Specification uppå de skiepp och fahrtyg som uti denna escadren äro commenderade*, De Prou to the Defense Commission, April 28, 1704, Volym 122 Militära befälhavare med särskilt kommando (utom Maydell), II Skrivelser från enskilda, E Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer, Riksarkivet, appendix to the letter, attached document, s. p.

<sup>633</sup> Schnack to Amiralitetskollegium, April 13, 1704, Admiralty letters 1704, p. 1231 and armament according to P. O. Bäckström, *Svenska flottans historia* (Stockholm 1884), pp. 413 and 431.

<sup>634</sup> Schnack to Amiralitetskollegium, April 13, 1704, Admiralty letters 1704, p. 1232.

<sup>635</sup> Schnack to Amiralitetskollegium, undated, Admiralty letters 1704, p. 1235.

ten galiots from Pomerania. The ice had been most dangerous, but, Schnack thanked God that there had been no damage.<sup>636</sup> When the galiots were brought to Narva “[...] för bryggan af Narva in Salvo [...]” [to the bridge of Narva, in safety], Horn ordered Schnack to post his brigantines by the mouth of the river [“Jamo reviret”]; Schnack complied. He had trees on the Magerborg peninsula cut down in order to get a better field of vision. At his station, Schnack received a message from Horn, warning him that the enemy was approaching with a strong force from Jama. They intended to conquer the Narva area.<sup>637</sup> Schnack then reported that on yesterday evening, which would have been the 25<sup>th</sup>, after sunset, the first Russians were seen. It was a cavalry patrol of some fifty men, appearing on the Ingrian side of the river. The Swedes ashore retreated to their boats and took cover under the brigantines. Schnack then concluded his report, stating that most of his crews were well.<sup>638</sup>

De Prou sailed from Karlskrona on April 13, 1704, with the ship *Wachtmeister* (40), the frigates *Falken* (20) and *Kveckenefelt* (20), and the brigantines *Castor* (14), *Skorpion* (14), *Göja* (14) and *Kräftan* (14).<sup>639</sup> The ships *Stralsund* and *Reval* were left behind in Karlskrona to join the flotilla later, as they were not ready to sail on the 13<sup>th</sup>.<sup>640</sup> His instructions were to protect the Swedish coastline from enemy invasion and attacks.

De Prou arrived in Reval on the 20<sup>th</sup>. He learned very little from De la Gardie about Russian activities at sea, except that they had built eight frigates at Nöteborg. De Prou intended to leave Reval on the following day.<sup>641</sup> However, he had to remain in port due to adverse winds. By April 28, he had dispatched the brigantine *Castor* to escort transports to Narva. They had arrived in Reval after the departure of Schnack’s convoy. De Prou now saw Narva as completely provisioned.<sup>642</sup> The brigantine *Castor* was under the command of Lieutenant [“kapten”] Johan Wilhelms. He escorted two transports, laden with government rye, and two private merchants, carrying rye and oats.

<sup>636</sup> Schnack to Amiralitetskollegium, April 26, 1704, Admiralty letters 1704, p. 1237.

<sup>637</sup> Schnack to Amiralitetskollegium, April 26, 1704, Admiralty letters 1704, p. 1238.

<sup>638</sup> Schnack to Amiralitetskollegium, April 26, 1704, Admiralty letters 1704, p. 1239.

<sup>639</sup> Jakob De Prou April 21, 1704, Amiralen Jacob De Prous expedition, p. 9.

<sup>640</sup> Compare Arnold Munthe, *Del I*, p. 244. It could here be noted that Arnold Munthe dated De Prou’s sailing to April 17. The letter in which De Prou reported was dated the 17<sup>th</sup>, but the actual sailing was, according to the letter, on the 13<sup>th</sup>.

<sup>641</sup> *Amiralen Jacob De Prous expedition*, pp. 8–[11].

<sup>642</sup> *Amiralen Jacob De Prous expedition*, p. 34.

Wilhelms arrived at the mouth of the Narva River on April 27, where he joined Lieutenant Schnack. Wilhelms stated in his report that Schnack had escorted ten galiots, loaded with malt and oats, which had crossed the banks and gone up to Narva. The ships following Wilhelms could not, however, get across the banks. Wilhelms went to Narva to deliver fourteen credit instruments [“assignmenters”] having a total value of 18,500 rixdollars. These had been given to him by De la Gardie for delivery to Horn. Wilhelms was almost captured by Russian troops when making his journey to the city. Wilhelms then remained by the mouth of the Narva River.<sup>643</sup>

Schnack’s next letter was dated May 8. He reported that since his last message, no more ships had been brought up to Narva. He also reported that since then, the enemy had arrived in force. The enemy had stood 8,000 strong by Jama. When they learned that a few ships had been brought from the gulf up the river, they marched on Narva. New Russian troops had been arriving daily. The brigantines, which were posted by “mynningen af Jama reviret” [by the mouth of the Jama area], had daily fights with the enemy. Schnack then described how the Russians tried to settle at the mouth of the river, but that the heavy fire drove them back into the woods. This seems to have occurred on April 28. Schnack was not specific on the date, but the next part of the letter begins with the 29<sup>th</sup>. Around noon on the 29<sup>th</sup>, Schnack went aboard the brigantine *Våduren*, ordering the brigantines to kedge toward the enemy. The brigantines then fought an artillery duel with the cannons on land, a battery of four heavy guns. The brigantines could not silence the enemy battery and Schnack finally ordered a retreat to the mouth of the river. The ships had suffered no casualties and only minor damage.<sup>644</sup>

Schnack was then asked by Horn to bring supplies up from the Gulf of Finland to Narva. The supplies to be brought up must then have come from the four ships escorted by Wilhelms. The Russians obviously controlled the eastern side of the Narva River. In this situation, Schnack suggested to Horn that a pier should be built on the western side. The ships in the gulf should then be discharged by that pier and the supplies brought up to Narva by land. Horn agreed to the scheme, and the work to build the pier was carried out night and day. The pier was completed and discharge began, that work also taking place around-the-clock.<sup>645</sup>

---

<sup>643</sup> Wilhelms to Amiralitetskollegium, May 10, 1704, Admiralty letters 1704, pp. 1651–1653.

<sup>644</sup> Schnack to Amiralitetskollegium, May 8, 1704, Admiralty letters 1704, p. 1241.

<sup>645</sup> Schnack to Amiralitetskollegium, May 8, 1704, Admiralty letters 1704, p. 1242.



Regarding earlier research, it can be concluded that Schnack's and Wilhelm's letters have not been used before. Another observation on earlier research is that Otto Sjögren's<sup>646</sup> and Ludvig W:son Munthe's<sup>647</sup> descriptions of the events refer to "von Numers's flotilla". This is not correct. Von Numers had previously been in command of the Swedish flotilla in the Gulf of Finland but, on October 8, 1703, he had left the gulf and reported himself sick<sup>648</sup>. He was replaced by De Prou as commander of the flotilla.

### *Narva – April*

Before Narva was totally invested, Horn wrote several letters in numbers code to Stockholm, where they were deciphered. The first one seems to be a letter to the King dated April 28, 1704, only deciphered in part. Horn wrote that Tsar Peter was at Nyen. He also told of the arrival of ships with supplies, two the day before and one on the day the letter was written. However, not a man from the regiments in Reval had been seen in Narva. He expected the enemy to make themselves masters of the mouth of the Narva River. He had called upon Maydell and von Schlippenbach for support.<sup>649</sup>

A new coded letter to the King followed on April 30. Horn had now reconnoitered the Ingrian side and seen an enemy line built above Magerborg, from where the Russians had had an artillery duel with the Swedish brigantines. The enemy also built a camp up by Kutterkyle [Estonian: Kudruküla]. The river was now completely blocked. Horn then claimed that the enemy could have been dislodged, but lack of troops and lack of an army covering his back had stopped him from attacking. Horn stated that the provisions would last for a month, and he called for all possible assistance.<sup>650</sup>

On April 30, Horn also wrote a letter to Vice Admiral De Prou. Horn wanted the Navy to keep guard at the mouth of the Narva River and challenge the enemy by Nyen, at the mouth of the Neva River.<sup>651</sup>

### *Sweden – April*

In a meeting on April 6, the situation in the east was discussed in the Defense Commission. A letter from Karl XII, dated March 4, 1704, was read. Accord-

<sup>646</sup> Sjögren, *Karl XII*, p. 407.

<sup>647</sup> Ludvig W:son Munthe, III:2, p. 446.

<sup>648</sup> Arnold Munthe, Del I, p. 165.

<sup>649</sup> Horn to the King, April 28, 1704, *Livonica II*, s. p.

<sup>650</sup> Horn to the King, April 30, 1704, *Livonica II*, s. p.

<sup>651</sup> Horn to De Prou, April 30, 1704, Admiralty letters 1704, pp. 1437–1440.

ing to the letter, the Defense Commission was to arrange for weapons, clothes and victuals for the troops raised by Major General von Schlippenbach, if the local resources did not suffice. The Defense Commission decided to send letters to the State Office [“Statskontoret”], the War College [“Krigskollegium”] and Lords Lieutenant [“ståthållarna”] Strokirch and Strömfelt. The two last mentioned were Michael von Strokirch, named as ordinary financial lord lieutenant [“ekonomiståthållare”] in Riga in 1690<sup>652</sup> and Gustaf Adolph Strömfelt, financial lord lieutenant in Dorpat and Pernau<sup>653</sup>. Then a letter from Governor General Count De la Gardie was read. He made a request for ships to escort transports going to Narva. This letter was placed *ad acta* as this matter was handled.<sup>654</sup>

On April 28, Narva was on the agenda of the Defense Commission again. Now a disturbing letter from Horn, number-coded and with no reference to its date, was read. Horn reported that disease steadily decreased the garrison and that there was a lack of supplies. Horn estimated that he could not sustain his garrison for long. Horn feared that the Russians were about to block the mouth of the Narva River.<sup>655</sup>

Having covered several letters from Maydell in Finland, where Maydell called for various support but consequently was referred to local resources, the Defense Commission turned to letters written by Horn in February. The first was dated February 5. Here Horn reported on losses from disease and a lack of supplies. The letter was placed *ad acta*. The next letter was dated February 12. It told of Russian preparations for an offensive and for blocking the mouth of the Narva River. Horn also complained about failed deliveries of supplies from Reval. The Defense Commission placed the letter *ad acta*.<sup>656</sup>

The accumulated letters from Horn give the impression that the mail service had just resumed operation for the season. The general picture is that the Defense Commission was now beset by demands, but could do little, except refer the matter to someone else.

---

<sup>652</sup> N. J., “Strokirch, von”, in *Nordisk familjebok*, Part 27 (Stockholm 1918), column 352.

<sup>653</sup> Gabriel Anrep, *Svenska adelns ättar-taflor*, Afdelning 4, (Stockholm 1864), p. 253.

<sup>654</sup> Minutes of the Defense Commission of April 6, 1704, Volume 2, s. p.

<sup>655</sup> Minutes of the Defense Commission of April 28, 1704, Volume 2, s. p.

<sup>656</sup> Minutes of the Defense Commission of April 28, 1704, Volume 2, s. p.

## MAY OF 1704

*Narva – May*

At the beginning of the month, the Russians had not yet laid a close cordon to the city. On May 10/11, 700 men from Colonel Rehbinder's regiment, most likely having arrived with Schnack's or Wilhelms's ships, could enter the city.<sup>657</sup> According to Grigorjev and Bespalov, it had been difficult to land the troops under the eyes of Apraksin's troops. They had finally managed to land about thirty kilometers from Narva, and then marched overland to the city.<sup>658</sup> The defenders of Narva soon found themselves hard-pressed. On the 12<sup>th</sup>, Russian troops began to ravage around the city and on the 14<sup>th</sup>, a strong Russian party passed Ivangorod. On May 21/22 and May 26/27, Russian patrols carried off cattle and horses from around the city. On May 31, they occupied the mountain by Rathshoff, close to Ivangorod. A Swedish post on the mountain was driven off.<sup>659</sup>

According to a statement in Ludvig W:son Munthe's work on the history of the Swedish fortification, Baron Bogislaus von der Pahlen's regiment managed to get into the city as well.<sup>660</sup> This seems to be some sort of misunderstanding, since Horn claimed in a letter to the Defense Commission that he had refrained from taking this unit into the city (see below).

*The Russians – May*

On May 20/21, Russian troops left St. Petersburg, marching north toward Viborg. The artillery was ready and embarked on ships at Schlüsselburg (Nöteborg). On the same day, a report from Apraksin arrived. Swedish Vice Admiral De Prou had bombarded his camp and Major General von Schlippenbach intended to march on Narva with his army. A conference was held in St. Petersburg where it was decided to recall the troops marching north. The recalled troops arrived in St. Petersburg on May 21/22. They then marched west and arrived at Apraksin's camp on the 26<sup>th</sup>/27<sup>th</sup>. At the same time, three regiments of dragoons left Pskov.<sup>661</sup>

---

<sup>657</sup> *Archiv für die Geschichte*, p. 243.

<sup>658</sup> Grigorjev and Bespalov, p. 142.

<sup>659</sup> *Archiv für die Geschichte*, pp. 244–245.

<sup>660</sup> Ludvig W:son Munthe, Del III:2, p. 446.

<sup>661</sup> Tsar Peter's diary, pp. 95–97.

Orders were given to dispatch artillery from St. Petersburg to Narva overland, which was hard work. The distance was about 180 kilometers. Some of the ammunition was sent by boats, which closely followed the shoreline.<sup>662</sup>

*The naval situation – May*

By the end of April, Swedish supplies were discharged by day and night, by the use of the improvised pier, and brought up to Narva on land. In the letter to the Admiralty of May 8, Schnack explained that these favorable circumstances did not last long. Around 2 o'clock at night, between May 2 and 3, when Schnack was fully occupied in the discharge work, the Russians crossed the Narva River about five kilometers south of the coast, by Kutterkyle. They used strugs and portable bridges, which had been brought there overland. A Swedish cavalry post was driven off during the crossing. The resupply operation was now completely severed.<sup>663</sup>

De Prou was delayed at Reval by adverse winds until May 11. He then sailed, arriving at the mouth of the Narva River on the 13<sup>th</sup>. Aboard were 600 men of Colonel von der Pahlen's regiment. On June 18, De Prou wrote a report to the King. He described how he had communicated with Horn via Fortifications Lieutenant De la Vallée, and that he also had been in contact with Maydell in Finland. They had forged a plan to attack the enemy off Narva, in concert with von Schlippenbach. Maydell would send 1,200 men from Viborg. De Prou was, however, careful to explain to the King that an attack would have called for a concentrated Swedish effort. On his own, he could do little. The month of May would end with no forces coming from von Schlippenbach or Maydell, and no Swedish attack was launched.<sup>664</sup>

Earlier research represented by Sjögren and Stackell claimed that De Prou had 1,200 infantry aboard his ships at this time<sup>665</sup>. It is likely that 600 men of Colonel Köhler's regiment also were aboard, but not mentioned by De Prou. On May 23, De Prou wrote to Major General von Schlippenbach, notifying him of the arrival of 600 men from Colonel Köhler's regiment at Reval.<sup>666</sup> This information does not specify their arrival date, but following information will indicate that this battalion reached the Narva area.

---

<sup>662</sup> Tsar Peter's diary, pp. 95–97.

<sup>663</sup> Schnack to Amiralitetskollegium, May 8, 1704, Admiralty letters 1704, p. 1243.

<sup>664</sup> De Prou to the King, June 18, 1704, *Amiralen Jacob De Prou's expedition*, pp. 209–214.

<sup>665</sup> Sjögren, *Karl XII*, p. 407 and Stackell, "Narva", p. 43.

<sup>666</sup> De Prou to von Schlippenbach, May 23, 1704, Admiralty letters 1704, The index, s. p. [18].

*The Swedish regional level – May*

On May 4, von Schlippenbach had been informed by Horn of the situation around Narva. Horn had explained that he had reconnoitered the Russian works, and that the Russians had built a redoubt on the Ingrian side, above Magerborg. Horn claimed that the entrance to the Narva River was blocked and called for von Schlippenbach to leave Reval with his troops, to cover the transports on land. Von Schlippenbach wrote to the King and explained that he wanted nothing more than to move to Horn's assistance, but that De la Gardie had disapproved of such an operation. Von Schlippenbach attached a letter from De la Gardie to his message to the King, to prove his point. Von Schlippenbach concluded his letter by saying that he would find out more about the conditions around Narva and do whatever he could.<sup>667</sup>

In the beginning of May, the Swedish defense system in Estonia and Livonia suffered a major setback. As soon as the ice broke on Lake Peipus, a force under Major General Nikolai von Werden left Pskov by boat and prepared for an attack on the Swedish Peipus flotilla, as it moved from its winter quarters in Dorpat, through the Embach River out into Lake Peipus. The Russian plan worked perfectly. Von Werden placed his troops along the river. In the morning of May 4, the Swedish flotilla weighed anchor and sailed straight into the Russian ambush. In the evening, the Swedish Peipus flotilla no longer existed. Some of the men aboard could make it back to Dorpat. In history, this short struggle has been referred to as the Battle of Caster. The Russians were now free to use Lake Peipus for transport.<sup>668</sup>

Margus Laidre pointed out that von Schlippenbach had urged von Hertzfeld to sail already on April 16.<sup>669</sup>

*Sweden – May*

In the meeting of the 9<sup>th</sup>, news from Narva was presented to the Defense Commission; it was apparently good. Commissar Major [“överkommissarie”] Brodde of Major General von Schlippenbach's army, then obviously in Stockholm, was called to the meeting.

Brodde told the Defense Commission that the ships sent to Narva had safely arrived there, and that Vice Admiral De Prou had reconnoitered up to

---

<sup>667</sup> Von Schlippenbach to the King, May 7, 1704, Militaria Riksarkivet, s. p.

<sup>668</sup> Ericson Wolke, *Rysshärjningar*, p. 111, Ludvig W:son Munthe, Del III:2, p. 441 and Arnold Munthe, pp. 238–240.

<sup>669</sup> Laidre, *Dorpat*, p. 104.

Nyenskans, having found no enemies – neither ships nor troops. Then, an April 29 letter from Lieutenant General Maydell in Finland was read. He told of a Cossack rebellion against Tsar Peter in Russia. After a few other items, a new letter from Maydell, also dated April 29, was read. In this letter, Maydell informed the Commission of Horn's request for a strong diversion against the Russians, necessitated by Russian preparations for an attack on Narva. Horn had told Maydell that his provisions would only last a month, but Maydell's informers had claimed that the Russians were withdrawing from Ingria. The letter was placed *ad acta*.<sup>670</sup>

On May 16, the Defense Commission became fully aware of the fact that Narva was under siege. Governor General De la Gardie suggested, in a letter read the same day, that troops should be sent by ship from Karlskrona to drive off the Russians. The Defense Commission decided to write an answer in which they sent their regrets regarding the unexpected news from Narva. They recommended that De la Gardie try to harm the Russians on land in all possible ways. He was also to consult with Major General von Schlippenbach on how provisions could be brought into Narva. By the end of the meeting, a decision was reached to write a letter to Karl XII informing him of the siege. It was also decided to inform him of the plans for raising men and supplies, and how far these plans had progressed. In the letter, a royal decision on how Narva should be supported would be requested.<sup>671</sup>

The May 19 meeting of the Defense Commission began with the reading of a letter of May 5 from Horn, written in lemon juice. He reported that the Russians were now on the Estonian side too and that all resupply routes to Narva were cut off. The existing supplies would only last for a month. The Defense Commission placed the letter *ad acta*, since the matter had already been handled by letters to De la Gardie and von Schlippenbach. By the end of the meeting, the Commission seems to have been struck by second thoughts regarding Narva. It was noted in the minutes that the relief of Narva was discussed and, quite interestingly, that the Commission so far had only answered letters and sent a message to the King. There are no details of the discussion and the passage only covers five lines in the minutes. Reading between the lines, one can imagine doubts on whether the Commission was acting forcefully enough in this serious situation.<sup>672</sup>

---

<sup>670</sup> Minutes of the Defense Commission of May 9, 1704, Volume 2, s. p.

<sup>671</sup> Minutes of the Defense Commission of May 16, 1704, Volume 2, s. p.

<sup>672</sup> Minutes of the Defense Commission of May 19, 1704, Volume 2, s. p.

A new letter from Horn, dated May 9 and written in lemon juice, was read in the May 27 meeting of the Defense Commission. Horn reported on the answers received from De la Gardie and von Schlippenbach, on his suggestions for relief of Narva. The central part of Horn's suggestion had been that von Schlippenbach should advance on Narva with his army. Here, it is not clear how De la Gardie and von Schlippenbach had replied, but it soon becomes obvious. A letter from De la Gardie dated May 16 was read. De la Gardie explained that von Schlippenbach was to move out with his army from Reval, although that army was quite weak. De la Gardie then carefully washed his hands of military operations. He stated that these matters were to be left entirely in the hands of the persons named by the King as responsible for the military operations, i.e. von Schlippenbach and Horn. He also expressed a hope that these men would be industrious in fulfilling their responsibilities.<sup>673</sup>

On May 30, a letter from Horn dated May 16 was read in the Defense Commission. In his letter, Horn remarked that the first wave of enemies could have been dislodged with proper speed in the Swedish movements. Horn continued by criticizing De la Gardie for not having sent 2,000 wagons with horses, which Horn had requested to bring the discharged supplies from the coast up to the city. For lack of provisions, Horn had not taken Colonel von der Pahlen's regiment into the city. Then von Schlippenbach's letter of May 18 was read. To begin with, von Schlippenbach placed all the blame for the loss of the Lake Peipus flotilla on Colonel Skytte, the commander in Dorpat. He then turned to the 600-man battalion of Colonel Köhler's regiment,<sup>674</sup> led by Lieutenant Colonel Braun<sup>675</sup>. This unit had been ordered to Narva and had now returned to Reval. Von Schlippenbach did not know what to order them to do, and requested instructions. Having listened to the reading of these letters, the Commission decided to order von Schlippenbach to open the road to Narva, with his forces, and make sure that Braun's battalion and the provisions waiting by the coast could be brought into the city. Horn was to be notified of these orders. The letter to Horn was to be written in lemon juice and sent to De la Gardie, who was made responsible for the safe arrival of the letter in Narva.<sup>676</sup>

---

<sup>673</sup> Minutes of the Defense Commission of May 27, 1704, Volume 2, s. p.

<sup>674</sup> Fredrik von Köhler, commander of Västgöta "tremänningsinfanteriregemente" (Lewenhaupt, Del 1, p. 370).

<sup>675</sup> Johan Braun (Brun), Lieutenant Colonel of Västgöta "tremänningsinfanteriregemente" (Lewenhaupt, Del 2, p. 80).

<sup>676</sup> Minutes of the Defense Commission of May 30, 1704, Volume 2, s. p.



## JUNE 1704

*Narva – June*

Horn started the month of June with a sally. On the night of June 1, 400 men under Colonel von Marqvard and Major Funck were sent out on the Ivangorod side. Funck had orders not to advance too far. Von Marqvard advanced all the way to the enemy camp, leading a cavalry force. Here, he could enter and make rich spoils. One of the diary keepers in Narva commented that if Funck had been ordered to follow von Marqvard's attack, the entire Russian regiment could have been defeated.<sup>677</sup> On the following day, a new sally in the direction of Ivangorod, counting some 1,500 men, was launched. It was led by Colonel Reh binder and Lieutenant Colonel von Marqvard. The cavalry part of the force fought a sharp battle, but the infantry did not get into action.<sup>678</sup>

The next major event was not good for Horn or the morale in the fortress. The Russians learned that Horn was expecting forces from Reval to arrive at any moment. The Russians decided to use this information as the basis for a stratagem. On June 8, a few regiments of infantry and dragoons marched to the road from Reval, unseen by the Swedes. Among them were regiments which wore blue uniforms; others were given coats in blue. The Russian units were also given flags which resembled those of the Swedes. The Russians then staged a mock battle between these blue-clad men and other Russian units, which the latter pretended to lose. Horn sent out Lieutenant Colonel von Marqvard with a few officers and a few hundred men to join the "reinforcements". These men were attacked and pursued all the way back to the walls. About ten soldiers were killed and forty-six taken prisoners; among the prisoners was Lieutenant Colonel von Marqvard. The ruse demoralized the garrison, and the Russians learned a lot about the fortress from the prisoners.<sup>679</sup>

Throughout the month, it was observed from the city how Russian trenches were dug. The fortress artillery tried to slow down the work, to little avail. On the 17<sup>th</sup>, all the houses and gardens in the suburbs were destroyed in an 800-man sally led by Colonel Reh binder.<sup>680</sup>

On the 18<sup>th</sup>, considerable activity on the Russian side was seen from the city. Strugs brought provisions and ammunition to the siege force. Two days

---

<sup>677</sup> *Archiv für die Geschichte*, p. 246.

<sup>678</sup> *Archiv für die Geschichte*, p. 246.

<sup>679</sup> Tsar Peter's diary, pp. 98–100.

<sup>680</sup> *Archiv für die Geschichte*, pp. 250–252.

later, the Russians began to throw hand grenades into the Swedish works; they, however, caused little damage.<sup>681</sup> The Russian build up then continued. On the 25<sup>th</sup>, the arrival of cavalry and infantry units, bringing several wagons, was observed. Four days later, a large cavalry force arrived. The Russians closed in with their trenches, and the Swedish artillery tried to slow down their work.<sup>682</sup>

The conditions in the city soon became miserable. On June 1, Horn wrote a letter to the Defense Commission stating that the defenders counted 3,830 infantry men and 1,283 mounted men.<sup>683</sup> Of them, half were sick. It has been assumed that typhoid fever was ravaging in the city.<sup>684</sup> The rations were running low, to such an extent that soldiers had begun to defect to the enemy for food.<sup>685</sup>

The work on digging trenches and batteries on the Ivangorod side started and, at the same time, Field Marshal Baron Georg Benedich von Ogilvie arrived and was given command of the Russian siege by Tsar Peter. Ogilvie was a sixty-year-old Scot who had served in the army of the Holy Roman Empire for forty years.<sup>686</sup> Tsar Peter then brought the generals to the mountains named Vayvarskia [Estonian: Vaivarani], where he ordered trenches to be dug to hinder the Swedes from reinforcing Narva. On June 30/July 1, Tsar Peter left Narva for Dorpat.<sup>687</sup>

### *The naval situation – June*

On June 18, De Prou wrote a letter to the King in which he reported on the latest events. The Swedish ships off the Narva River were exposed to the weather. This had serious consequences on June 1. Hard winds drove two of the merchant ships ashore. One of the ships carried eighty sick men from Reh binder's regiment and forty "läster" of cereal; the other carried thirty "läster" of cereal. The larger ship was captured by the Russians; the smaller one broke up and sank.<sup>688</sup>

In the beginning of June, on the 8<sup>th</sup>, von der Pahlen's regiment and Lieutenant Colonel Braun's 600-man battalion left the vicinity of Narva. They marched for Kaspervik, where they planned to join von Schlippenbach's army. Vice Admiral

<sup>681</sup> *Archiv für die Geschichte*, p. 253.

<sup>682</sup> *Archiv für die Geschichte*, pp. 254–255.

<sup>683</sup> Sjögren, *Karl XII*, p. 408.

<sup>684</sup> Stackell, "Narva", p. 45.

<sup>685</sup> Ludvig W:son Munthe, *Del III:2*, p. 447.

<sup>686</sup> Robert K. Massie, *Peter the Great: His Life and World*, (London 2012), p. 397. (Further on, "Massie")

<sup>687</sup> Tsar Peter's diary, p. 101.

<sup>688</sup> De Prou to the King, June 18, 1704, *Amiralen Jacob De Prou's expedition*, pp. 215–216.

De Prou explained that their departure was due to a lack of supplies, and that they saw no use in remaining where they were.<sup>689</sup> Lieutenant Colonel Braun's battalion was previously seen in Reval, and must then have been sent east once again for the information above to be correct.

De Prou also declared that he was going to give up attempts to support a relief of Narva and sail for his original destination, the waters off Nyen. De Prou's main reason for leaving Narva was that he had understood that von Schlippenbach was not coming. Von Schlippenbach had explained why it was impossible for him to march on Narva until he had relieved Dorpat, which was also under Russian siege. Von Schlippenbach had claimed that his back would be threatened, as long as the Russians were at Dorpat. When departing, De Prou left two ships off the Narva River to ensure that no Russian boats could get into the river.<sup>690</sup>

Regarding the situation by the mouth of the Narva River, there is an interesting piece of information in Tsar Peter's diary from the beginning of June. The diary claimed that there were only a few old, and not very good, iron cannons in Apraksin's force. Two of them blew up when fired, whereupon one Russian artillery man was killed and another wounded.<sup>691</sup> This information raises questions about the artillery duel between the Swedish brigantines and the Russian artillery, at the very beginning of the siege.

#### *The Swedish regional level – June*

On June 7, von Schlippenbach wrote a letter to the Chancellery [“Kanslikollegium”] from his encampment at a place called Okuskule, most likely in the vicinity of Wesenberg. He was now on his way to assist Narva. The first problem had been to get salt and bread for the army. He had then marched toward Narva. We can understand that von Schlippenbach only marched with his cavalry. When writing the letter, he had waited ten days for the infantry and the artillery, which would be moved by ship from Reval to the harbor Tolsborg, Toolse in today's Estonia, some fifty kilometers west of Narva. Von Schlippenbach then reported that the enemy had used the time to get into positions where he, with his 1,500 cavalry and 1,000 infantry, could not threaten him. Von Schlippenbach had now changed his ambition to defending provinces where the enemy had not yet penetrated. To this end, according to orders from the King, he had rallied

---

<sup>689</sup> De Prou to the King, June 18, 1704, *Amiralen Jacob De Prou expedition*, pp. 214–215.

<sup>690</sup> De Prou to the King, June 18, 1704, *Amiralen Jacob De Prou expedition*, p. 216.

<sup>691</sup> Tsar Peter's diary, p. 98.

the civilians to arms. Von Schlippenbach stated that he would send an officer to Stockholm as soon as possible to report on the situation. He ended his letter by saying that the conditions in his encampment could not be described.<sup>692</sup>

Learning that von Schlippenbach stood by Wesenberg about halfway between Reval and Narva, with around 1,400 men, Tsar Peter sent Colonel Rönne with 8,000 men to defeat him. The Russians found von Schlippenbach by a place called Lesna where they attacked him on June 16.<sup>693</sup> Von Schlippenbach attempted to put up a defense, but noticed that a part of Rönne's force tried to get past him. Seeing that he was about to be surrounded, von Schlippenbach ordered a retreat. According to Swedish historian Adlerfelt, only 200 men remained for von Schlippenbach at the end of the day; the others were killed, captured or had left their units<sup>694</sup>. The battle earned Colonel Rönne a promotion to major general.<sup>695</sup>

On June 20, von Schlippenbach wrote to the King again. The tone of his letter was now quite different from the previous ones. The newly hired soldiers were of little use, since they could not hold up against enemy cavalry. Von Schlippenbach saw no other option than to retreat to the walls of Reval. Concluding his letter, he called for assistance from Major General Lewenhaupt in Riga, or for a diversion into Russia. Von Schlippenbach finally pointed out that he was sickly and his soldiers were in miserable condition.<sup>696</sup>

### *Sweden – June*

On June 2, a letter of May 19 from Horn was read in the Defense Commission. Horn informed of the Russian measures to enclose the fortress and regretted having been misinformed on the real strength of the Russian force. Horn requested 1,000 cavalry from von Schlippenbach's army and 2,000 wagons from Estonia. With these, he could dislodge the enemy and resupply the city. Without these reinforcements, the fortress would change hands within a month. Horn stated that for the month of June, there were no supplies other than the small private stocks. The Commission took the message most seriously and decided to send letters to De la Gardie and von Schlippenbach. The letters to De la Gardie and von Schlippenbach were written in unusually strong language. They were urged to do something significant for Narva, since the fall of this fortress would place

---

<sup>692</sup> Von Schlippenbach to Kanslikollegium, June 7, 1704, Kanslikollegium letters, s. p.

<sup>693</sup> Grigorjev and Bespalov, p. 146,

<sup>694</sup> Adlerfelt, p. 201.

<sup>695</sup> Grigorjev and Bespalov, p. 146.

<sup>696</sup> Von Schlippenbach to the King, June 20, 1704, Militaria Riksarkivet, s. p.

them in great jeopardy. Horn was to be notified of “*eftertryckelig anstallt*” [the emphatic action], which the Commission had taken upon his letter.<sup>697</sup>

On June 15, Narva was on the agenda of the Defense Commission again. A letter from De la Gardie, dated June 4, was read. De la Gardie informed the Commission that he had sent 1,000 men from the garrison of Reval, and that Maydell had sent 1,000 men from his army to create a relief force for Narva. There were also the 600 men from Köhler’s regiment, 300 men from De Prou’s flotilla and 1,000 men from von der Pahlen’s regiment.

On their arrival, Horn planned to launch a sally with 1,000 men. De la Gardie was optimistic about the possibilities of dislodging the Russians, since the total Swedish force would count 4,900 men, not including 1,500 cavalry from von Schlippenbach’s army heading toward Narva. De la Gardie also claimed that 2,000 wagons were on their way east. The next letter to be read was from von Schlippenbach, dated Wesenberg May 30. Von Schlippenbach reported that he was now on his way to Narva. He explained that his force was weak due to lack of clothing, weapons and provisions, which he had often requested but never received. Von Schlippenbach enclosed copies of letters to Horn and De Prou, saying that he could only bring 1,500 cavalry. Then a letter from Maydell, dated June 7, was read. Maydell reported on problems with fulfilling the plans made for a relief of Narva. The lack of necessary “*requisiter*” [requisitions], had stopped him from any operation in support of Narva.

The meeting then turned to a May 23 letter from Horn. He told of 2,000 men on horse marching from Estonia, and the forthcoming sally. Horn was now highly optimistic. He foresaw a Swedish victory, since the Russians only counted 2,000 cavalymen and 3,000 on foot. A letter from Horn of May 30 was also read. He reported that the enemy now roamed close to the walls. Regarding cereal, the magazines in the fortress were now empty and only small private stocks remained.<sup>698</sup>

At the beginning of the meeting of the Defense Commission on June 27, Fabian Wrede was obviously deeply disturbed by the news from the east. The first thing he told the Commission was that he had found it necessary to send a message from his office, the State Office [“*Statskontoret*”], to the King. He now wanted the Defense Commission to send a letter too. The background seems to have been a letter from von Schlippenbach, in which he declared that he would

---

<sup>697</sup> Minutes of the Defense Commission of June 2, 1704, Volume 2, s. p.

<sup>698</sup> Minutes of the Defense Commission of June 15, 1704, Volume 2, s. p.

not go to Narva, and that the Russians had sent a third of their siege army to find his force and destroy it. The Commission agreed to send a letter to the King. It was estimated that Narva could hold out until the end of August. The letter to the King was to point out that only a considerable relief army could now save Narva and Dorpat. It was also concluded that it was impossible to set up a relief army in Sweden, and that the consequences of the loss of Narva would be the loss of Estonia, Livonia and Finland, plus Ingria.<sup>699</sup>

## JULY 1704

### *Narva – July*

During the night going into July 1, the Russians were working hard on their trenches. Fire from fifty cannons in Narva and Ivangorod was to slow down their work. In the evening, eighty men from the garrison sallied and took prisoners. They told of Dorpat being under siege by Sheremetov and 15,000 men. The diaries now testified of civilians dying of a “hot fever” [“hitzigen Fieber”].<sup>700</sup>

The days then proceeded with the Russian works getting closer and the garrison fighting back with small sallies and cannons. However, on July 6, Colonel von Fersen was fined one ducat for each shot, having opened fire with cannons against the enemy.<sup>701</sup> This seems to be the beginning of Horn’s hesitation to use the fortress artillery against the besiegers. Ludvig W:son Munthe wanted to explain Horn’s hesitation to use the fortress artillery as due to the poor condition of the garrison.<sup>702</sup> Toward the middle of the month, the fighting intensified. The Russians were now sometimes launching intense musket fire at the defenders of Narva, where one musket ball wounded Horn in a finger. The Russian hand grenades also began to claim victims. On the 14<sup>th</sup>, the counterfire from Narva was heavy, although the diary stating this did not specify whether it was cannons or muskets being used.<sup>703</sup> On the 19<sup>th</sup>, the diaries kept in Narva reported on the arrival of Tsar Peter in the vicinity and the arrival of the Russian siege artillery from St. Petersburg.<sup>704</sup>

On July 29, Horn wrote a letter to the Defense Commission in lemon juice. He reported that the enemy trenches on the Ingrian side now reached the river below the Victoria bastion. There the Russians also had erected a fairly high

---

<sup>699</sup> Minutes of the Defense Commission of June 27, 1704, Volume 2, s. p.

<sup>700</sup> *Archiv für die Geschichte*, p. 256.

<sup>701</sup> *Archiv für die Geschichte*, pp. 257–259.

<sup>702</sup> Ludvig W:son Munthe, Del III:2, p. 447.

<sup>703</sup> *Archiv für die Geschichte*, pp. 260–261.

<sup>704</sup> *Archiv für die Geschichte*, p. 263.

work, from which cannons could reach the Victoria bastion and the right flank of Honor bastion. On the Estonian side, trenches were approaching the glacis between the Gloria and Fama bastions. From their trenches, the Russians kept up a steady fire with muskets and hand grenades.

The Russians had also built new bridges over the Narva River. Horn remarked that the units in the Russian siege force were marching back and forth and kept changing their camps, so he could not keep track of their strength. Horn also remarked on Russian celebrations. The Russians soon informed him that they were celebrating the fall of Dorpat. Horn, in this context, remarked that he had not heard a word from Swedish authorities for several months. He thought that it was quite possible to get messages into the city on dark nights, and he wanted letters sent to him. Horn then turned to the conditions in the fortress. The garrison was troubled by the Russian shooting, but most of all by disease, which killed men in large numbers.

Regarding the supplies, Horn painted a dark picture. The garrison had survived July, as Horn had commandeered all food from the burghers and the nobility. The poor people were starving to death; the rich were living with a food shortage. He saw very little hope for the month of August, and concluded that the fortress was lost if not relieved soon, adding that the lack of food, news and hope of relief made large parts of the garrison demoralized. Horn saw the besieger tactic as aiming for a victory by starvation, a theory which he saw supported by the fact that no heavy artillery had been used against the walls, so far. Horn also added that he was fully occupied with trying to keep the mood up among the soldiers. He concluded his letter by reminding the Commission about the victory in 1700, and hoped that relief from all directions would be forthcoming.<sup>705</sup>

On Sunday the 30<sup>th</sup>/31<sup>st</sup>, the diaries testified to the beginning of the Russian breach shooting and heavy bombardment. One of the diaries remarked that one of the Russian bombs hit the artillery laboratory, with severe results. The ammunition and chemicals stored there exploded. Another diary told of lack of Swedish counter-battery fire. The burghers were upset by the fact that the Russian batteries were not destroyed, and four captains of the burghers' defense forces wrote a letter on the matter. The letter was handed over to Mayor Dittmer who handed it over to Colonels Kynnaid and Lillie.<sup>706</sup>

---

<sup>705</sup> Horn to the Defense Commission, July 29, 1704, copy in von Schlippenbach to Kanslikollegium, August 15, 1704, Kanslikollegium letters, s. p.

<sup>706</sup> *Archiv für die Geschichte*, pp. 266-267 and Tsar Peter's diary, p. 105.



*The Russians – July*

During Tsar Peter's absence [in July], the artillery from St. Petersburg had arrived at Narva by land. On July 20/21, a meteor resembling a bomb was seen, which was recognized as a good sign. Around July 20/21, although there is no specific date in Tsar Peter's diary, he was back at Narva. On July 30/31, a Sunday, after the service, the Russian siege artillery opened fire on the signal of three cannons. The fire was concentrated against the faces of the Victoria bastion. A bombardment with mortars was also begun.<sup>707</sup>

Another important event on July 30/31 was the arrival of the Russian infantry regiments from Dorpat to Narva. The new troops were led by Major General von Werden. They settled on the Estonian side of the Narva River, above the city. Field Marshal Sheremetov brought his cavalry to the Vaivarskia Mountains.<sup>708</sup> According to a table enclosed with Horn's letter of July 29, these forces consisted of sixteen battalions of infantry and twelve regiments of dragoons. Still according to Horn, each battalion counted 500 men and the soldiers were well-dressed.<sup>709</sup> The total Russian force off Narva then counted forty-six battalions of infantry and twelve regiments of dragoons, plus six regiments of dragoons under Major General Rönne posted at Pyhäjoggi, farther west of Narva. If the Russian infantry battalions counted 500 men and dragoon regiments 1,000, the total Russian force would now be 23,000 infantry and 18,000 dragoons, 41,000 in all.

Horn's table also presented some of the Russian staff. The general engineer in charge of the siege was Frenchman Lambert [Joseph Gaspard Lambert de Guérin<sup>710</sup>], there was also an Italian Lieutenant Colonel Engineer named De Bryli. The King of Denmark had sent a Mecklenburger, Heinson, to witness the siege, and King August of Poland and Saxony had sent a man by the name of Arestedt.<sup>711</sup>

According to Tsar Peter's diary, the Russian artillery at the siege counted sixty-six cannons, twenty-six large mortars, seven small mortars and one howitzer. This force would consume 400,120 pounds of gunpowder, 12,358 cannonballs and 5,714 bombs.<sup>712</sup>

<sup>707</sup> Tsar Peter's diary, p. 105.

<sup>708</sup> Tsar Peter's diary, pp. 105–106.

<sup>709</sup> Horn to the Defense Commission, July 29, 1704, copy in Schlippenbach to Kanslikollegium, August 15, 1704, Kanslikollegium letters, appendix, s. p.

<sup>710</sup> Kaur Lillipuu, *Põhjasõja-aegsete Narva piiramiste (1700 ja 1704 analüüs vaubani piiramisteooria seisukohast*, Academic Paper Tallinna Ülikool, Ajaloo Instituut 2014, p. 54, note 188.

<sup>711</sup> Appendix to Horn's letter of July 29, 1704, Militaria Riksarkivet, s. p.

<sup>712</sup> Tsar Peter's diary, p. 113.

*The Swedish regional level – July*

With 2,000 cavalry and 1,000 infantry, Maydell marched east to attack St. Petersburg and Kronslott. He clashed with Russian troops at Vallisaari (Walkesaar) on July 11. Maydell drove the Russians off and proceeded toward Nyenskans. He could capture the old work there, but was in no position to seriously threaten the Russians. Maydell hoped for a rendezvous with De Prou, which never materialized. Unable to cross the Neva River, and suffering from lack of fodder for the horses, Maydell broke off the offensive and withdrew. On July 14, he wrote a letter to the Excellencies, most likely the Defense Commission. Maydell enclosed a report on the campaign. He claimed that if he had been able to get across the Neva River, he could have damaged the enemy severely. Maydell expressed a hope that his expedition had drawn a considerable part of the Russian army off Narva and Dorpat.<sup>713</sup>

On July 10, von Schlippenbach wrote to the Chancellery [“Kanslikollegium”]. He stated that nothing could be expected from his handful of soldiers if the enemy launched an offensive against them. Von Schlippenbach also claimed that if Narva had been resupplied earlier, if the Peipus flotilla had not been defeated, if the newly hired soldiers were clothed and armed, and if he could have exchanged a few newly hired regiments for old regiments from the garrisons, he could have dealt with the enemy. Then he explained that nothing was to be expected from the rallied civilians, as hunger and lack of bread made it impossible to maintain any discipline.<sup>714</sup>

On July 26 in Livonia, Lewenhaupt won a major victory at Jacobstadt. With about 6,000 men, he defeated a Russo-Latvian force of some 16,000. A Lithuanian force of about 3,000, under General Sapieha, stood on Lewenhaupt’s side. In his report on the battle, Lewenhaupt pointed out that before the battle, not much hope had been placed on Sapieha’s force. After the battle, it was concluded that they had not contributed much either.<sup>715</sup>

*The naval situation – July*

De Prou’s flotilla remained in the Gulf of Finland, blocking the Russian ships by Retusaari. During a short period in July, the Russians ventured out to sea. De Prou, with his ships, once lifted the blockade and sailed to Björkö to bring the sick ashore. During these days, the Russians left port with four ships of three

<sup>713</sup> Maydell to the Excellencies, July 14, 1704, in Yrjö-Koskinen, pp. 95–99.

<sup>714</sup> Schlippenbach to Kanslikollegium, July 10, 1704, Kanslikollegium letters, s. p.

<sup>715</sup> Samuel E. Bring (red.), *Adam Ludvig Lewenhaupts berättelse*, (Facsimile edition Stockholm 1987), originally published in *Historiska handlingar* Del 34:2 (Stockholm 1952), pp. 60 and 66.

masts, larger than the Swedish brigantines, and six galleys with twelve pairs of oars.<sup>716</sup> Three of the four ships with three masts would have been *Frigate no 1*. and *Frigate no.2* launched in 1702, and the frigate *Sthtandart* launched in 1703. The fourth might have been the frigate *Michail Arkhangel*, launched in 1704. These ships were armed with eighteen to twenty 6-pounder cannons. The first three of them were built of green timber and were difficult to steer.<sup>717</sup> In all, the Russian fleet was not a powerful force at this time. Considering their lack of training at sea, this would be even more true.

### *Sweden – July*

Narva was on the agenda of the July 6 meeting of the Defense Commission. There, a letter of June 23 from De la Gardie was read. Von Schlippenbach had asked De la Gardie if he could rely on provisions for his army. De la Gardie had not been able to answer this question, since he lacked both provisions and funds. When this letter was read, Fabian Wrede harshly declared “[...] at sådant af ingen sanning består, [...]” [there is no truth in such a statement]. He claimed that Commissar Major [“överkommissarie”] Brodde had returned to Estonia with 80,000 rixdollars, and that there had been a balance of 50,000 rixdollars in the Estonian coffers when Brodde was in Stockholm. Wrede also pointed out that the supplies intended for Narva were now shipped to Reval and discharged there. A letter to De la Gardie was sent.

Then a letter from von Schlippenbach, of June 20, was read. Von Schlippenbach had the burdensome duty of informing the Commission of his defeat at Russian hands on June 16, and that he could not carry out his part of the plan to relieve Narva. In his letter, von Schlippenbach criticized his troops and suggested that Major General Lewenhaupt should launch an offensive, together with Lithuanian commander Sapieha, to drive off the Russians. In its answer, the Commission regretted the setback at Russian hands, but severely reprimanded von Schlippenbach for criticizing his troops. The Commission claimed that his statements had reduced respect for the Swedish arms, in foreign nations as well as in the enemy camp. Finally, the Commission told von Schlippenbach to do the best he could to organize the defense on his front.

The Commission then turned to a letter from De la Gardie of June 18, reporting on von Schlippenbach’s defeat of June 16. De la Gardie said that only

---

<sup>716</sup> Maydell to the Excellencies, July 25, 1704, Yrjö-Koskinen, pp. 100–101.

<sup>717</sup> Tredera and Sozaev, pp. 141–142.

400 or 500 of 1,400 men had returned to Reval from the battle. De la Gardie also claimed that von Schlippenbach had refused to accept 2,600 infantrymen waiting at Kaspervik to join his army. Instead, von Schlippenbach sent this infantry to Reval. De la Gardie further claimed that the Russians counted 40,000 off Narva and 70,000 off Dorpat, and that von Schlippenbach counted 8,000 men. De la Gardie's conclusion was that the only way to save the province was to send troops and funds from Sweden or other places. The letter was placed *ad acta*.<sup>718</sup>

So far, Karl XII had not been mentioned in the discussions on Narva and Dorpat in the Defense Commission. However, in the meeting of July 18, a letter from the King dated June 23, was read. Karl XII had reacted to a letter regarding the situation in Estonia, sent to him by De la Gardie. In his letter, Karl XII referred the matter to the Defense Commission. They were to consider De la Gardie's letter and make sure that the defenses in Estonia were in good condition. The Commission then had De la Gardie's letter read and decided to prepare a detailed answer to it. The more important points in De la Gardie's letter were the organization of magazines and the need for reinforcements.<sup>719</sup> In a meeting on the following day, the answer was presented. The core message to De la Gardie was that he could not expect any reinforcements from Sweden, except for the 600 men from Västgöta "tremänningsregemente", where the unit had obviously already arrived in Estonia. The Commission then pointed to contracts for recruiting in Estonia, which would bring the total force there to 18,000 men, and concluded that the defense of Estonia would not suffer from lack of manpower.<sup>720</sup> It should be noted that July was the first month with no letters from Horn in Narva.

## AUGUST OF 1704

### *Narva – August*

In the beginning of August, the pace of the siege accelerated, and the situation in Narva deteriorated rapidly. On August 2, Horn wrote a letter to the Defense Commission. On the previous Sunday, July 31, at half past eleven in the morning, the Russian batteries had opened fire. The primary goal was to shoot breaches in the Victoria bastion. The Russians shot with fifty cannons. Most of the siege artillery were 24-pounders, but some of the pieces were heavier. Horn testified

---

<sup>718</sup> Minutes of the Defense Commission of July 6, 1704, Volume 2, s. p.

<sup>719</sup> Minutes of the Defense Commission of July 18, 1704, Volume 2, s. p.

<sup>720</sup> Minutes of the Defense Commission of July 19, 1704, Volume 2, s. p.

that the effect was severe.<sup>721</sup> Here, Horn was in agreement with Russian siege commander Ogilvie, who later told the English Ambassador to Russia, Charles Whitworth, that he never saw better use of artillery.<sup>722</sup> The credit for the effective use of the Russian artillery would go to local artillery commander Bruce, who was made commander of all Russian artillery, after the siege.<sup>723</sup> The city was also bombarded by sixteen heavy mortars. During the short period of intense Russian fire, the city suffered more damage than during the entire siege in 1700.

A new Russian trench was dug toward the Fortuna bastion, and the trench toward Victoria was extended all the way to the palisades. The fortress was now completely cut off. Horn concluded his letter, stating that with no relief, matters would soon come to a pitiful end.<sup>724</sup>

In the beginning of August, Horn's doubt about counter-battery fire from the fortress became evident. Captain Sperreuter was placed under arrest for claiming he could ruin the Russian batteries if given the orders and means to do so. Later in the day, Horn decided to let Sperreuter go to work, but then he rapidly changed his mind and countermanded the order. At the end of the day, Horn allowed four bombs to be fired into the Russians works, which thus were shot off and caused considerable damage on the Russian side.<sup>725</sup>

During the first days of August, it seems that Swedish morale was beginning to break. In the evening of the 4<sup>th</sup>, Captain Fock ordered his company out of their quarters, but was met by refusal. Colonel Lode then intervened and cut a man down. The rest of the company moved out, but a voice from the line remarked that it was better to die by getting cut down than from hunger. Among the officers, morale also seems to have been broken. On the 8<sup>th</sup>, Lieutenant Colonel Kynnaid, the commander of the fortress artillery, mounted a gun carriage, quite drunk. He was observed from the Russian lines and was soon struck dead. During the first days of August, several soldiers and burghers defected to the Russian side.<sup>726</sup>

In the afternoon of the 6<sup>th</sup>, the Russians sent Colonel Skytte, the former commander of Dorpat, out into the trenches to prove to Horn that Dorpat had

---

<sup>721</sup> Horn to the Defense Commission, August 2, 1704, copy in von Schlippenbach to Kanslikollegium, August 15, 1704, Kanslikollegium letters, s. p.

<sup>722</sup> Massie, p. 398.

<sup>723</sup> Grant G. Simpson, *The Scottish Soldier Abroad, 1247–1967* (Edinburgh 1992), p. 60.

<sup>724</sup> Horn to the Defense Commission, August 2, 1704, copy in von Schlippenbach to Kanslikollegium, August 15, 1704, Kanslikollegium letters, s. p.

<sup>725</sup> *Archiv für die Geschichte*, p. 269.

<sup>726</sup> *Archiv für die Geschichte*, pp. 270–274.

fallen. Ogilvie also sent a letter to Horn, informing him of the fall of Dorpat. Horn tried for a respite, calling for a ceasefire until the following day, when he could answer the letter. However, Ogilvie did not want to grant a ceasefire. Instead, Horn was given another letter, now from Russian Colonel Powiche. Powiche asserted that if Horn did not surrender, and instead awaited the storm, no mercy could be expected. The Russians also built a trench close to the walls, from where musketeers could support a storm.<sup>727</sup>

The Russian artillery continued to pound the city's defenses, focusing on the Victoria and Honor bastions. The right section of Honor was breaking and the point of Victoria was shot to pieces. The major news came on the 7<sup>th</sup>. During the service, it was reported that the front of the Honor bastion had caved-in, and that the rubble had fallen into the ditch. In Tsar Peter's diary, it was claimed that the large number of bombs falling on the bastion most likely made it fall. The Russians placed a battery of five mortars close to Honor. They planned to throw bombs, hindering the Swedes from defending the breach. At the final stage, according to Tsar Peter's diary, the Swedish artillery, at the Russian points of attack, was almost wiped out.<sup>728</sup>

#### *Narva – the final battle*

On the 8<sup>th</sup>/9<sup>th</sup>, Tsar Peter called a council of war in which it was decided to storm. Field Marshal Ogilvie would write and distribute orders for the attack.<sup>729</sup> Ladders were secretly brought up through the Russian trenches, and the grenadiers from all regiments were concentrated. They were to support the attack by continuous fire from portable mortars. A battery of four cannons was built close to the ditch by the Victoria bastion. In the night, the first wave of storm troops was moving up the trenches. Some of them were detailed to actually storm, and some were to support the storm. In the morning, the remaining infantry left their camps and marched to the trenches. Men with criminal records, such as deserters, were chosen to carry the ladders to be used against Honor.<sup>730</sup>

At 2 o'clock in the afternoon of the 9<sup>th</sup>/10<sup>th</sup>, five mortars shot the signal to launch the storm. The five bombs were thrown against the Victoria bastion, which was attacked under the command of Lieutenant General Schönbeck. Ma-

---

<sup>727</sup> Tsar Peter's diary, p. 107.

<sup>728</sup> Tsar Peter's diary, p. 106.

<sup>729</sup> Tsar Peter's diary, p. 108.

<sup>730</sup> Tsar Peter's diary, pp. 108–109.

Major General Chambers led an attack against the Honor bastion with the Préobragensky and other regiments. Under the command of Major General Scharf, the ravelin in front of the Gloria bastion was attacked.<sup>731</sup> Swedish writer Adlerfelt also mentioned a fourth line of attack, in which the *General-Feltwachtmeister* von Werden led troops against the ravelin between the Gloira and Fama bastions.<sup>732</sup> The Russians attacked with vigor and were not stopped by a mine detonated by the defenders in a breach, or by explosive barrels rolled out. The storm lasted for forty-five minutes.<sup>733</sup> The details of the final battle are not to be found, although Adlerfelt claimed that the initial Russian attacks were repelled.<sup>734</sup>

The supporting fire and the oncoming Russians forced the Swedes to abandon the breaches, and the Russian troops could advance into the city. Having gotten through the defenses, the Russians pursued the Swedish troops toward the Old Town. The commander of Ivangorod withdrew to his fortress and closed the gates.<sup>735</sup>

In a short report on the events at Narva, written in 1722, Horn gave his own description of the final battle. When the Russians had passed the breaches and he had detonated his mine, Horn saw further resistance, in the new part of the town, as futile. As he heard that the Russians were moving toward the old city wall, which divided the city in two, Horn, in the company of Colonel Lillie, moved there. He tried to organize a new resistance, based on the old city wall. Arriving at the old city wall, Horn found no Swedish soldiers, only Russians who were firing salvo after salvo. He then cried that if they did not stop shooting, he would blow up the powder magazine. On this threat, all shooting stopped. Horn asked who was in command of the Russian advance guard and got the answer that it was Chambers, who immediately stepped forward. Horn asked Chambers if he would give his word of honor that Horn himself, the garrison, and the burghers would be allowed to keep all of their property and would be free from plundering. Chambers gave his word and sent a major and 150 men to stand guard in front of Horn's house.<sup>736</sup> Narva was now lost for the Swedish Empire, and the days of Ivangorod were counted

---

<sup>731</sup> Tsar Peter's diary, pp. 108–109.

<sup>732</sup> Adlerfelt, p. 216.

<sup>733</sup> Tsar Peter's diary, pp. 108–109.

<sup>734</sup> Adlerfelt, p. 216.

<sup>735</sup> Tsar Peter's diary, pp. 108–109.

<sup>736</sup> Henning Rudolf Horn, *En kort underdånig och sanfärdig berättelse*, May 7, 1722, Volym M 1377, 6 Relation on Narvas övergång, Militaria Riksarkivet, s. p.



## AFTER THE SIEGE

According to Tsar Peter's diary, the Russians took 1,837 prisoners after the surrender of Narva. Thus, there were some 1,800 men, of the original garrison's approximately 4,500, going into captivity. It then looks like the siege cost the lives of 2,900 Swedish soldiers. The number of civilian deaths is unknown. Besides bombs, disease and starvation, most likely several of them died in the storm. Chambers could not fulfill his promise to respect the burghers. During and shortly after the storm, there was much Russian plundering and killing.<sup>737</sup>

In Narva, the Russians would capture twenty-nine mortars, two howitzers, nine stone-shooting cannons ["perriers"], 392 other cannons, seventy-three light cannons, 11,200 muskets and 2,449 "center" of gunpowder.<sup>738</sup> The gunpowder equals around 104 tons in modern measurements. According to Tsar Peter's diary, the total Russian losses had been 359 dead and 1,340 wounded<sup>739</sup>.

In Ivangorod, commander Stjernstråhle stalled the Russians by negotiations, but on August 16/17, the garrison had run out of food and water and Ivangorod surrendered. There were then 200 men left in Ivangorod, all hungry and exhausted. The conditions were that the garrison was given safe conduct and could march off with arms, but without flags and drums. Some would leave for Reval and some for Viborg. In Ivangorod, there were seven mortars, four howitzers, twenty-two scrap-shooting cannons, ninety-five other cannons and 2,041 "center" of gunpowder, which equals about 87 tons.<sup>740</sup>

*The Swedish regional level – August*

In the beginning of August, Maydell carried out a new diversion to support Narva. He had learned that the fortress Petersburg suffered from lack of provisions and saw an opportunity to harm the enemy. On August 4, he arrived at Nyenskans. There he found a Russian cavalry force in an advantageous position, which was supported by artillery on ships on the river. The Swedish advance guard, with no respect for the position or the artillery, attacked the Russians. Maydell saw no use in the attack and called it off. Not without difficulties, he could finally stop his men from attacking. He then sent a party toward Nöteborg, to find ships or boats to get across the Neva River, and manned

---

<sup>737</sup> Stackell, "Narva", p. 52.

<sup>738</sup> Tsar Peter's diary, pp. 112–113.

<sup>739</sup> Tsar Peter's diary, pp. 113–114.

<sup>740</sup> Stackell, "Narva" p. 57, Ludvig W:son Munthe, Del III:2, p. 450, Fryxell, Del 22, (Stockholm 1856) p. 44 and Tsar Peter's diary, pp. 110–113.

the old Swedish fortress Nyenskans with a battalion. The old fortification had been razed but obviously was still of some use. Maydell and his force then spent six days by Nyenskans, beating off Russian attacks and trying to build vessels to cross the river. The attempt to build vessels was to no avail, and when the supplies were depleted, Maydell ordered a retreat. The losses during the expedition mounted to one dead from wounds.<sup>741</sup>

On August 1, von Schlippenbach wrote a short letter to the Chancellery [“Kanslikollegium”]. He informed about the loss of Dorpat (see Chapter 4.9) and disquieting rumors concerning Narva. He wrote that the misery now was beyond description, and a relief army sent by the King was the only hope.<sup>742</sup>

### *Sweden – August and September*

In August, Narva was not frequently on the agenda of the Defense Commission. In the meeting of August 19, there was a discussion about it. A letter of August 5 from von Schlippenbach, in which he responded to complaints from De la Gardie sent to the King, was read. De la Gardie criticized discipline in von Schlippenbach’s army. He claimed that the districts not ravaged by the Russians were as badly treated by von Schlippenbach’s soldiers as by the enemy. This plundering by Swedish troops had severely affected the ability to supply the army in a legal and organized way.<sup>743</sup>

It would then be some time until the fall of Narva was mentioned in the Defense Commission minutes. On September 2, there was obvious urgency. It was now a matter of “[...] finna expedienter till medels anskaffande, at hålla wärcket någorlunda oprätt.” “[...] finding ways to secure means to keep the Empire somewhat afloat.”]. At the meeting, it was also noted that Karl XII had issued new instructions. In matters where there was no time to wait for the King’s decision, the Senate [the Council] was to meet to resolve these matters.

Then Horn’s letter of August 2 was read. Horn stated that, at a maximum, the supplies would last until the end of August, that the garrison was dying in large numbers from disease, and that the fortress would fall into enemy hands if he was not relieved soon. The letter was placed *ad acta*, with the motivation that there was nothing the Defense Commission could do. Later on the agenda, there was a letter from Provincial Governor Lindhielm in Finland, dated

<sup>741</sup> Maydell to the Excellencies, August 15, 1704, Yrjö-Koskinen, pp. 101–103.

<sup>742</sup> Von Schlippenbach to Kanslikollegium, August 1, 1704, Kanslikollegium letters, s. p.

<sup>743</sup> Minutes of the Defense Commission of August 19, 1704, Volume 2, s. p.

August 23, which told of an unconfirmed rumor, indicating that Narva had fallen.<sup>744</sup>

On September 5, a letter from De la Gardie, dated August 25, was read. De la Gardie referred to a soldier coming from Narva. The soldier claimed that Narva had been taken by storm on August 11, and that a part of the garrison had retreated to Ivangorod. The meeting then discussed the defense of Sweden. It was concluded that new troops should be raised, and that these, together with the old regiments stationed in Sweden, would be able to offer considerable resistance against an invading enemy. It was also discussed whether or not some troops could be sent to Livonia. It was concluded that the Russians now were strong in Estonia and Livonia, and an army of 18,000 to 20,000, led by a good general, was a minimum needed there, as small forces would not make a difference.<sup>745</sup>

On the following day, the 6<sup>th</sup>, the defense of Sweden was on the agenda again. It was now taken for granted that the Russians could be in the skerries, i.e. off Stockholm, twenty-four hours after they had captured Reval. It was concluded that there was no reason to worry about Sweden now, especially since De Prou's flotilla was provisioned until October or November. When the Russians had taken Reval, it was inevitable that they would come.<sup>746</sup>

## NARVA AND IVANGOROD - CONCLUSIONS

The fortifications of Narva and Ivangorod were twin-fortifications – sharing the general aspects of their location. They were, however, individual regarding construction and local accessibility.

The following could be concluded about Narva:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were strong.
- It was hazardous to fetch drinking water, but lack of water was not a decisive factor.

The following could be concluded about Ivangorod:

- It had a small garrison, under 1,000 men.
- The works were medieval, thus weak.
- There was no well to provide drinking water.

---

<sup>744</sup> Minutes of the Defense Commission of September 2, 1704, Volume 2, s. p.

<sup>745</sup> Minutes of the Defense Commission of September 5, 1704, Volume 2, s. p.

<sup>746</sup> Minutes of the Defense Commission of September 6, 1704, Volume 2, s. p.

Matters of accessibility can be summarized as below.

**Table 4.10** Narva and Ivangorod general accessibility

	General accessibility
Russian (attacker)	High
Swedish (defender)	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. The command of Lake Peipus and the possibility of using the Narva River further enhanced Russian general accessibility. The defender's general accessibility was low, due to the fact that Russian troops reduced the value of the roads, and that they could block any river transport from the Gulf of Finland by army means.

**Table 4.11** Narva and Ivangorod local accessibility

	Narva	Ivangorod
Russian (attacker)	High	Low
Swedish (defender)	Low	Low

Source: See above.

The attacker's local accessibility to Narva was high, since the height advantage was limited and other terrain features left large parts of the fortification open to attack. The attacker's local accessibility to Ivangorod was low, since the fortress was located at a considerable height.

The defender's local accessibility to both fortifications was low, since there was no sail-in function or protected discharge place to use for unloading supplies.

The Russian tactic in the case of Narva was obviously to storm breached walls. When faced with a superior enemy, the fortress surrendered during the storm. Thus, a breach-and-storm tactic was decisive. The case of Ivangorod is less obvious but also less important, since the fortress was doomed to fall when water ran out. It could be argued that Ivangorod was won by the Russians through a blockade tactic.

The commanders cannot be burdened with any process errors, since the limited and isolated garrisons had little hope of a long-run defense against a

determined enemy. A relief force would have been the only salvation for Narva and Ivangorod. The outcome completed the Russian hold on Ingria.

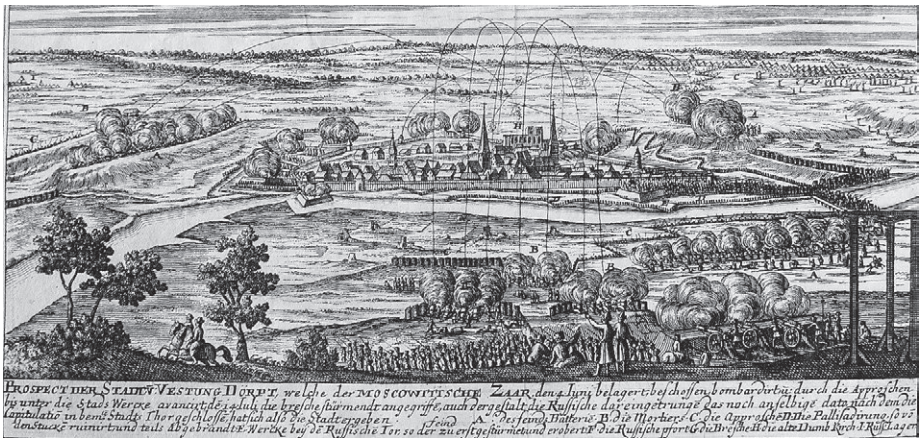
#### 4.9 DORPAT 1704 – Livonia (today's Tartu in Estonia)

**Under siege from June 4/5 to July 13/14, 1704 (40 days). Surrendered.**

##### *Introduction*

Having conquered the Ingrian Nyenskans in 1703, the Russians attacked the Swedish Livonian fortress of Dorpat and the dual Swedish fortresses of Narva and Ivangorod in Ingria in 1704 (see Chapter 4.8).

The grounds of Dorpat seem to have been inhabited since the fifth century, being fortified shortly thereafter. During the late middle ages, Dorpat was the capital of the semi-independent Bishopric of Dorpat. It continued to be an important town when Livonia fell to Poland-Lithuania in the middle of the sixteenth century. Swedish troops captured Dorpat in 1625. In the war of 1656–1661, it was captured by the Russians, but returned in the peace of 1661<sup>747</sup>. As a Swedish fortress, it was the anchor for the defense of eastern Livonia.<sup>748</sup>



**Picture 4.14** Dorpat. The city was partly protected by modern works. The Embach River is seen in the center of the picture. (Source: Prospect [...] Vestung Dörpt, [...], nr 1704:7, Volume 14 Omslag 1701–1704, Förteckning 426 Historiska planscher 1520–1904, Krigsarkivet.) (Detail.)

<sup>747</sup> [No signature], "Dorpat", in *Nordisk familjebok*, Del 3, (Stockholm 1880), columns 1401 and 1402.

<sup>748</sup> Ludvig W:son Munthe, Del III:2, p. 440.

The original fortifications taken over by the Swedes were medieval, with towers and high walls. These were meant to be improved with an outer ring of an eight-bastion modern fortification. However, in 1704, these works were not complete. The southern and western fronts were protected by quite powerful works, but the northern and eastern fronts still only had the old walls. The northern front was partly covered by marshland. On the eastern front, toward the Embach River, there was a small lake between the wall and the river.<sup>749</sup> From the description of subsequent events, we can deduce that there was a glacis and a covered way around the major part of the fortifications. In 1704, an unusually high spring flood had made the marshland by the fortress even more difficult to traverse.<sup>750</sup>

Dorpat was located about forty-five kilometers up the Embach River which flowed down to Lake Peipus. Lake Peipus was connected to the open sea by the Narva River in the north. The location of Dorpat was thus by a river, connected to open sea. However, the Embach River was army blockable. Communications with open sea also depended on the mastery of Lake Peipus and on the army blockable Narva River.

Dorpat had roads coming in from the north and south. Via the northern road, it was about 150 kilometers to the Gulf of Finland and a further fifty kilometers to Narva. Via the southern road, it was about 100 kilometers to the road coming in from Russian Pskov across the Russian border. Swedish forces then had difficulties reaching Dorpat, as soon as superior Russian army units controlled the countryside around it. The Russians had good access by road and on water, if they could take control of Lake Peipus.

The defensive properties of Dorpat were somewhat increased by the marshland on the northern front, but the fortification had no advantage from height. No source mentions a shortage of drinking water in the city.

It was not of significance in the actual situation, but it should be noted that there was no sail-in function in the city or protected discharge place. Any attempt to fight supplies or reinforcements into the city via the Embach River would then be futile.

---

<sup>749</sup> Anonymous, "Dorpat's belägring år 1704", in *Meddelanden från Föreningen för Stockholms Fasta Försvar* (s. l. 1917), p. [1].

<sup>750</sup> Margus Laidre, *The Great Northern War and Estonia: the trials of Dorpat 1700–1708*, translation from Estonian, Piret Ruustal, (Tallinn 2010). (Further on "Laidre, *Dorpat*"), p. 111.





**Picture 4.15** The map above shows the location of Dorpat (Derpt), west of Lake Peipus, on the Embach River. (Source: *Kleyne en beknopte Atlas, of tooneel des oorlogs un Europa* (Amsterdam 1753), p. 109.) (Detail.)

#### *Earlier research and sources*

The more important Swedish source on the siege of Dorpat is a report written by Swedish garrison commander Carl Gustaf Skytte, "Dorpat's belägring år 1704" [The Siege of Dorpat in 1704], published in *Karolinska krigares dagböcker*<sup>751</sup> [Diaries of Carolean Warriors]. The siege, from the Russian perspective, is covered in Tsar Peter's diary.

The more important modern work is Margus Laidre's *The Great Northern War and Estonia: the trials of Dorpat 1700–1708*, published in English in 2010<sup>752</sup>. Laidre used, for example, Skytte's report and Kelch's 1875 work on Li-

<sup>751</sup> Carl Gustaf Skytte, "Dorpat's belägring år 1704", in August Quennerstedt (red.), *Karolinska krigares dagböcker*, Del 11, (Stockholm 1916), pp. 217–326. (Further on "Skytte".)

<sup>752</sup> Laidre, *Dorpat*, see reference above.



vonian history, but also added material from the Estonian Historical Archives in Tartu and Swedish archives. Margus Laidre's book has an extensive overview of earlier literature on Dorpat and its history. There is also an article from 1917, "Dorpats belägring år 1704" [The Siege of Dorpat in 1704] by an anonymous writer published in *Meddelanden från Föreningen för Stockholms Fasta Försvar* [Journal of the Association for the Fixed Defenses of Stockholm].<sup>753</sup> That article is primarily based on Skytte's report.

### *The garrison and artillery*

Colonel Carl Gustaf Skytte was in command of the garrison, with Captain Lars Lorentz Glansberg as his fortification officer.<sup>754</sup> The garrison counted around 3,000 men from five units. In the table below, the first figure is list strength, and the figure in parentheses is the strength given by the regional commander, Major General Wolmar Anton von Schlippenbach, on April 30, 1704.

**Table 4.12** The Dorpat garrison on April 30, 1704

Unit/Commander	List strength/(reported)
Åbo, Björneborg and Nyland "tremänningsregemente" Colonel Magnus Gabriel von Tiesenhausen,	1,025 (700)
Nüggen Livonian infantry battalion Lieutenant Colonel George Gustaf Wrangel af Ludenhoff	600 (400)
Carl Gustaf Skytte's Livonian infantry regiment (1 Bat.)	700 (1,000)
Livonian country militia from the Dorpat circuit (1 Bat.) Lieutenant Colonel Henrik Hastfehr	300 (400)
Livonian country militia from Oberphalen circuit (1 Bat.) Lieutenant Colonel Bernhard Wilhelm Taube	300 (400)
TOTAL	2,925 (2,900)

Source:

List strength: Lars-Erik Höglund and Åke Sallnäs, *Stora Nordiska Kriget: Fanor och uniformer* (Karlstad 2000), pp. 128, 110 (Nüggen not mentioned), 106 and 134.

Strength within parenthesis: von Schlippenbach to the King, April 30, 1704, Volum M 1377, Schlippenbachs skrivelser till Kungl. Maj:t, 3 Kriget i Östersjöprovinserna 1700–1711, XXIII Karl XII:s krig. *Stora Nordiska kriget 1700–1720*, 2 Krigshistoriska samlingen 1500t–1800t, Riksarkivets ämnessamlingar 754 Militaria, Riksarkivet, s. p.

The spelling of Baltic units is according to Margus Laidre, *The Great Northern War and Estonia: the trials of Dorpat 1700–1708*, translation from Estonian, Piret Ruustal, (Tallinn 2010), p. 110.

There were also armed burghers in Dorpat. The artillery staff counted 125 men under the command of Major Gustaf Löfling. Some soldiers from the Peipus flotilla

<sup>753</sup> Anonymous, "Dorpats belägring 1704", in *Meddelanden från Föreningen för Stockholms Fasta Försvar*, (s. l. 1917), pp. 1–11.

<sup>754</sup> Ludvig W:son Munthe, Del III:2, p. 441 and Anonymous, "Dorpats belägring 1704", in *Meddelanden från Föreningen för Stockholms Fasta Försvar*, (s. l. 1917), s. p. [1].

(see below) would also join the defense.<sup>755</sup> Rifts between the highest officers affected morale in the garrison. The rifts have been blamed on Skytte's bad temper.<sup>756</sup>

The artillery consisted of sixty-one cannons and eight mortars. Of the cannons, ten 18-pounders and ten 12-pounders were modern. The mortars consisted of four 70-pounders from 1698 and four older ones.<sup>757</sup> This armament was far from the plan made up in 1695, where Dorpat should have a total of 194 cannons, of which ninety-two were 24-pounders and 18-pounders, and twenty mortars.<sup>758</sup> Thus, it must be concluded that Dorpat was undergunned. The lack of modern heavier pieces especially contributes to this conclusion.

There was no shortage of supplies in Dorpat. In his report on the siege, Skytte never mentioned lack of supplies.<sup>759</sup> In a letter to the Defense Commission of May 18, read there on May 30, regional commander Major General von Schlippenbach reported that Dorpat was supplied for six months.<sup>760</sup> However, in a letter to the Defense Commission, read there on May 19, 1704, Skytte requested cash funds and "bikost". "Bikost" would translate to "supplementary victuals", indicating a lack of certain types of food.<sup>761</sup>

### *The regional level*

Regarding the situation on the regional level, see Chapter 4.8 Narva and Ivan-gorod 1704.

### *Prior to the siege*

On May 4, the Swedish Lake Peipus flotilla was annihilated in a Russian ambush (see Chapter 4.8 Narva and Ivangorod). Some of the Swedes would make it back to Dorpat.<sup>762</sup> However, the lake was now open for Russian transports. On May 21, Field Marshal Count Boris Petrovich Sheremetov marched on Dorpat from Pskov<sup>763</sup>. His siege force would have counted twenty battalions of infantry of about 600 men each and twelve regiments of dragoons.<sup>764</sup>

<sup>755</sup> Ulfhielm, "Karl XII:s tid" p. 390.

<sup>756</sup> Ludvig W:son Munthe, Del III:2, p. 442 and Ulfhjelm "Karl XII:s tid", p. 390.

<sup>757</sup> Ulfhjelm, "Karl XII:s tid" p. 390.

<sup>758</sup> Bestyckningsplan 1695.

<sup>759</sup> Skytte, *passim*.

<sup>760</sup> Minutes of the Defense Commission of May 30, 1704, Volyme 2, s. p.

<sup>761</sup> Minutes of the Defense Commission of May 19, 1704, Volume 2, s. p.

<sup>762</sup> Ludvig W:son Munthe, Del III:2, p. 441.

<sup>763</sup> Laidre, *Dorpat*, p. 107.

<sup>764</sup> Horn to the Defense Commission, July 29, 1704, copy in von Schlippenbach to Kanslikollegium, August 15, 1704, Volym 3½, VIII Skrivelser i krigsärenden 1700–1712, E Inkomna handlingar, 1411 Kanslikollegium 1584–1801, Riksarkivet, appendix, s. p.

*The siege*

On June 2, the commander of a Swedish reconnaissance patrol informed Skytte of Russian forces standing by Kirumpää, not far from Dorpat.<sup>765</sup> On the 5<sup>th</sup>, Skytte wrote to General Governor De la Gardie in Reval, General Governor Frölich in Riga and his superior officer, regional commander von Schlippenbach. He explained that the Russians now were spreading out around the city, and that he would do his best to defend it. However, a relief army was called for. On the following day, Skytte had the suburbs burned.<sup>766</sup>

The Russians began to prepare an attack on the strong southern parts of the defenses. At the same time, Skytte had the works strengthened by erecting palisades and construction of a small work, a “half-moon”, outside the Russian Gate on the weak northern front. This work was also called the “New Battery”.<sup>767</sup> The month of June then saw artillery duels and mortar bombardment of the city.<sup>768</sup> Skytte had an aggressive spirit and on June 27/28, he ordered a sally with 650 men. The sally cost the life of Lieutenant Colonel Brandt and several other men, but achieved no significant results.<sup>769</sup>

Skytte expected a relief army to come. Of the three men he had written to at the beginning of the siege, von Schlippenbach was the only one leading an army, and he was defeated by Russian forces on June 16.<sup>770</sup> On June 20, von Schlippenbach considered leaving Estonia to join forces with Lewenhaupt’s army standing in southern Livonia.<sup>771</sup> Thus, Skytte’s hopes were in vain.

On July 3/4, Tsar Peter arrived at Dorpat, not satisfied with the progress of the siege. He redirected the attack from the south toward the north. During the following two days, the Russians built new batteries.<sup>772</sup> The battle soon became more intense. On July 6/7, the Russians began breach shooting against the Russian Gate and the wall from the Russian Gate to the Torture Tower. They used twenty-five cannons.<sup>773</sup>

---

<sup>765</sup> Skytte, p. 224.

<sup>766</sup> Skytte, p. 226.

<sup>767</sup> Skytte, p. 231.

<sup>768</sup> Skytte, pp. 232–242.

<sup>769</sup> Skytte, pp. 243–245.

<sup>770</sup> Adlerfelt, p. 201.

<sup>771</sup> Von Schlippenbach to the Defense Commission, June 20, 1704, Volume 122 Militära befälhavare med särskilt kommando (utom Maydell), II Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer, Riksarkivet, s. p.

<sup>772</sup> Tsar Peter’s diary, pp. 101 and 102.

<sup>773</sup> Skytte, pp. 252–253.

Skytte's report and a contemporary picture (see below), provide a fairly clear understanding of the situation when the final battle began. The Russian Gate and adjacent Torture Tower were damaged, and large parts of the wall between the gate and the tower were shot away.

The siege did not draw much attention in Stockholm. On July 11, a letter from Skytte of June 14 was read in the Defense Commission. It informed on the progress of the siege and was not further commented on.<sup>774</sup>

The final battle began prematurely. In the evening of July 12/13, the Russians tried to get a foothold by the Russian Gate. The Swedish guard there, under the command of Lieutenant Christopher Berg, fought back stubbornly. The Russians then sent 300 reinforcements to support their original force. At the same time, they were rapidly building a bridge over the Embach River just above the city. This was about 7 o'clock in the evening. Skytte perceived the arriving reinforcements as preparations for a storm and rapidly reinforced Berg. The Russians reacted by also sending reinforcements, and the battle escalated. The Swedes were pushed back. The half-moon was soon in Russian hands. The five Swedish cannons there were turned against the Russian Gate. The battle was then fought in the Russian Gate itself. The Russians pushed on.<sup>775</sup>

At 2 o'clock in the morning, Skytte was hit in the head by a stray bullet and knocked unconscious. He quickly recovered enough to give command to Colonel Tiesenhausen and Lieutenant Colonel Mejercrantz. The Swedish troops, which by now had been concentrated to the northern part of the city, resisted for a time in the Russian Gate but were pushed out.<sup>776</sup> The Swedish artillery took an active part in the battle. According to Skytte, Lieutenant Max brought up two pieces that fired on the attacking Russians. According to Tsar Peter's diary, the Swedes brought up a 24-pounder behind the Russian Gate and fired scrap at the attackers.<sup>777</sup>

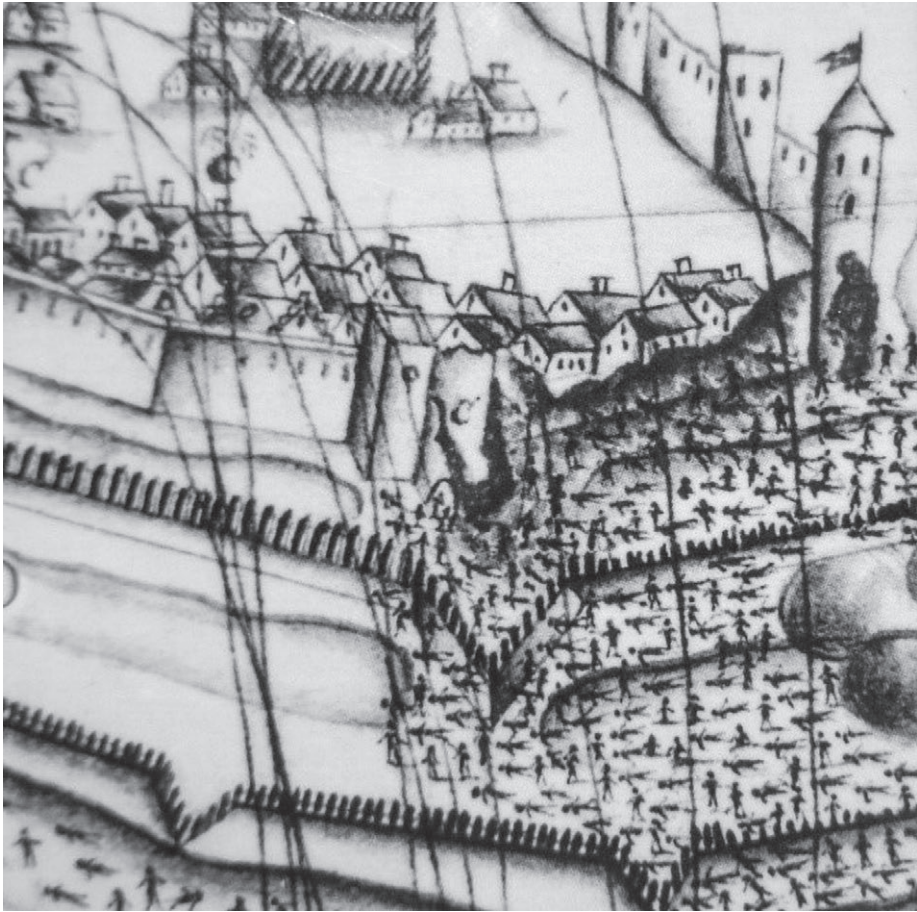
---

<sup>774</sup> Minutes of the Defense Commission of July 11, 1704, Volyme 2, s. p.

<sup>775</sup> Skytte, pp. 255-257 and Tsar Peter's diary, pp. 102-103.

<sup>776</sup> Skytte, p. 257.

<sup>777</sup> Skytte, p. 258 and Tsar Peter's diary, p. 103.



**Picture 4.16** The picture above shows the situation at the final stage of the siege. The Russians had shot down a large part of the wall between the Russian Gate, at the center of the picture, and the Torture Tower. However, it can be seen that there was no breach which could be walked or run up. The lowest part of the wall, slightly left of the gate, is almost man high. However, at this stage of the battle, fortress commander Skytte chose to surrender. The vertical lines in the picture are trajectories from mortar bombs. The wedge shape in front of the Russian Gate is the half-moon, also called the New Battery. (Source: Margus Laidre, *The Great Northern War and Estonia: The Trials of Dorpat 1700–1708* (s. l. 2010), s. p. (by p. 129). (Detail.)

Skytte soon recovered from being hit and returned to the battle. The Swedish troops still contained the Russian attack, not letting them out of the Russian Gate. Coming to the scene of the battle, Skytte was told by Tiesenhausen that the garrison had done all that was humanly possible, and that the storming Russians would soon be in the city. Skytte later estimated that by then, the

defense could only hold for another seven or eight minutes. In this situation, Skytte decided to surrender. Drummers beating the *chamade* were shot down, but a trumpeter managed to get the message across and the fighting stopped.<sup>778</sup>

Ludvig W:son Munthe, in his work on the history of Swedish fortification, claimed that there were three breaches which could be stormed when Skytte surrendered.<sup>779</sup> He must then have referred to the Russian Gate itself, to the lowest part of the adjacent wall and to the breach in the Torture Tower. The Russians could obviously get into the Russian Gate, which could count as one point of entry. Then, the Russians obviously did not try to get over the reduced wall or storm through the Torture Tower. Thus, it can be claimed that Munthe somewhat understated the defensive capability of Dorpat, at the time of the surrender.

#### *After the siege*

The surrender document was signed in the evening of July 13/14. The terms were safe conduct for the garrison, their families and servants and other Swedish subjects in the city. The Russians caused delays, but in the end, most of the survivors reached Swedish cities.<sup>780</sup>

Swedish casualties have been estimated at 700 to 900 men in the final battle and 1,400 to 2,000 in total during the siege. The civilian casualties in Dorpat have been stated as seventy-two killed and forty-eight injured.<sup>781</sup> Skytte claimed that the Russian losses were 5,000 killed and 3,000 wounded.<sup>782</sup> Tsar Peter's diary gave the Russian losses in the storm at about 300 killed and 400 wounded.<sup>783</sup>

#### *Dorpat- conclusions*

The following could be concluded about Dorpat:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were medieval in places, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

---

<sup>778</sup> Skytte, p. 259 and Tsar Peter's Diary, p. 103.

<sup>779</sup> Ludvig W:son Munthe, Del III:2, p. 445.

<sup>780</sup> Skytte, pp. 266-271.

<sup>781</sup> Laidre, *Dorpat*, p. 148.

<sup>782</sup> Skytte, p. 265.

<sup>783</sup> Tsar Peter's diary, p. 104.



Matters of accessibility can be summarized as below.

**Table 4.13** Dorpat accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, due to the proximity of Russian bases and the road system. Control of Lake Peipus and the Embach River increased Russian general accessibility. The defender's general accessibility was low, due to the fact that Russian troops reduced the value of the roads, and that they could block any river transport with army means.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The marshlands north of the city were not enough to make a significant difference. The defender's local accessibility was low, since there was no sail-in function or protected discharge place there.

The city finally fell to breach-and-storm tactic, where Skytte surrendered during the storm, most likely assuming that his forces could not win the final battle. No serious blame falls on Skytte. Dorpat was a forlorn hope when attacked by a superior enemy with siege artillery.

The serious process error on the Swedish side was letting Russian boats into Lake Peipus. History could have taken a different turn if Löschern von Herzfeld had made it out into Lake Peipus before von Werden.

The fall of Dorpat moved the strategic focus in Livonia westward. Much of Swedish Livonia now lay open to Russian ravaging, and the next line of fixed defense was on or close to the eastern coast of the Baltic Sea. The losses of fortresses in 1702–1704 were detrimental to the Swedish war effort. Swedish historian Jan Lindegren concluded that by 1705, the Swedish armed forces did not control enough of Livonia to feed an army of 22,000 men<sup>784</sup>.

<sup>784</sup> Jan Lindegren, "Karl XII", in Anders Florén (red.), *Kungar och krigare: tre essäer om Karl X Gustav, Karl XI och Karl XII* (Stockholm 1992), p. 188.



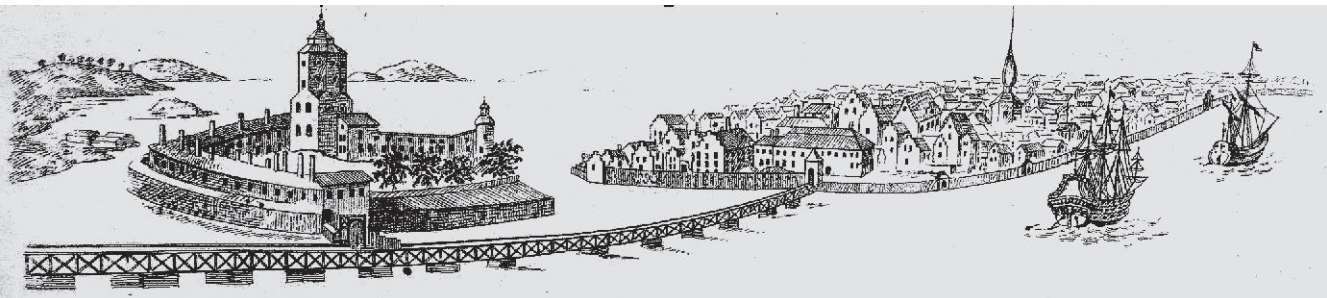
#### 4.10 VIBORG 1706 – (today’s Vyborg in Russia)

**Under siege from October 11/12 to October 27/28, 1706 (17 days). Held.**

##### *Introduction*

In 1706, the last more important Swedish fortification to have fallen to the Russians was the Narva/Ivangorod complex, captured in 1704. When Karl XII left Poland and invaded Saxony in 1706 (see below), Tsar Peter returned to Russia and turned against Viborg.

The Viborg area was captured by Swedish forces in what is sometimes called the Third Crusade, taking place in 1293–1295. In the first year, a small fortification was built on the islet where the main castle would stand later. For a long time, Viborg was a cornerstone in the east for the Swedish state. The city was besieged by Russians several times, but remained in Swedish hands. After the Peace of Stolbova in 1617, when Sweden acquired Ingria, Swedish authorities saw little military value in Viborg.<sup>785</sup>



**Picture 4.17** The illustration above shows Viborg in the seventeenth century. The castle island is seen to the left and the city on the peninsula to the right. (Source: Gabr. Lagus, *Ur Viborgs historia*, Part I, (Wiborg 1893), illustration V.) (Detail.)

In the 1570s, Lübeck lost control of the Baltic trade, so Viborg could thus begin to trade directly with Holland, which led to a financial upswing<sup>786</sup>. In 1700, Viborg had 1,347 taxable citizens. In his book on the history of Viborg, Finnish

<sup>785</sup> Lovén, p. 97 and M. G. S. and L. W:son M., “Viborg”, in *Nordisk familjebok*, Part 32, (Stockholm 1921), columns 209–210.

<sup>786</sup> Holger Weiss, “Viborgtyskarna, i Östra Finland”, i *Det andra Finland*, *Historicus* skriftserie, Volym 11 (Helsingfors 1994), p. 134. A resumé of Robert Schweitzer, “Die Wieborger Deutschen”, i *Det andra Finland*, *Historicus* skriftserie, Volym 11 (Helsingfors 1994), pp. 113–132.

historian J. W. Ruuth assumed that this figure corresponded with about 2,250 inhabitants in total.<sup>787</sup>

The city was located on a peninsula in the Bay of Viborg, and almost at the bottom of the bay. Navigation into Viborg was complicated. At Trångsund, some fifteen kilometers south of the city, the passage was around 200 meters wide and the navigable channel veers in different directions. It was impossible for a ship of some size to sail to the city. Ships had to be towed or pulled from the shores to get through the Trångsund passage.<sup>788</sup> There was no sail-in function in the city, and there was no protected discharge place either.



**Picture 4.18** The map above shows Viborg, almost at the bottom and on the eastern side of the bay, marked with a red dot. Several islands made the passages into the city army blockable. (Source: *Landt Charta eller geographisk Delineation öfwer Ingermanland, Uppsatt och Förfärdigadt Anno 1699*, nr 32a, Volume 9 *Stora nordiska kriget 1699–1721*, Förteckning 425 *Sveriges krig 1521–1864*, Krigsarkivet.) (Detail.)

Considering land communication, Viborg was located on an old main road leading up from the Karelian Isthmus, where it turned sharply west and continued along the southern coast of Finland. Less than fifty kilometers above this coastal road, there was an inland road going over Lappstrand (today's Lappeenranta/Villmanstrand in Finland). The distance from Viborg to St. Petersburg is about 150 kilometers. Proceeding deeper west into Finland by road, while leaving a strong garrison in Viborg behind, would have been against military wisdom.

<sup>787</sup> J. W. Ruuth, *Viborgs stads historia*, Första bandet (Helsingfors 1906), p. 331. (Further on, "Ruuth, Del I".)

<sup>788</sup> Arnold Munthe, Del II, p. 455.

The ability of the Swedes to reach Viborg by sea was basically high, and hinged on control of the Gulf of Finland, although siege force control of the Trångsund passage could nullify a Swedish advantage in the gulf. The road system leading to Viborg, theoretically, created good access for both the Swedes and Russians. However, this road system would not be suitable for heavy transports.

The defensive properties of Viborg were enhanced by the castle being on an island, with the city on a peninsula. The latter advantage was limited in the south, because the water separating the city from the mainland was not wide. The fortifications had no benefit of height. The defensive works of Viborg had medieval origins. The main components were a castle on the islet west of the city and the city wall. The remains of an old city wall split the city in half in a north-south axis. The parts of the city wall facing land had been improved over the centuries, primarily by construction of two large bastions on the eastern side. The parts facing water were in miserable condition at the beginning of the Great Northern War.<sup>789</sup>

In 1704, more extensive repairs began. When the Russian attack came in 1706, the Viborg fortifications were in better condition than they had been for a long time. As remote works, redoubts on two small peninsulas west of the city were built or repaired; a blockhouse was also built on the islet south of the city.<sup>790</sup>

#### *Earlier research and sources*

One Swedish work covering the first siege of Viborg is T. J. Petrelli's article, "Striderna kring Finska viken 1706–1710"<sup>791</sup> [The Fighting around the Gulf of Finland 1707–1710], published in *Historisk Tidskrift* 1904. Among Petrelli's sources was a Russian article by Timtjenko-Ruban, published in *Vojennij Spornik* [Sbornik] in October 1900, which dealt with Russian operations in Ingria in 1706–1708.<sup>792</sup>

Another Swedish work on the first siege of Viborg is found in J. W. Ruuth's *Viborgs stads historia*, Part I, [The History of the City of Viborg] (Helsingfors 1906).<sup>793</sup> Eirik Hornborg also described the siege in his book on Viborg.<sup>794</sup> Ar-

<sup>789</sup> Carl Jacob Gardberg, *Viborg som befäst stad* (s.l. s. a.), pp. 15–16.

<sup>790</sup> Ruuth, Del I, pp. 461–464, M. G. S. and L. W:son M., "Viborg", in *Nordisk familjebok*, Del 32, (Stockholm 1921), columns 209–210 and Ludvig W:son Munthe, Del III:2, drawing 137.

<sup>791</sup> T. J. Petrelli, "Striderna kring Finska viken 1706–1710", in *Historisk Tidskrift* Stockholm 1904, p. 117–119. (Further on "Petrelli".)

<sup>792</sup> Petrelli, s. p. [113].

<sup>793</sup> Ruuth, Del I, p. 472, note 2 and 482, note 1.

<sup>794</sup> Eirik Hornborg, *Gränsfästet i öster: Viborg från korstågstiden till våra dagar*, (Stockholm 1942), pp. 195–199. (Further on, "Hornborg, Gränsfästet".)

nold Munthe looked at the siege mostly from the naval point of view.<sup>795</sup> Ludvig W:son Munthe briefly covered the siege in his work on the history of the Swedish fortification.<sup>796</sup> The siege is dealt with in Tsar Peter's diary.<sup>797</sup> The siege is also briefly covered in the contemporary work of Estonian history writer Christian Kelch,<sup>798</sup> who added some information not found in other western sources.

Of primary sources, letters from the commander of the Swedish Army in Finland, General Maydell, are found in Yrjö-Koskinen's work (see Chapter 1. Introduction). Letters from the commander of the Swedish flotilla in the Gulf of Finland, Admiral Cornelius Anckarstierna, are found in the Admiralty letter book for 1706<sup>799</sup>. Anckarstierna also filed a report on his expedition, but the pages covering the middle of August, 1706 to the end of the expedition – the period including the siege of Viborg – have gone missing, leaving Anckarstierna's letters to the Admiralty as the best sources for the naval activities<sup>800</sup>.

Another document has also gone missing, a report on the siege written by the commander-in-chief in Finland. That report is mentioned in a letter to the Chancellery [“Kanslikollegium”] of November 6, 1706, but is not to be found.<sup>801</sup>

#### *The garrison, the artillery and provisions*

Colonel Zacharias Aminoff was in command of the Viborg garrison. Since he was old and ailing, George Johan Maydell (promoted to full general in January of 1706 and commander of the Swedish Army in Finland, the Army of Narva) in reality exercised the command. The garrison in Viborg has been estimated at about 3,000 men.<sup>802</sup> The total force in Viborg, and which units these troops came from, are two of the uncertainties concerning the first siege of Viborg.

The artillery counted twenty men in the castle and sixty-two in the garrison. The former was under the command of Captain Georg Kühn and the latter un-

<sup>795</sup> Arnold Munthe, Del II, pp. 309–313.

<sup>796</sup> Ludvig W:son Munthe, Del III:2, pp. 467–469.

<sup>797</sup> Tsar Peter's diary, pp. 288–301.

<sup>798</sup> Christian Kelch, *Liefländische Historia, Part II, Continuation 1690 bis 1707* (Dorpat 1875), pp. 548–551. (Further on, “Kelch?”)

<sup>799</sup> *Ink. handl. från ämbetsverk etc*, Volym 30 (NAD), 1706 Äldre n:r 84 (manual system), Ser. c., E II Inkomna handlingar från ämbetsverk m. fl. myndigheter samt enskilda, 1 Kansliet, Förteckning 500 Amiralitetskollegium, Flottans arkiv, Krigsarkivet. (Further on “Admiralty letters 1706”).

<sup>800</sup> Cornelius Thijssen Anckarstierna, *Eskaderchefens journal, april–aug 1704*. Volym 1 Amiralen Cornelius Thijssen Anckarstiernas expedition. Eskaderchefens journal, 33 Sjöexpeditioner, eskaderchefer 1642–1814, Förteckning 503a Amiralitetskollegiets med efterföljares kontor, Arméns flotta, loggböcker, rullor m. m., Flottans arkiv, Krigsarkivet.

<sup>801</sup> 9 Hornborg, *Gränsfästet*, p. 199 footnote 1.

<sup>802</sup> 9 Ludvig W:son Munthe, Del III:2, p. 468.

der Lieutenant Anders Ahlgren. Also, parts of the Finnish field artillery were in the city at the time of the siege. In 1707, there was a total of ninety-six artillery pieces in Viborg; the exact number in 1706 is unclear.<sup>803</sup> There was no littoral flotilla attached to the fortress.

#### *Prior to the siege*

In the fall of 1706, the Swedish main army invaded Saxony and stood a long way from Viborg. On September 14, 1706, a peace between Sweden and Saxony was concluded in Altranstädt. Saxony was now out of the war. The Swedish main army remained in Saxony for the rest of the year (see Chapter 2). In 1705, Lieutenant Colonel Baron George Lybecker had succeeded Anders Lindhielm as provincial governor in the Viborg province.<sup>804</sup>

A clear picture of the Swedish military resources in Finland in October of 1706 is difficult to establish. Swedish military historian Julius Mankell, however, offered the following description of the situation in the spring of 1708:

**Table 4.14** The Swedish Army in Finland in 1708

Cavalry and dragoons	Infantry
Tiesenhusen's Estonian	Tavastehus Regiment (regular)
Nyland "Doubles"	Narva Regiment (600 men)
Åbo län "Doubles"	Tavastehus "Doubles"
Viborg "Doubles"	Nyland "Doubles"
Hastfehr's Finnish dragoons	Åbo län "Doubles"
	Björneborg "Doubles"
	Österbotten "Doubles"
	Viborg "Doubles"
	Savolax "Doubles" (Saxon prisoners of war)

Source: Julius Mankell, *Uppgifter rörande svenska krigsmagtens styrka, sammansättning och fördelning sedan slutet af femtonhundralet jemte öfversigt af svenska krigshistoriens vigtigaste händelser under samma tid* (Stockholm 1865), p. 395.

Note: "Doubles" here is a translation of Swedish "fördubbling" used in the source. The Swedish word could indicate a unit of any size, a regiment or a battalion.

Mankell arrived at a total of 13,600 troops, counting 1,000 men in each unit, except for the Narva Regiment.<sup>805</sup> The figure is most likely an exaggeration, since the units might not have been up to full strength. Also, the Saxon prisoner

<sup>803</sup> 9 Ulfhielm, "Karl XII:s tid", p. 435.

<sup>804</sup> 9 Ludvig W:son Munthe, Del III:2, p. 466.

<sup>805</sup> Julius Mankell, *Uppgifter rörande svenska krigsmagtens styrka, sammansättning och fördelning sedan slutet af femtonhundralet jemte öfversigt af svenska krigshistoriens vigtigaste händelser under samma tid*, (Stockholm 1865), Part II, Table no. 482, p. 395.

of war units were not set up until 1707<sup>806</sup>. Thus, Maydell's army would count a maximum of 12,600 men. By the time of the Russian attack in 1706, Maydell's army had returned to winter quarters<sup>807</sup>.

At sea, Anckarstierna led the Swedish so-called Nyen Flotilla, consisting of seven ships of the line, eight frigates, three brigantines and two hospital ships. Anckarstierna's instructions were to block all sailing on Narva and Nyen and cover the Finnish and Estonian coasts.<sup>808</sup> This Swedish flotilla held the upper hand on the Russian naval forces. Anckarstierna's cruise began in the spring and had largely been uneventful.<sup>809</sup>

In the early fall of 1706, Tsar Peter ordered Major General Romain Bruce, governor of St. Petersburg, to prepare for a siege of Viborg. In the beginning of October, a Russian army led by Bruce and Brigadier Schomburg left St. Petersburg. On October 4/5, they crossed the Neva River. The march was delayed by heavy rains.<sup>810</sup> In his article, Petrelli gave a picture of the Russian forces prior to the siege. By the end of September, seven regiments of infantry, with a list strength of 6,678 men, arrived in St. Petersburg from cities in Ingria, Pskov and Novgorod. This brought the local Russian force up to nineteen regiments of infantry, seven regiments of dragoons, 2,000 cavalry and 2,000 Cossacks. The siege force was to consist of 13,000 infantry, 5,000 regulars on horse and 2,000 Cossacks.<sup>811</sup>

Having received news of the Russians approaching, Maydell sent Lieutenant Colonel Johan Wessman with 1,000 men to defend a place about five kilometers from the city.<sup>812</sup> Maydell also had the buildings outside the city walls burned.<sup>813</sup>

When the Russian force was getting close to Viborg, Lieutenant Colonel Putiatin was dispatched with an advance party. Some seventy kilometers from Viborg, they encountered a redoubt with about 100 Swedish cavalry. The latter rapidly withdrew. On October 10/11, Brigadier Schomburg was sent ahead of the infantry with the cavalry. About ten kilometers from Viborg, they encountered a Swedish redoubt with 400 men and two cannons. The Russian cavalry charged and swiftly conquered the redoubt.<sup>814</sup>

---

<sup>806</sup> Sallnäs, pp. 111–112.

<sup>807</sup> Anckarstierna to Amiralitetskollegium, October 26, 1706, Admiralty letters 1706, p. 205.

<sup>808</sup> Arnold Munthe, Del II, p. 309.

<sup>809</sup> Arnold Munthe, Del II, p. 311, compare also Chapter 4.16 Viborg 1710.

<sup>810</sup> Tsar Peter's diary, pp. 163–165.

<sup>811</sup> Petrelli, pp. 117–118.

<sup>812</sup> Ruuth, Del I, p. 465.

<sup>813</sup> Ruuth, Del I, p. 466.

<sup>814</sup> Tsar Peter's diary, pp. 163–165.



The use of the waterways was denied the Russians. Anckarstierna's flotilla was still in the waters, and he had two frigates posted by Trångsund,<sup>815</sup> where navigable water for larger ships ended.

*The siege*

Schomburg's cavalry arrived in front of Viborg on the morning of October 11/12. During the evening, the first Russian infantry started to march in, and the last infantry arrived on the 12<sup>th</sup>/13<sup>th</sup>.<sup>816</sup>

On the 12<sup>th</sup>/13<sup>th</sup>, there was a struggle between Swedish and Russian boats in the upper part of the Bay of Viborg. Maydell had called for assistance from Anckarstierna and the Swedish flotilla. He wanted soldiers, hand grenades and some other materiel. Anckarstierna decided to comply with this request and sent two large sloops ["espingar"] up toward Viborg. The sloops carried about 200 men who brought 600 hand grenades from the flotilla. Advancing toward Viborg in darkness and mist, the Swedish force was attacked by Russian boats. In the ensuing battle, one Swedish sloop was lost, and Anckarstierna concluded that the resupply and reinforcement operation had been blocked.

The descriptions of the struggle in Anckarstierna's journal and Tsar Peter's diary vary considerably. Anckarstierna claimed that the sloops were attacked by six strugs that seemed to have 100 men on each. Tsar Peter's diary described the Russian force as forty-eight men on five small boats, where the largest took some fifteen men and the smaller five to seven. In Anckarstierna's journal, the fight was described as follows. The first Swedish sloop to be attacked had around eighty men aboard. Of these, six or seven escaped in the end. The rest were killed, lost or taken prisoner. The other Swedish sloop, under the command of Boatswain Carl Swartz, fought back hard and would retreat to the Swedish frigates. In Tsar Peter's diary, this Russian victory is much celebrated with the claim that a numerically inferior Russian force defeated a Swedish force.<sup>817</sup> Estonian historian Christian Kelch placed this struggle at an island called Kilpisaare<sup>818</sup>.

---

<sup>815</sup> Anckarstierna to Amiralitetskollegium, October 26, 1706, Admiralty letters 1706, pp. 205 and 205b.

<sup>816</sup> Tsar Peter's diary, p. 165.

<sup>817</sup> Tsar Peter's diary, pp. 165–166 and Anckarstierna to Amiralitetskollegium, October 26, 1704, Admiralty letters 1706, pp. 205b, 206 and 206b.

<sup>818</sup> Kelch, p. 549.



Swedish history writer Arnold Munthe claimed that Anckarstierna's flotilla reinforced and resupplied Viborg,<sup>819</sup> a claim also made by Ludvig W:son Munthe.<sup>820</sup> These statements do not fit well with Anckarstierna's. Munthe also left the reader with the impression that the Russians had a sizeable force of strugs at Viborg, which does not match well with the claim in Tsar Peter's diary. On the whole, the version presented in Tsar Peter's diary would seem more likely. It would have been difficult for the Russians to get strugs past the Swedish blockade ships, but small boats could have been found locally.



**Picture 4.19** Viborg and the siege of 1706. The city is in the upper left of the picture, with the castle ["slättet"], northwest of it. The Russian trenches can be seen in the center right of the picture. (Source: Ludvig W:son Munthe, *Kungl. Fortifikationens Historia, III. Fortifikationsstaten under Dahlberg, Stuart och Palmquist 1674–1719*, Part III:2, (Stockholm 1911), Plate ["plansch"] 137.) (Detail.)

<sup>819</sup> Arnold Munthe, Del II, p. 312.

<sup>820</sup> Ludvig W:son Munthe, Del III:2, p. 468.

From October 12/13 to 27/28, Russian activity around Viborg was low, due to the fact that the Russian siege artillery had not arrived from St. Petersburg. The roads were bad, and it was difficult to find fodder for the horses along the way. Trenches were dug.<sup>821</sup>

In the beginning, Maydell was not optimistic about the ability of Viborg to resist a Russian attack. On October 15/16, he wrote a letter to the Chancellery [“Kanslikollegium”] in which he requested immediate support. Otherwise, the city would fall for lack of supplies.<sup>822</sup> However, Maydell seems to have recovered his confidence. He carried out sallies, with a major one launched on the 20<sup>th</sup>.<sup>823</sup> These sallies, however, seem to have been ineffective. Estonian historian Christian Kelch described these sallies in a bit more detail, which does not alter the previous statement about them being ineffective. Kelch also added a piece of information describing the atmosphere around the siege. Russian General Brusen [Bruce] sent a letter to the city indicating that he wanted to buy some items. Soon, Bruce’s request was complied with, and the items were delivered by a Swedish drummer to the Russian camp.<sup>824</sup>

At a Russian council of war meeting, it was then decided to get some mortars to Viborg and order the heavy artillery returned to St. Petersburg. The reason for getting some mortars up to Viborg was that the Russians did not want to lift the siege without having fired a shot at the fortress. On the 22<sup>nd</sup>/23<sup>rd</sup>, the mortars had arrived and a bombardment began.<sup>825</sup>

Maydell had made calls for his troops to move out of their winter quarters, but these calls seemed to have fallen on deaf ears. On October 26/27, Maydell decided to leave Viborg to rally his army. Maydell explained his plan in a letter to the Chancellery [“Kanslikollegium”]. He was to raise the siege or, if Viborg fell, block further Russian expansion into Finland.<sup>826</sup> However, Maydell would not need his army this winter. During the night between October 26/27 and 27/28, the Russians withdrew. Before leaving, they had fired a total of 1,097 bombs into Viborg.<sup>827</sup> The retreating Russians were pursued

---

<sup>821</sup> Tsar Peter’s diary, pp. 166–167.

<sup>822</sup> Maydell to Kanslikollegium, October 16, 1704, Yrjö-Koskinen, p. 111.

<sup>823</sup> Maydell to Kanslikollegium, October 22, 1704, Yrjö-Koskinen, p. 113.

<sup>824</sup> Kelch, pp. 549–550.

<sup>825</sup> Tsar Peter’s diary, p. 167.

<sup>826</sup> Maydell to Kanslikollegium, October 27, 1704, Yrjö-Koskinen, p. 115.

<sup>827</sup> Anckarstierna to Amiralitetskollegium, November 1, 1706, Admiralty letters 1706, p. 209b.

by Lieutenant Colonel Essen with 300 men on horse. The pursuit, however, yielded little.<sup>828</sup>

In Stockholm, Maydell's letter, requesting reinforcements of a few regiments or at least a few of hundred men, was read in the Council. Councilor General Count Frölich suggested sending a few hundred men and offered to lead the force himself. The Council sent a letter, dated October 27, to the King. They referred to a royal ban on sending regiments east from Sweden and pointed out the sheer impossibility of sending troops to Finland at that time of year. Still, they wanted to inform the King of Maydell's request and Frölich's offer.<sup>829</sup> The Russians, however, had withdrawn long before the letter reached Karl XII.

#### *After the siege*

The siege made the authorities in Stockholm consider Viborg important. General Quartermaster Lieutenant Colonel Magnus Palmquist was sent there to improve the works around the city.<sup>830</sup>

#### *Viborg– conclusions*

The following could be concluded about Viborg:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were medieval in places, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.15** Viborg accessibility

	General accessibility	Local accessibility
Russian (attacker)	Low	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's low general accessibility was due to the poor road system, leading up from Russia through barren land, in combination with Swedish control of

<sup>828</sup> Kelch, pp. 550–551.

<sup>829</sup> The Defense Commission to the King, "Till K. M:t 27 Oct. 1706, Om Viborgs försvar mot rysen", Nr 156, *Historiska handlingar: Utgifna af Kongl.samfundet för utgifvande af handskrifter rörande Skandinaviens historia*, Del IV, (Stockholm 1864), pp. 31–34.

<sup>830</sup> Ludvig W:son Munthe, Del III:2, p. 469.

the Gulf of Finland, which prohibited sea transport. The defender's general accessibility was low, due to the fact that the waterway through the Bay of Viborg was army blockable.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The location on a peninsula was not enough to make a significant difference. The defender's local accessibility was low, since there was no other way to bring in supplies and reinforcements than to send a relief army, which could defeat the Russian siege forces. Had a naval resupply and reinforcement operation managed to reach Viborg, it would have failed, since there was no sail-in function or protected discharge place there.

The attacker's planned tactic was breach-and-storm. However, that plan first failed because of problems with bringing the siege artillery up the poor roads, and then because of the Swedes blocking the sea routes. Thus, this siege battle was won by the Swedish flotilla in the Gulf of Finland, where Anckarstierna denied the Russians access to the waterway.

#### 4.11 RIGA 1709–1710 – Livonia (today's Riga in Latvia)

**Under siege from October 29/30, 1709 to July 4/5, 1710 (249 days). Surrendered.**

#### INTRODUCTION

Their failed operation against Viborg in Finland in 1706 was the last Russian attack on Swedish fortifications prior to the Battle of Poltava in June of 1709. The period from 1707 to the Battle of Poltava had been marked by the Swedish and Russian main armies maneuvering against each other (see Chapter 2.5 The Great Northern War). The total defeat of the Swedish main army at Poltava made it possible for Russia to turn against Swedish fortresses anew. It also opened up for a Danish invasion of the Swedish mainland.





**Picture 4.20** The picture above shows the city of Riga, located upstream on the Dūna River from the Baltic Sea. (Source: *Kleyne en beknopte Atlas, of tooneel des oorlogs un Europa* (Amsterdam 1753, p. 93.) (Detail.)

The city of Riga, capital today of Latvia, then Livonia, is situated on the Dūna River (Lithuanian: *Daugava*) about fifteen kilometers from its outflow into the Baltic Sea. At the city, the river is about 800 meters wide. Riga grew up around a church founded by Bishop Albert in 1201. It rapidly developed into an important international trading place. In 1282, Riga became a member of the Hanseatic League. Its early history was marked by conflicts with the Teutonic Knights that ruled large parts of today's Baltic States. In 1559, Russian forces invaded Livonia, where the Teutonic state was falling apart. In 1561, Riga turned to Poland for protection. After long negotiations, Riga became Polish in 1581. Forty years later, in 1621, Gustav II Adolf conquered the city. Sweden was now *de facto* ruler of Livonia, which would not be fully recognized by Poland until the Peace of Oliva was signed in 1660. In her Swedish times, Riga withstood one Russian siege, which lasted from August 22 to October 5, 1656. The city played a key role in the opening of the Great Northern War, when a Saxon *coup de main* failed. Riga was subsequently left relatively unaffected by the war until 1709, after the Swedish defeat at Poltava.<sup>831</sup>

<sup>831</sup> L. W:son M., "Riga", in *Nordisk Familjebok*, Del 23, (Stockholm 1916), columns 268–276 and Heribert Seitz & Erik Rosengren, *Sveriges freder och fördrag 1524–1905*, (s. l. 1944), p. 48.

An exact figure for the civilian population is difficult to establish, especially since there were many refugees from the countryside in the city. Arfwidsson (see below) estimated a total of 45,000 to 50,000 inhabitants in Riga at the beginning of the siege. He also remarked that several of them lived in miserable conditions, sometimes with less than a square meter of living space per person.<sup>832</sup>



**Picture 4.21** The picture above shows Riga in 1701. The small “star” above the city of Riga is the citadel. In the lower left part of the picture, Cobron’s Redoubt can be seen as a five-pointed star. The fortress Neumünde is seen in the upper left part of the picture, on a promontory where the Düna River connects with the Baltic Sea. The picture illustrates that the fortified city of Riga was situated on a waterway which could be blocked by army forces. This was a serious flaw in the Swedish prewar planning. (Source: [Staden och fästningen Riga med omnejd år 1701. Polska arméns läger på Dünas västra strand.], nr 1701:08, Volume 14 Omslag 1701–1704, Förteckning 426 Historiska planscher 1520–1904, Krigsarkivet.) (Detail)

<sup>832</sup> Fredrik Arfwidsson, *Försvaret av Östersjöprovinserna 1708–1710*, Del I–II:1, (s. l. 1936), PhD-dissertation, p. 217. (Further on “Arfwidsson, Försvaret”.)

Riga had outlying defense posts, primarily serving to alert its garrison, but also to delay attacking forces and defend the mouth of the Düna River. The outlying defenses focused on the Düna River. Upriver by the Russian border, there was the small Ewst Redoubt. There also was the improved medieval castle Kokenhusen farther down the river. That castle had been captured by the Saxons in 1700 and was severely damaged in their retreat on July 14, 1701.<sup>833</sup> Even closer to Riga, the small Rummeln Redoubt was on an islet in the river some fifteen kilometers above the city.<sup>834</sup> At the mouth of the Düna River, there was the fortress of Neumünde, vastly improved by the Swedes since 1682.<sup>835</sup> Adjacent to Riga, Cobron's Redoubt was situated, where major reconstruction work had begun in 1698.<sup>836</sup>

The relative importance of these outlying works could be understood from a garrison plan of 1699. According to that plan, Neumünde should have four companies with a total of 560 men, Cobron fifty-one men, Kokenhusen eighty-two and Rummeln eleven. The Ewst Redoubt was not mentioned in the plan. According to the same plan, Riga had a garrison of just over 3,200 men.<sup>837</sup> At the beginning of the siege in 1710, there is no mention of manning Ewst, Kokenhusen or Rummeln. Cobron's Redoubt was earmarked for destruction (see below).

The core Riga defenses consisted of the city wall and a citadel. The burghers were to finance the city wall; the government was to fund the citadel. The citadel was an irregular bastion fortress with six bastions, placed on the Düna River, separated from the city by water. The city wall had three large bastions facing north. In front of the wall there was a wet moat and three ravelins. The wall facing the river consisted of medieval-type works with small bastions. North and east of the city there were suburbs.<sup>838</sup> When Dahlbergh wrote his 1698 paper on Swedish fortifications, he was quite satisfied with the citadel but called for government financing of the city wall, where work was proceeding slowly.<sup>839</sup>

<sup>833</sup> J. F. N. and L. W:son M., "Kokenhusen", in *Nordisk Familjebok*, Del 14, (Stockholm 1911), column 496.

<sup>834</sup> Ludvig W:son Munthe, Del III:2, p. 252.

<sup>835</sup> Dahlbergh 1698, s. p. [33].

<sup>836</sup> L. W:son M., "Kobron", in *Nordisk Familjebok*, Part 11, (Stockholm 1911), column 424.

<sup>837</sup> *General Extract öfwer Lijfländske Guarnizonernas General Munster Rullor Anno 1699*, Volym 1 *Generalförslag öfver svenska hären 1636–1724*, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p.

<sup>838</sup> Ludvig W:son Munthe, Del III:2, Drawing 141.

<sup>839</sup> Dahlbergh 1698, s. p. [32–33].



The citadel was in good condition in 1710, but some of the city defenses were improved by makeshift measures.<sup>840</sup>

Riga could thus be reached from the east and the west via the Düna River. Several roads coming in from the north and the east converged some ten kilometers north of Riga. In the south, two roads came up from Mitau in Courland; one went directly to Riga and the other led to Dünamünde.<sup>841</sup>

Accessibility by sea depended not only on control of the Baltic Sea, but also on command of the army blockable stretch of the Düna River, from the Baltic Sea up to the city. The Düna River also provided for transports from the east. The defensive qualities of Riga were somewhat increased by its location on the Düna River, but three of its four sides had no such protection. The Riga fortifications had no advantage from height, for example.

#### *Earlier research and sources*

The most important Swedish work on the siege of Riga is Fredrik Arfwidsson's dissertation *Försvaret av Östersjöprovinserna 1708–1710*, Part I–II:1 (s. l. 1936) [The Defense of the Swedish Baltic Provinces 1708–1710], where more than 200 pages of part II are almost entirely dedicated to the siege of Riga. Below, Arfwidsson's references are frequently given in parentheses and are given in Swedish. Often used abbreviations are: "def kom", meaning the Defense Commission; "RR", meaning the Council; "kon", meaning the King; "Statskont.", meaning the State Office; and "Rådet", meaning the Council.

Prior to Arfwidsson's work, knowledge of the siege had largely rested on *Theatrum Europaeum* (Franckfurth am Mayn 1723), Nordberg's work (Stockholm 1740) and Tsar Peter's diary. The latest research when Arfwidsson wrote his dissertation was Eirik Hornborg's *Finlands hävder* (Helsingfors 1931). In that work, Arfwidsson had seen some of Nordberg's errors reproduced, and he published a critique of Nordberg in *Kungl. Krigsvetenskapsakademiens Tidskrift* in 1935.<sup>842</sup> In Russian, there is V. G. Boldyrev's work *Osada i Vzyatie Rigi russkimi vojskami v 1709–1710* (Riga 1910).

<sup>840</sup> Ludvig W:son Munthe, Del III:2, p. 529.

<sup>841</sup> F. L. Güssefeld, *Charta von den Herzogthümen Liefland und Esthland oder den Statthalter-schaften von Riga und Reval* (Nürnberg 1905).

<sup>842</sup> Arfwidsson, *Försvaret*, p. [XI] and Fredrik Arfwidsson, "Rigas belägring 1709–1710 i Nordbergs Carl XII:s Historia. – Ett bidrag till frågan om dennas tillförlitlighet", in *Kungliga Krigsvetenskapsakademiens Tidskrift* 1935, pp. 294–303. (Further on, "Arfwidsson, Nordberg's.")

The siege is covered in major Swedish works on the period. Ludvig W:son Munthe had an extensive description of the siege.<sup>843</sup> Arnold Munthe was very brief on the matter, despite the considerable naval aspect of the siege.<sup>844</sup> Otto Sjögren, in his work on Karl XII, covered the siege somewhat in depth.<sup>845</sup>

Later research is represented by Grigorjev's and Bepalov's work.<sup>846</sup> There is also an article by Steve Kling, "The Siege of Riga 1709–1710", published in *Great Northern War Compendium* 2015.<sup>847</sup>

Among the primary sources, there is a diary kept by an anonymous Swedish person – most likely an officer – during the major part of the siege. The diary was published in *Handlingar till Carl XII:s historia* in 1824.<sup>848</sup> The siege of Riga was also extensively covered in Kagg's diary.<sup>849</sup> There is also a diary kept by Deputy Garrison Commander Clodt, which has not been used in this study. From the Russian side, Tsar Peter's diary deals extensively with the siege and the events surrounding it.<sup>850</sup>

Since the siege was long, it was discussed in the Defense Commission and the Council. Defense Commission minutes are kept in one volume for each of the years of 1709 and 1710.<sup>851</sup> Council minutes are more complicated. There is a total of four volumes, as listed in the table below<sup>852</sup>. In these volumes, the minutes are sorted according to who wrote them. The minutes in volume 100 are sorted into two series, marked "100:1" and "100:2" below. The 100:1 covers foreign policy and the war, while series 100:2 deals with civilian matters. Volume 101, according to an inscription on the binding, deals with domestic issues ["Inrikes ärender"], but also contains material of relevance on the war.

<sup>843</sup> Ludvig W:son Munthe, Del III:2, pp. 528–538.

<sup>844</sup> Arnold Munthe, Del II, pp. 446–447.

<sup>845</sup> Sjögren, *Karl XII*, pp. [609]–615 and 619–621.

<sup>846</sup> Grigorjev and Bepalov, pp. 172–179.

<sup>847</sup> Steve Kling, "The Siege of Riga 1709 – 1710", in Stephen L. Kling, Jr. (ed.) *Great Northern War Compendium*, Volume Two, (St. Louis, Missouri 2015), pp. 33–36.

<sup>848</sup> Anonymous, "Journal ofver staden Rijgas belägringh af Muscowiterne annis 1709 och 1710 från och till datum som följer", in Gustaf Floderus (ed.), *Handlingar hörande till konung Carl XII:s historia*, Part III, (Stockholm 1824), pp. 170–211. (Further on, "Anonymous, *Diary*".)

<sup>849</sup> Leonhard Kagg's diary, pp. 140–167.

<sup>850</sup> Tsar Peter's diary, pp. 268–277 and 301–342.

<sup>851</sup> Volume 6 and 7, I Huvudserien, A Protokoll, 243 Defensionskommissionen 1700–1714, 243 31 Äldre kommittéer, Riksarkivet.

<sup>852</sup> Volume 99, 100, 101 and 102a, A1 Huvudserie, 1111 Det odelade kansliet. Rådsprotokoll 1621–1723, Riksarkivet. There is also a Volume 102b, which contains Council minutes from 1712, but also an index for 102a. (Further on, "Council minutes".)

**Table 4.16** Number of Council and Defense Commission minutes from the siege period

Volume	09				10						
	A	S	O	N	D	J	F	M	A	M	J
<b>The Council</b>											
Volume 99	1	2	-	2	1	3	2	2	-	1	-
Volume 100:1	2	6	4	-	2	-	-	-	-	-	-
Volume 100:2	-	3	2	6	1	-	-	-	-	-	-
101	-	-	-	-	1	4	4	9	6	4	-
102a	-	-	-	-	-	-	2	3	6	5	8
<b>Def. Com.</b>											
Volume 6	3	10	10	9	7	-	-	-	-	-	-
Volume 7	-	-	-	-	-	7	6	5	6	10	6
<i>Total</i>	6	21	16	17	12	14	14	19	18	20	14

Source: Volume 99, 100, 101 and 102a, A1 Huvudserie, 1111 Det odelade kansliet. Rådsprotokoll 1621–1723, Riksarkivet.

Several of the letters from the governor in Riga to the Defense Commission are available from a copy book kept at The Swedish Military Archives [“Krigsarkivet”] in Stockholm<sup>853</sup>. That source was also extensively used by Arfwidsson.

#### *The garrison, artillery and supplies*

Lieutenant General Count Nils Stromberg exercised the supreme command in Riga (see below). The deputy commander was Major General Baron Johan Adolph Clodt von Jürgensburg.<sup>854</sup> Colonel Carl Adam Stackelberg was commander of the adjacent Neumünde Fortress. According to the anonymous diary writer, the garrison, at the beginning of the siege, counted 346 officers and 10,068 men, a total of 10,414 soldiers. That figure was recognized by Arfwidsson.<sup>855</sup> The units and their strength are presented in the table below.

<sup>853</sup> Volym 14 Vederbörande auctoritetens skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet.

<sup>854</sup> B. Boéthius, ”J. Adolph Clodt von Jürgensburg”, in *Svenskt biografiskt lexikon*, Åttonde bandet (Stockholm 1929), pp. 657–658.

<sup>855</sup> Anonymous, *Diary*, p. 172 and Arfwidsson, *Försvaret*, p. 246.

**Table 4.17** The Riga garrison according to an anonymous writer of a diary

Regiment	Officers	Soldiers	Total
Colonel Horn's	13	477	490
Major General Kakelberg's	6	123	129
Colonel Mellin's	24	766	790
Colonel Budberg's	12	428	440
Colonel Fitinghof's	16	1056	1072
Major General Skytte's	26	777	803
Colonel Hillebard's	25	595	620
Major General von Clot's	26	794	790
Colonel Mengden's	38	838	876
Colonel Dyker's	44	759	803
Colonel Banér's	32	1183	1215
Colonel Budenbrock's	32	1166	1198
Cavalry	18	515	533
Train servants	-	25	25
Dragoons	34	596	630
<b>TOTAL</b>	<b>346</b>	<b>10 068</b>	<b>10 414</b>

Source: Anonymous, "Journal ofver staden Rijgas belägringh af Muscowiterne annis 1709 och 1710 från och till datum som följer", in Gustaf Floderus (ed.), *Handlingar hörande till konung Carl XII:s historia*, Del III, (Stockholm 1824), p. 172.

After the siege, the Russians captured, in the city as well as in the citadel, 567 cannons, sixty-six mortars and seven howitzers.<sup>856</sup> Although these figures do not reveal the calibers, there does not seem to have been a shortage of artillery in Riga. In 1700, some artillery was mounted on floating units. The city privateer ["Stadt Caparen"] carried four 3-pounders. Floating batteries ["Stadtsens Bläckhuuss"] carried ten 8-pounders and ten 4-pounders.<sup>857</sup> The Riga Flotilla was under the command of Lieutenant ["kapten"] Michael Henck.<sup>858</sup> It could be noted that people compiling the armament plan (see Chapter 1), were somewhat at a loss regarding the actual number of guns held by the city of Riga, as opposed to the government artillery.<sup>859</sup>

The main problem was how to keep the people in the city fed. The large garrison and the civilian population made this a major undertaking. An adult doing physical work would probably need two kilos of food per day to maintain strength. Depending on various factors, people can survive longer on less food.

<sup>856</sup> Tsar Peter's diary, p. 338.

<sup>857</sup> Theodor Jakobsson, "Om bestyckningen i Riga under svensktiden", *Meddelande 10 Armémuseum*, Stockholm Armémuseum 1949 [1950], p. 40.

<sup>858</sup> Compare Lewenhaupt, Del 1, "Henck, Michael", p. 289 and the following text.

<sup>859</sup> Bestyckningsplan 1695, pp. 42–44.

By the end of the siege, the daily rations for the garrison were down to 425 grams of bread per day, and nothing more. It was recognized that this was not sustainable for working soldiers<sup>860</sup>.

Using the rounded off figure of 50,000 for population and garrison together, in calculation, the population would consume approximately 50 to 100 metric tons of food every day. This meant that 1,500 to 3,000 tons of victuals would be needed for every month of the siege. Of that amount, the garrison would need about a fifth.

Regarding the supply situation, Swedish historian Anders Fryxell (1795–1881) claimed that in the summer of 1709, large quantities of cereal had been exported from Livonia. Fryxell further remarked that this was done either by carelessness or by greed.<sup>861</sup> Arfwidsson, in his critique of Nordberg's description of the siege, also attacked Fryxell's statement. He was, however, not able to prove it false.<sup>862</sup>

## PRIOR TO THE SIEGE

### *The Russians*

Having defeated the Swedish main army at Poltava on June 28, 1709, Tsar Peter went to Poland and then to Russia. Field Marshal Count Boris Petrovich Sheremetov was detached to lay siege to Riga. He started his march north on July 15/16. The avant-garde was led by General Prince Repnin and Lieutenant General Bauer. By September, the Russian forces reached the Düna River. On October 5/6, the Russians passed "Dunabourg" with four regiments of dragoons, and on October 27/28 they stood about thirty kilometers from Riga. On the 26<sup>th</sup>/27<sup>th</sup>, Bauer had reached a point about twenty kilometers from Riga. At the same time, General Hallart's and Lieutenant General Renzel's troops arrived in the vicinity of Riga.<sup>863</sup> The total strength of the Russian siege army is difficult to establish; rumors ranged from 40,000 to 70,000. Arfwidsson referred to a figure of 30,000, but assumed that the figure also was too high.<sup>864</sup>

---

<sup>860</sup> Arfwidsson, *Försvaret*, p. 302. (Clotiana. Riga Stadsbibl.)

<sup>861</sup> Fryxell, Del 24 (Stockholm 1857), p. 142.

<sup>862</sup> Arfwidsson, "Nordberg's", p. 295.

<sup>863</sup> Tsar Peter's diary, pp. 268–277 and 301–302.

<sup>864</sup> Arfwidsson, *Försvaret*, p. 236.

*Riga and the regional situation*

In the end of August, 1709, Colonel Albedyhl was in command of the Swedish forces in Livonia as vice governor. The Swedish forces left in Livonia counted slightly more than 13,000.<sup>865</sup> On September 23, Albedyhl had the available Swedish troops enter Riga.<sup>866</sup> The difference of 3,000 soldiers, between the total of 13,000 and the Riga garrison of 10,000, at the beginning of the siege, was mainly the garrisons in Neumünde and Pernau.

The Council and the Defense Commission were not satisfied with Albedyhl. On August 28, the Council sent a letter to Lieutenant General Stromberg, then governor of Estonia. They ordered him to Riga and wanted him to assume the general governorship of Estonia, Livonia and Courland. He entered Riga on September 25, 1709.<sup>867</sup> Major General Johan Adolf Clodt von Jürgensburg, Swedish vice governor of Courland, was appointed by the Council, as a reserve for Stromberg, in case the latter could not make it into the city.<sup>868</sup>

*Sweden*

During the siege of Riga, the Defense Commission was important, but since 1704 (see Chapter 4.8 Narva), also the Council, or the Senate, was in charge of urgent defense matters. Frequently attending members of the Council were Field Marshal Lieutenant Count Axel Julius De la Gardie, Count Fabian Wrede, Count Carl Gyllenstierna, Count Gabriel Falkenberg, General Count Carl Gustaf Frölich, Lieutenant General Count Knut Posse and Lieutenant General Count Arvid Bernhard Horn.<sup>869</sup> The Defense Commission was made up of the men mentioned, except Frölich. Axel Julius De la Gardie only participated in one meeting in 1710; he was old and died in the spring of that year.

A brief description of the men holding power in Sweden would be that Wrede, an administrator and financial man, was the strong man.<sup>870</sup> De la Gardie,

<sup>865</sup> Minutes of the Defense Commission of August 26, 1709, Volume 6, s. p.

Translation: "13,000 and a few hundred men". See also Council minutes of August 25, 1709, Volume 100:1, s. p. [44b].

<sup>866</sup> Arfwidsson, *Försvaret*, p. 197.

<sup>867</sup> Arfwidsson, *Försvaret*, p. 182 (RR. d. 28 aug. 1709) and 199.

<sup>868</sup> B. Boéthius, "J. Adolph Clodt von Jürgensburg", in *Svenskt biografiskt lexikon*, Åttonde bandet (Stockholm 1929, pp. 657–658).

<sup>869</sup> Council minutes, Volume 102a, passim.

<sup>870</sup> Hjr., "Fabian Wrede", in *Nordisk familjebok*, Del 32 (Stockholm 1921), column 1148 and Jan Liedgren, "Arkivförteckning Historik Inledning", in 31 Äldre kommittéer 243 Defensionskommissionen (ring binder), Riksarkivet, s. p.

once a successful soldier, was a former governor and a political lightweight.<sup>871</sup> Gyllenstierna<sup>872</sup> and Falkenberg<sup>873</sup> were academics. Gyllenstierna, at least, was another among them who was a political lightweight. Frölich<sup>874</sup> was the highest-ranking soldier at most of the Council meetings. He also knew what a siege involved. In Karl XI's War (1674–1679), he had participated in the stubborn and successful defense of the Bohus Fortress. In an article about him in the encyclopedia *Nordisk familjebok*, it is claimed that his relationship to the other members of the Council was tense. Knut Posse<sup>875</sup> and Arvid Horn were generals, having returned from the war. Horn, at least, was not very welcome among the civilian members.<sup>876</sup> Karl XII, the absolute leader of Swedish politics, remained in the Ottoman Empire. Communication with Sweden was not fast.

On August 25, the Council held a meeting. A letter from Clodt in Riga, dated August 8, 1709, was read. In his letter, Clodt reported on rumors that Mensjikov was already advancing on Lithuania, and supplies were urgently needed. Fabian Wrede was the only one in the Council to show some concern for Riga, stating that an able man had to be named governor there. After the Council meeting, Wrede went to the State Office [“Statskontoret”], where he was in charge. Here it was decided to order the Pomeranian Chamber to purchase as much food as possible and send it to Riga. The officials in Riga were informed that there was nothing to be had from core Sweden, but that orders had been issued to Pomerania to assist as well as possible. In the Defense Commission, Riga was discussed again on August 26. Arfwidsson noted that the Council and the Defense Commission now seemed to feel satisfied, thinking that they had done everything required to save Riga.<sup>877</sup>

On the following day, August 27, the Defense Commission had a new meeting. The Commission was now mostly concerned with the risk of a renewed war with Denmark. They also discussed a question of utmost importance: Major General Crassow's army, operating in Poland, was under pressure. Crassow

<sup>871</sup> G. Jacobsson, “Axel Julius De la Gardie”, in *Svenskt biografiskt lexikon*, Tionde bandet, (Stockholm 1931), p. 714.

<sup>872</sup> Sven Grauers, “Karl Gyllenstierna”, in *Svenskt biografiskt lexikon*, Band 17, (Stockholm 1967 – 1969), p. 628.

<sup>873</sup> Ingegerd Hildebrand, “Gabriel Falkenberg”, in *Svenskt biografiskt lexikon*, Band 15, (Stockholm 1956), p. 222.

<sup>874</sup> H. B-n., “Karl Gustaf Frölich”, in *Nordisk familjebok*, Del 9 (Stockholm 1908), columns 63–64.

<sup>875</sup> P. S., “Knut Göransson Posse”, in *Nordisk familjebok*, Del 21 (Stockholm 1915), column 1499.

<sup>876</sup> Sven Grauers, “Arvid Bernhard Horn”, in *Svenskt biografiskt lexikon*, Del 19 (Stockholm 1973), p. 381 and Arfwidsson, *Försvaret*, p. 179.

<sup>877</sup> Arfwidsson, *Försvaret*, p. 180. (Statskont:s prot. d. 25 aug 1709.)



now wanted to know if he should retreat to Livonia or Pomerania; he was ordered to Pomerania. At the same time, Colonel Schultz, obviously also operating in Poland, was ordered to join Crassow, and Colonel Ekebladh was ordered to Elbing, a Swedish-held fortified city in Poland.<sup>878</sup> The two colonels presumably had about one regiment each at their disposal. The Defense Commission had now dissipated the Swedish forces.

## THE SIEGE

### OCTOBER OF 1709

#### *Riga – October*

On October 24, the first Russian soldiers became visible from Riga. They were small parties seen by Cobron's Redoubt.<sup>879</sup> On October 27, a troop of 100 dragoons led by Captain Flemming was sent out from Riga. They encountered a strong Russian unit and lost fifty-four men in the ensuing encounter; the survivors fled into Riga. On the following day, a Swedish party of 200 mounted men, under the command of Major General von Clodt, went out and found more patrolling Russians. A few Cossacks, riding at high speed, attacked a post outside the walls and killed three soldiers. In the end of October, Stromberg decided that Cobron's Redoubt was of little defensive value, and that it should be demolished.<sup>880</sup> On October 29, Stromberg considered Riga cut off by Russian forces.<sup>881</sup>

#### *The Russians – October*

Sheremetov set up camp by Jungfernhof, a manor house about ten kilometers upriver from Riga. Bauer set up camp at Neuermühlen, a manor house north of the city. Initially, the besiegers lacked bread and salt.<sup>882</sup> On October 28/29, 1,000 Russian troops under the command of Major General Golowin captured Cobron's Redoubt, where the wall facing Riga was demolished. It was renamed Peter-Schantz.<sup>883</sup>

<sup>878</sup> Arfwidsson, *Försvaret*, pp. 180–181. (Def. kom:s prot. d. 27 aug. 1709.)

<sup>879</sup> Leonhard Kagg's diary, p. 140.

<sup>880</sup> Anonymous, *Diary*, p. 173.

<sup>881</sup> Arfwidsson, *Försvaret*, p. 211.

<sup>882</sup> Arfwidsson, *Försvaret*, p. 236. (Rådet i Riga t. de deputerade i Sthlm d. 5 nov 1709. IV. 16, 38, ÅRA [Riga Council Archive] and (Stromberg t. def. kom. d. 10 nov. 1709.)

<sup>883</sup> Tsar Peter's diary, p. 302.

*Sweden – October*

Very little was said about Riga at the Council or the Defense Commission meetings during the month of October. On the 7<sup>th</sup>, a letter from Colonel Albedyhl of August 23 was read in the Defense Commission. Albedyhl wanted clarifications on the decisions regarding leadership in Riga, Livonia and Courland. The Commission made no comments on the letter.<sup>884</sup>

## NOVEMBER OF 1709

*Riga – November*

On the first day of November, a Swedish party of thirty men drove the Russians off from the mansions and the farmhouses closest to the Düna River. A small sally was also carried out, forcing Russian troops to withdraw from the proximity of the city. On November 3, Swedish artillery almost killed Sheremetov, as one cannonball struck his horse while he reconnoitered the city. According to rumors that reached Riga, Sheremetov took the incident badly.<sup>885</sup>

The riverine warfare began on November 6. The Royal Swedish brigantine, which may have been the privateer mentioned earlier, then set out under the command of Lieutenant [“kapten”] Henck. From the brigantine, some fifty cannonballs were fired at the Russians by Cobron’s Redoubt, whereupon the Russians had to withdraw. Three days later, the Russians launched a boat attack against the brigantine. The Russians soon had to retreat, with the loss of two boats.<sup>886</sup>

Regarding the resupply situation in November, the information in the diary by an anonymous writer gives a relatively clear picture. We are informed that on November 6, seven ships from Pomerania arrived, carrying cereal. Arfwidsson claimed, referring to the diary, that this delivery was contested by the Russians, an impression actually not provided by the anonymous writer.<sup>887</sup> Kagg’s diary claimed that three ships arrived.<sup>888</sup> Despite variation in the sources, it could be concluded that Riga was substantially resupplied at this time.

On November 9, the mail yacht from Sweden arrived, carrying news of the Danish declaration of war against Sweden. On November 14, two smaller

---

<sup>884</sup> Minutes of the Defense Commission of October 7, 1709, Volym 6, s. p.

<sup>885</sup> Anonymous, *Diary*, pp. 174-175.

<sup>886</sup> Anonymous, *Diary*, p. 176.

<sup>887</sup> Arfwidsson, *Försvaret*, p. 226 and Anonymous, *Diary*, p. 176. See also Arfwidsson, *Försvaret*, p. 206, note 45.

<sup>888</sup> Leonhard Kagg’s diary, p. 141.

Swedish ships [“smackar”], sailed from Riga to Neumünde, in order to load supplies which had been discharged there. The two ships ran into Russian fire from a newly constructed battery by the river shore, which fired some twenty shots. The Russian battery was then taken under fire from the citadel, and the two ships would pass without further hazard. We thus get a picture of river communication which is contested, but where Russia has not yet gained the upper hand.<sup>889</sup>

At 5 o'clock in the morning on November 15, a Russian battery opened fire with mortars. Before the day was over, ninety-one bombs had killed four people and destroyed a few houses. On the following day, that battery was suppressed by counter-battery fire from Riga with both cannons and mortars. By the end of the month, the Russians had begun to add red-hot shot to the bombs. The totals for the month of November were around 200 bombs and 100 red-hot shots fired into Riga.<sup>890</sup> No specific day for the freezing of the Düna River is given in the sources used; however, Arfwidsson commented that the sailing season came to a close by the end of November. At that time, the supply of cereal for the garrison was estimated to last for five months, and malt for four. The supplies of meat and vegetables would not even last for a month.<sup>891</sup>

### *The Russians - November*

On November 9/10, Tsar Peter arrived. Mortars were now made ready in the batteries and at 5 o'clock in the morning on the 14<sup>th</sup>/15<sup>th</sup>, Tsar Peter fired the first three bombs toward Riga. A battery of seven 12-pounders was also made operational, and an irregular and slow bombardment of the city began. Tsar Peter then instructed Sheremetov not to storm Riga, but to starve the city into submission. The major reason for the tactic chosen was that the large garrison made storming a dangerous undertaking. Tsar Peter then left the Riga area.

The Russian army was to go into winter quarters, and the blockade was left to General Prince Repnin and 6,000 men. They were spread out with 2,000 at Jungfernhof, 1,000 at Peter-Schantz, 500 men and the field artillery at Kirchholm, a manor house farther upriver from Jungfernhof, and a reserve of 2,000 men close to Jungfernhof. The main body of the Russian infantry took winter quarters in Courland, and the cavalry in Livonia, neither far from Riga.<sup>892</sup>

---

<sup>889</sup> Anonymous, *Diary*, pp. 176–177.

<sup>890</sup> Anonymous, *Diary*, pp. 177–178.

<sup>891</sup> Arfwidsson, *Försvaret*, p. 249.

<sup>892</sup> Tsar Peter's diary, pp. 303–304.

Repin's troops were to be relieved every four weeks by men from the winter quarters.<sup>893</sup>

#### *Sweden – November*

On November 2, 1709, 14,000 Danish troops landed at Råå, in the vicinity of Helsingborg, Skåne. The Swedish defense force in Skåne was limited, and Sweden was thus under an immense pressure (see Chapter 2.5 The Great Northern War). In this military-political situation, Riga was infrequently on the agenda in the Defense Commission. On November 6, a letter was read from Stromberg regarding a shipment of cereal which had been brought out of Riga.<sup>894</sup> Later during the meeting, another letter from Stromberg, dated October 22, was read. In the letter, Stromberg told of Russian troops approaching Riga.<sup>895</sup>

### DECEMBER OF 1709

#### *Riga – December*

Fryxell noted that the troops in Riga were living in relative comfort until winter.<sup>896</sup> In December, both humans and animals began to starve. The anonymous diary writer reported that on December 4, horses began to eat each other; five days later, they were eating the wood of the stables. By the end of the month, the poor began to die in the streets for lack of food; soldiers died on a daily basis. At the same time, orders were issued to the cavalry to kill their horses.<sup>897</sup> In his diary, Leonhard Kagg set the total number of dead horses during the siege at 650.<sup>898</sup>

The major disaster in December was set off when a man, carrying a lit candle, walked into a powder tower in the citadel. In the ensuing explosion, more than 300 people died<sup>899</sup>. Another setback was when the Russians diverted water from Mjölgraven [the Flour canal], making it impossible to use the mill there. During December, almost 400 bombs were thrown into Riga. However, guards and a good supply of fire extinguishing equipment rendered the damage limited.<sup>900</sup>

---

<sup>893</sup> Arfwidsson, *Försvaret*, p. 276.

<sup>894</sup> Minutes of the Defense Commission of November 6, 1709, Volym 6, s. p. [2].

<sup>895</sup> Minutes of the Defense Commission of November 6, 1709, Volym 6, s. p. [4].

<sup>896</sup> Fryxell, Del 24 (Stockholm 1857), p. 142

<sup>897</sup> Anonymous, *Diary*, pp. 179–181.

<sup>898</sup> Leonhard Kagg's diary, p. 148.

<sup>899</sup> Leonhard Kagg's diary, p. 144.

<sup>900</sup> Anonymous, *Diary*, pp. 179–181.

*The Russians - December*

December was a fairly uneventful month for Repnin and the Russians. They noted the explosion in Riga, and deserters told them that many people had perished in the disaster. In the middle of the month, working parties were sent out to build two batteries between Riga and Neumünde, one on each side of the river. The work met with furious fire from Neumünde, but the Russians suffered no casualties.<sup>901</sup>

*Sweden – December*

Arfwidsson pointed out that anyone could understand that the real window of opportunity for resupplying Riga was when the spring flooding swept away the ice from the Düna River, which would call for early planning.<sup>902</sup>

At the Council meeting of December 3, 1709, Frölich raised the matter of supporting the provinces in the east. He began to discuss various means to raise funds for such an operation. Frölich then ended his discussion on monetary matters with the conclusion that, without new money, Riga, Pernau and Reval could not be supported. Wrede's reaction to Frölich's suggestions was lukewarm. He expressed the hope that such measures would work. It was resolved that Frölich was to file his suggestions in writing.<sup>903</sup> It should be noted that Arfwidsson dated Frölich's first mention of the Riga matter to February of 1710.<sup>904</sup>

## JANUARY OF 1710

*Riga – January*

January was an uneventful month. In the middle of January, Major General Clodt, with 100 mounted men and sixty grenadiers, were ordered out to set fire to a Russian magazine at Jungfernhof. They got lost, however, and could not complete their mission. During January of 1710, forty-five bombs were fired into Riga.<sup>905</sup>

Stromberg wrote a letter to the Council on January 14. He informed them about the bombing and the difficulties in maintaining horses. Stromberg also described the poor conditions under which his garrison and the people in the city were living, as the Russian bombs destroyed houses and the food stored in-

---

<sup>901</sup> Tsar Peter's diary, pp. 304–305.

<sup>902</sup> Arfwidsson, *Försvaret*, p. 304.

<sup>903</sup> Council minutes of December 3, 1709, Volym 99, s. p.

<sup>904</sup> Arfwidsson, *Försvaret*, pp. 304 and 304, note 13.

<sup>905</sup> Anonymous, *Diary*, pp. 181–183.

side them. The letter was not, however, alarming. Stromberg concluded the letter hoping that the Council would reflect on his situation and act accordingly.<sup>906</sup>

### *The Russians – January*

During January, the Russians carried out the siege work at Riga with very little energy. Clodt's sally was noticed as a failure in Tsar Peter's diary. The Russians estimated that 4,000 men had sallied. The Russians also noticed that their bombs had caused three fires in Riga. On January 28/29, Russian troops managed to capture Elbing, the last Swedish stronghold in Poland.<sup>907</sup>

### *Sweden – January*

On January 3, 1710, there was a Council meeting that did not have Riga on the agenda, but was most revealing regarding Count Fabian Wrede and his thinking. The actual matter was a possible threat to Swedish Pomerania. In the discussion, Wrede once argued: is it not better that they are entering the provinces than entering core Sweden? He then made a reference to the last war, where the German possessions had been sacrificed to save core Sweden.<sup>908</sup> Otherwise, the work of the Council and the Defense Commission focused on the Danish invasion. For example, the Council meeting of January 22 was dominated by a heated debate on Swedish operations in Skåne.<sup>909</sup>

## FEBRUARY OF 1710

### *Riga – February*

In February, a minor Swedish sally was launched in the beginning of the month. Soon after, the atmosphere in Riga became more tense. Additional men were sent to the walls, and surveillance was intensified, since a storm was expected. The new situation did not stop collection of wood outside the city. On February 12, a wood-gathering party protected by 100 men would carry out their work unmolested by the Russians. On the 17<sup>th</sup> and 18<sup>th</sup>, the protection force was increased to 600 men.

On the 27<sup>th</sup>, the Russians shot four bombs filled with leaflets into the city. These leaflets were written in German and told of the fall of Elbing and of peace

---

<sup>906</sup> Stromberg to the Council, January 14, 1710, Volym 14 Vederbörande auctoritetens skrivelser till defensionskommissionen 1710–1711 Avskriftssamlingen, Krigsarkivet, p. 169.

<sup>907</sup> Tsar Peter's diary, p. 305.

<sup>908</sup> Council minutes of January 3, 1710, Volym 101, s. p. [28b].

<sup>909</sup> Council minutes of January 3, 1710, Volym 101, s. p. [43b].

for twenty years concluded between the Ottoman Empire and Russia. During the month of February, 1710, around 350 bombs were fired into Riga.<sup>910</sup>

Stromberg wrote a letter to the Defense Commission dated February 1. He remarked on the fact that he had received no letters from them since the beginning of the siege. Stromberg then calmly described the misery in the city. He underscored that Riga had to be resupplied at first open water, otherwise the city would fall.<sup>911</sup> Stromberg wrote a new letter to the Defense Commission on February 19. The tone was quite different from his previous letter. Stromberg described, in no uncertain terms, a city in misery and despair. The letter is full of emotion. By the end of the letter, Stromberg called for money and a substantial delivery of supplies at first open water, before the enemy could block the waters. The alternative was the fall of the city.<sup>912</sup>

### *The Russians – February*

During February, the Russians carried out an expedition to the island of Ösel, trying to make the nobility on the island submit to Tsar Peter. The size of the Russian force that left for Ösel is not clear; figures of 4,000 and considerably less are mentioned. The Russians set out from the camp at Neuermühlen on February 16. They crossed the ice to Ösel and arrived at Arensburg on March 2, withdrawing from there on the 7<sup>th</sup>. In Riga, Stromberg was unaware of the fact that a considerable part of the siege army had left the vicinity. Prior to their departure, the Russians had sent a man, posing as a deserter, into Riga. The Russian told of an imminent storm, which Stromberg believed.<sup>913</sup>

### *Sweden – February*

From the beginning of February, 1710, the council members found themselves under pressure. On February 11, they wrote a letter to Karl XII, informing him of a decision to call the committees [“utskotten”] of the Parliament [“Riksdagen”] to a meeting on March 30, 1710.<sup>914</sup>

<sup>910</sup> Anonymous, *Diary*, p. 183–186.

<sup>911</sup> Stromberg to the Defense Commission, February 1, 1710, Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftsamlingen, Krigsarkivet, pp. 170–173.

<sup>912</sup> Stromberg to the Defense Commission, February 19, 1710, Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftsamlingen, Krigsarkivet, pp. 173–176.

<sup>913</sup> Arfwidsson, *Försvaret*, pp. 279–282 and 284.

<sup>914</sup> Arfwidsson, *Försvaret*, p. 304. (Rådet t. kon. d. 11 febr. 1710. H. H., V., s. 5 ff.)



On February 28, 1710 Stenbock defeated the Danish Army in Skåne in the Battle of Helsingborg.

## MARCH OF 1710

### *Riga - March*

The month began with little news. On the 12<sup>th</sup>, Stromberg announced, at the daily parade, that he had received a letter from the Senate [the Council], stating that Karl XII had recovered from his wound, and that he was marching with a considerable force through Poland. On the 19<sup>th</sup>, news from Courland also told of a Swedish relief army approaching. In the last days of the month, there was good news again. A merchant journeyman [“gesäll”], sent on a mission to Berlin to gather information, returned with the news of the Danish defeat in Skåne. During the month of March, around 300 bombs were fired into Riga.<sup>915</sup>

Stromberg wrote letters to the Defense Commission, dated March 14 and 18. He began his letter of the 14<sup>th</sup> humbly, although pointing out the great misery in the city, which he described in most of two pages of his letter. Stromberg wrote that by the end of February, 2,000 of the garrison had died, and that the casualty figures could be expected to rise. He again emphasized the need of money, and concluded with a call for supplies at first open water, or the city would be lost.<sup>916</sup> His letter of March 18 was much different from his letter of March 14. There is no sense of urgency or despair, and he made no calls for assistance.<sup>917</sup> From the month of March, typhus [“fläckfeber”] raged with increasing intensity in Riga. The plague, however, had not yet arrived.<sup>918</sup>

### *The Russians – March*

On March 11/12, Sheremetov returned to the siege and assumed command. By the end of the month, Russian siege artillery began to arrive. It had been shipped by boat from Smolensk. The transport passed Riga. Tsar Peter’s diary notes that the Swedes had no means of stopping the shipment from passing the city. Colonel Lecci and 1,000 men were ordered to the battery on the left bank

---

<sup>915</sup> Anonymous, *Diary*, pp. 186–189.

<sup>916</sup> Stromberg to the Defense Commission, March 14, 1710, Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftsamlingen, pp. 177–178.

<sup>917</sup> Stromberg to the Defense Commission, March 18, 1710, Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftsamlingen, Krigsarkivet, p. 179.

<sup>918</sup> Arfwidsson, *Försvaret*, p. 335.

of the river. Here, eleven 18-pounder and 12-pounder cannons were posted. Three thousand men were sent to the “Island”, possibly Hästhölm, with ten 8-pounder and 6-pounder cannons. On the right bank, 500 men with eleven 18-pounder and 12-pounder cannons were posted. Seven hundred grenadiers and other soldiers, together with 300 Don Cossacks, were detached to operate on the river in small boats. Tsar Peter’s diary reported on a sally on the 29<sup>th</sup>/30<sup>th</sup>, which was repelled. The diary also reported on Russian losses from Swedish bombs suffered in Peter-Schantz since December 4/5, thirty-three dead and wounded.<sup>919</sup>

### *Sweden – March*

In the beginning of March, an attempt to relieve besieged Riga was launched. A letter was sent from the State Office [“Statskontoret”] to Provincial Governor Mannerburg in Ösel. The letter ordered Mannerburg to send cereal to Riga at first open water.<sup>920</sup>

The Council held meetings on March 1 and 3. During the March 1 meeting, Horn worried about Swedish mastery at sea, and Frölich spoke at length about relieving Riga.<sup>921</sup> At the March 3 meeting, Frölich presented a memorandum on what should and could be done to relieve Riga, Pernau and Reval.<sup>922</sup> He suggested that three brigantines should be sent to reconnoiter, bringing as much dry bread, as well as snaps, as could be collected rapidly. Frölich’s opinion was that there was nothing to fear from enemy ships, as the conditions were still wintery. Not losing time, and with the help of God, Frölich thought that these measures would serve to preserve the fortresses until offensive action against the besieging armies could be taken.<sup>923</sup> In the following discussion, Horn stated that Riga had to be supplied with men and provisions. Wrede explained that orders had already been given to Provincial Governor Mannerburg in Ösel to supply Riga.<sup>924</sup> In his dissertation, Arfwidsson did not observe Frölich’s memorandum or the Council meetings of March 1 and 3.

---

<sup>919</sup> Tsar Peter’s diary, pp. 305–307.

<sup>920</sup> Arfwidsson, *Försvaret*, p. 304. (Statskont:s prot. d. 4 mars 1710) and (Rådet t. statskont. d. 7 mars 1710).

<sup>921</sup> Council minutes of March 1, 1710, Volym 101, s. p. [122b] and 123.

<sup>922</sup> Council minutes of March 3, 1710, Volym 101, s. p. [138b]–[139b].

<sup>923</sup> Carl Gustaf Frölich, *Memorial till härwarande Kongl. Maj:ts Råd; att hielpa Rijga, Pernau och Reval*, Appendix to Council minutes of March 3, 1710, Volym 101, s. p. [137b].

<sup>924</sup> Council minutes of March 3, 1710, Volym 101, s.p. [137b]–138.

On March 11, some pressure was taken off the Council and the Defense Commission as news arrived of the Danish total retreat from mainland Sweden.<sup>925</sup> On March 14, letters from Stromberg of February 1, 9 and 19 were read in the Council. In the letters, Stromberg described the deteriorating situation and called for money and relief by the end of the month of April.<sup>926</sup> In his dissertation, Arfwidsson further remarked that Fabian Wrede made a fairly negative statement regarding the letters and nothing was done.<sup>927</sup> In the minutes, Wrede made a remark that might explain some of his standing in regard to Riga and the eastern cities. He claimed that failure to extract food from the surrounding countryside during the fall, as ordered by Karl XII, would make the governors responsible if anything went wrong.<sup>928</sup>

The Council made a letter be sent to Stromberg, informing him of the transport coming from Ösel. They expressed hope that the enemy would not be able to stop the transport, and that the city of Riga thus should receive everything it needed. In his comments to the letter, Arfwidsson remarked that the Council seemed to have no concerns about the transport being blocked by the Russians.<sup>929</sup> That interpretation is not obvious. Since the Council expressed the hope that the transport would get through, it seems to have been quite aware of the risks.

On March 21, a letter was sent from the Defense Commission to the Admiralty in Karlskrona in which the Admiralty was ordered to send one or more ships to cover the transport from Ösel to Neumünde. The possibility of getting the supplies from Neumünde to Riga was now considered by the Council. In a letter to Karl XII, they foresaw that the supplies could be brought up to Riga from Neumünde on armed barges or by other means, the latter not being specified.<sup>930</sup>

On the island of Ösel – like in many other places – the harvest had been poor, but Mannerburg could collect ordinary contributions. He did, however, choose not to collect any extraordinary contributions. On March 26, Mannerburg wrote to the State Office [“Statskontoret”]. He specified what he had col-

<sup>925</sup> Arfwidsson, *Försvaret*, p. 304. (Rådet t. kon. 11 febr. 1710.)

<sup>926</sup> Council minutes of March 14, 1710, Volym 102a, pp. 77–80.

<sup>927</sup> Arfwidsson, *Försvaret*, p. 304.

<sup>928</sup> Council minutes of March 14, 1710, Volym 102a, p. 77.

<sup>929</sup> Arfwidsson, *Försvaret*, pp. 306 and 306, note 22 (Rådet t. Stromberg d. 16? mars 1710).

<sup>930</sup> Arfwidsson, *Försvaret*, p. 306 and p. 306, note 23 (Def. kom:s prot. och regist. d. 21 mars.) and (Rådet t. kon. d. 23 mars H. H., V., s. 33.)

lected and requested instructions for its distribution.<sup>931</sup> Responding to the letter from the Defense Commission of March 21, 1710, the Admiralty in Karlskrona sent out two brigantines to cover the transport from Ösel to Neumünde, *Kräftan*, under the command of Lieutenant [“löjtnant”] J. Wall, and *Jungfrun*, under the command of Lieutenant [“löjtnant”] L. Fegerman.<sup>932</sup>

## APRIL OF 1710

### *Riga - April*

Spring brought new intensity to the siege, in which control of the Düna River moved to the center of attention. According to Arfwidsson, the ice broke on April 5<sup>933</sup>. Before the riverine battle began, news of relief arrived twice.

The struggle for the river began in earnest on April 14, when the man bringing mail to Neumünde returned with his mission incomplete. Wooden bars now blocked the river, so water communications with Neumünde were thus severed. This development seems to have been expected in Riga. The diary writer commented that on the 14<sup>th</sup>, there was work in progress on fifteen boats to use for military action on the Düna River. Each boat was armed with one cannon. The crews were made up of 400 men regular army and twenty-two artillerymen.<sup>934</sup>

Four days later, a rumor told of Swedish flags seen at Neumünde. The Swedish riverine flotilla went into action on the 21<sup>st</sup>, when they entered the river during the night. They returned, having accomplished nothing.<sup>935</sup> On the following night, five Swedish boats fought a small battle against sixty Russian boats. On the 23<sup>rd</sup>, Swedish ships were seen from Riga, to no small delight to the people in the city.<sup>936</sup> During the night, six boats under the command of Lieutenant [“kapten”] Grass entered the river. The cruise was uneventful, except for a few ineffective shots from Cobron’s Redoubt.

The riverine struggle continued on the 28<sup>th</sup>. On that day, two new Swedish ships were sighted from Riga. The Swedish boats left the city and encountered Russian ones. In the ensuing battle, the Russians lost one boat and five men as prisoners. On the same day, a Swedish ship with ten cannons sailed out on the

<sup>931</sup> Arfwidsson, *Försvaret*, p. 326. (Mannerburg t. def. kom. d. 8 jan. 1710.)

<sup>932</sup> Arfwidsson, *Försvaret*, p. 325. (Rådets prot. d. 4 april 1710) and (RR. d. 7 april 1710.)

<sup>933</sup> Arfwidsson, *Försvaret*, p. 288.

<sup>934</sup> Anonymous, *Diary*, pp. 189–191.

<sup>935</sup> Anonymous, *Diary*, pp. 191–195.

<sup>936</sup> Leonhard Kagg’s diary, p. 158.

roadstead. The Russian batteries opened fire, but with no effect. The Swedish ten-gun ship advanced up to the Russian batteries. When they were within range of them, the wind had died down, and the ship became a stationary target. The Russians scored 100 hits, but the ship returned fire, more than double the Russians'. The Swedish losses were two killed and seven wounded. While the ten-gun ship fought, Swedish boats landed troops opposite the citadel. These troops attacked two Russian batteries, which were under construction.<sup>937</sup>

The month of April ended with intense artillery duels between the fortress and the besiegers.<sup>938</sup> For the last day of April, the anonymous diary writer noted that all attempts to maintain communication between Riga and Neumünde now failed. The Russians had pulled a cable across the river, their batteries were too many and their patrolling boats too efficient. During the month of April, around 500 bombs were fired into Riga.<sup>939</sup>

As the battle for the river was fought, there were signs of morale breakdown in Riga. On the 18<sup>th</sup>, Stromberg issued an order declaring pessimistic talk among the burghers a criminal act. He also ordered his officers to stop writing letters complaining about their conditions, and begin to be patient.<sup>940</sup>

In the introduction to his dissertation, Arfwidsson remarked that there were several misunderstandings regarding the siege of Riga.<sup>941</sup> One of them is found in Fryxell's much circulated work on Swedish history. Fryxell claimed that Riga was resupplied during April, a statement that has no support in the sources.<sup>942</sup> This mistake found its way into Wikander's work of good repute, on Swedish wars in the eighteenth century. There, Wikander claimed that Stromberg received some supplies from Vice Admiral Watrang's flotilla, sailing for the Gulf of Finland. Wikander was careful, however, and explained in a footnote that the information came from Julius Mankell's *Finska arméns och Finlands krigshistoria*.<sup>943</sup>

### *The Russians – April*

On April 13/14 Sheremetov decided to call the Russian troops from their winter quarters and then draw the noose tighter around Riga. Two days later, Field

---

<sup>937</sup> Anonymous, *Diary*, pp. 191–195.

<sup>938</sup> Anonymous, *Diary*, p. 192.

<sup>939</sup> Anonymous, *Diary*, p. 196.

<sup>940</sup> Anonymous, *Diary*, pp. 192–193.

<sup>941</sup> Arfwidsson, *Försvaret*, s. p. [XI].

<sup>942</sup> Fryxell, Del 24 (Stockholm 1857), p. 143.

<sup>943</sup> Wikander, p. 145.

Marshal Prince Alexander Danilovich Menshikov arrived. His mission was to block those sailing on the Düna River, from Dünamunde to Riga. A heavy chain was laid across the river, and a bridge was built. The bridge was protected by heavy cannons.

From the 19<sup>th</sup>/20<sup>th</sup> to the 29<sup>th</sup>/30<sup>th</sup>, the Russian divisions came in from their winter quarters. Menshikov's infantry division occupied both sides of the river below Riga. General Prince Repnin's division was posted above Riga. Lieutenant General Rentzel was posted by Jungfernhof; Sheremetov's division and General Hallart's division were posted by Cobron's Redoubt.<sup>944</sup>

Regarding the riverine military situation, Arfwidsson claimed that on the 17<sup>th</sup>, three Dutch ships, having wintered in Riga, were given safe conduct to the Baltic Sea by the Russians. They were, however, confiscated by the Russians and converted to fighting ships. Arfwidsson here gave the anonymous diary writer as his source. However, although that source mentions the three Dutch ships, and that the Russians took up to 80,000 rixdollars from them, it does not mention their conversion to fighting ships.<sup>945</sup> If Arfwidsson was right, the balance of power on the Düna River changed dramatically from the 17<sup>th</sup>. It can be assumed that these three ships, armed with cannons, would be a superior fighting force, compared to the Swedish ten-gun brigantine.

For the 28<sup>th</sup>/29<sup>th</sup>, Tsar Peter's diary reported on nine Swedish ships arriving at Dünamünde, which were driven back by Russian artillery and musketry.<sup>946</sup>

### *Sweden – April*

During April, there was much talk about the relief of Riga among common people in Sweden. One general view was that the troops in Pomerania ought to be sent to Livonia as a relief force. The matter was discussed in the Council on April 4. The Council found it impossible to transport troops from Pomerania to Livonia.<sup>947</sup>

The Council soon decided to call on military expertise to discuss the matter of resupply and relief of Riga. On April 9, 1710, Lieutenant Generals [Johan August] Meijerfelt (Meyerfeldt) and [Jacob] Burenschiöld and Major General [Gustaf Adam] Taube reported to the Council. The meeting began with the reading of Stromberg's letter of March 19 to the State Office ["Statskontoret"].

---

<sup>944</sup> Tsar Peter's diary, pp. 308–310.

<sup>945</sup> Arfwidsson, *Försvaret* p. 290 and Anonymous, *Diary*, p. 192.

<sup>946</sup> Tsar Peter's diary, pp. 308–310.

<sup>947</sup> Arfwidsson, *Försvaret*, pp. 306–307. (Rådets prot. d. 4 april 1710.)

In that letter, Stromberg explained that Riga urgently needed supplies, or it would fall into enemy hands. Wrede commented that 4,000 barrels ought to be enough, if that quantity could be acquired. Meijerfelt pleaded for vigilant action to support Riga, seeing that Pomerania would also be lost if Riga fell. Meijerfelt spoke in aggressive terms: six old regiments, so far not employed in the war, should be sent to Livonia; new ones should be raised in their place. The relief army should bring dry bread for three months. Meijerfelt also spoke in favor of operations which would indicate a Swedish landing on Zealand, to contain the Danes. Wrede argued that there was no Swedish fleet or money, and that nothing could be done. The minutes ended in an odd way. Taube, previously having said nothing, stated that Riga still had supplies of cereal. Wrede agreed with him and, with that, the minutes ended with no decision having been made.<sup>948</sup>

In the last days of April, Meijerfelt raised the temperature. On April 29, he filed a memorandum called “Betänkande ang. hjälp åt Östersjöprovinserna” [“Memorandum regarding assistance to the Baltic Provinces”].<sup>949</sup>

On April 30, a letter from Stackelberg in Neumünde, dated March 30, was read in the Council. Stackelberg here described the Russian efforts to block the river. He further explained that he had one galiot and one small yacht that could be armed. These ships could assist in a break-through effort. The Council ordered the Admiralty to immediately send two well-armed frigates to Neumünde. The order was dispatched the same day.<sup>950</sup>

The Council also had Viborg to deal with (see 4.16 Viborg 1710). On August 23, a troublesome letter from Major General Lybecker in Finland was read. Lybecker reported that Russian ambitions seemed to aim further than to conquer just Viborg. The Council decided to write letters to all provincial governors in Finland, urging them to cooperate in the defense of Finland.<sup>951</sup>

### *Ösel and the naval situation – April*

It is not easy to keep track of the complete naval situation and all the ships dispatched east. One complicating factor is that the Council and the Defense Commission minutes rarely identified a ship's name. Another is that several of

<sup>948</sup> Council minutes of April 9, 1710, Volym102a, pp. 149–160. (Treated in Arfwidsson, *Försvaret*, p. 308–309.)

<sup>949</sup> Arfwidsson, *Försvaret*, pp. 312 and p. 312, note 34. (J. H. Meijerfeldts betänkande ang. hjälp åt Östersjöprovinserna, dat. d. 29 april 1710, St. nord. kriget, Volym 19.)

<sup>950</sup> Arfwidsson, *Försvaret*, p. 313. (Stackelberg t. def. kom. d. 30 mars 1710. Def. kom:s acta 1712–1714) and(RR. d. 30 april 1710).

<sup>951</sup> Council minutes of April 23, 1710, Volume 101, p. 187.



the sources, regarding movements of ships, are assumed lost to posterity. However, so far, we have seen the brigantines *Kräftan* and *Jungfrun*, sent out from Karlskrona in March.

In April, the brigantine *Skorpion*, under Lieutenant [“skeppslöjtnant”] W. Swan, was ordered to reconnoiter the waters between Neumünde and Ösel. He arrived at Neumünde on the 23<sup>rd</sup>. Here, Swan received letters to Mannerburg in Ösel, to the Defense Commission and to the general admiral in Karlskrona. On the 24<sup>th</sup>, Swan proceeded to Arensburg in Ösel. Sailing toward Arensburg, Swan encountered two small Rigian ships [“smackar”] fully laden with provisions for the garrison in Neumünde. They carried about a month’s worth of provisions for the Neumünde garrison.<sup>952</sup> From where and when these small ships originally departed is not evident from the sources. Swan turned around and escorted these ships to Neumünde. Having arrived there, he once again set his course for Arensburg.<sup>953</sup>

Thus, the sightings of Swedish ships, according to the anonymous writer’s diary, are fairly well explained by other sources. The Swedish ships seen from Riga on the 23<sup>rd</sup> should then have been the brigantine *Skorpion*, possibly in the company of the brigantines *Kräftan* and *Jungfrun*. The arrival of Swedish ships on the 28<sup>th</sup>/29<sup>th</sup> should have been the *Skorpion* again and the small ships from Riga, although the number falls short of the nine ships mentioned in Tsar Peter’s diary.

## MAY 1710

### *Riga – May*

During the month, the city was rife with rumors of relief to arrive. The writer of the anonymous diary reported on the arrival of several Swedish ships at Neumünde. On the 10<sup>th</sup>, a Swedish man-of-war arrived at Neumünde, shooting a salute. Six boats sent downriver from Riga were met by over 100 shots from seven Russian batteries. The boat patrol returned fire, but then withdrew. On the 12<sup>th</sup>, a new ship arrived at Neumünde. On the 20<sup>th</sup>, two more new ships arrived. Two days later, a force of 100 men sallied from Riga, and an attack by boat was launched against Russian batteries. The Swedish troops drove the

---

<sup>952</sup> Arfwidsson, *Försvaret*, pp. 325–326. (Stackelberg t. def. kom. d. 24 april 1710) and (Statskon-  
t:s prot. d. 11 maj.)

<sup>953</sup> Arfwidsson, *Försvaret*, pp. 325. (Mannerburg t. def. kom. d. 3 maj 1710.)

Russians out of a battery, only losing one man.<sup>954</sup> Leonhard Kagg offered some additional information regarding the Russian blocking efforts: on May 11, a Russian bridge over the Düna River, toward Neumünde, could be seen. Kagg considered this bridge to be the final closing of the routes to Riga.<sup>955</sup> On the 28<sup>th</sup>, Sheremetov announced, through a Swedish messenger visiting the Russian camp, that the siege would now intensify. On the same day, the anonymous diary writer reported on two ships arriving at Neumünde. Then on the 29<sup>th</sup>, he told of two new ships from Sweden arriving at Neumünde.

For the month of May, the diary writer told of living conditions in Riga. There were poor people dying everywhere in the streets; morale continued to deteriorate in the city. On the 25<sup>h</sup>, Stromberg had the Mayor and the members of the City Council arrested; they were guarded by fifty men. During the month of May, 1710, around 400 bombs were fired into Riga.<sup>956</sup>

#### *The Russians – May*

On May 10/11 Lieutenant General Bruce and the siege artillery arrived. The artillery was shipped by boat on the Düna River. Just four days later, disaster struck as the plague broke out; it was to afflict the Russian troops until December. During this period, it would kill 9,800 Russian soldiers. With the plague raging, it was decided to maintain the blockade tactic. On the 17<sup>th</sup>, Menshikov left the siege for St. Petersburg.<sup>957</sup>

The last two regiments of Menshikov's division arrived on the 25<sup>th</sup>/26<sup>th</sup>. The Russian siege army can be assumed now to have reached its maximum strength, thirty-eight regiments, of which twenty-four were infantry. The siege army also included four companies of Saxon artillerymen and 2,100 Don Cossacks. It was then decided on the 29<sup>th</sup>/30<sup>th</sup> to attack the Riga suburbs. That attack began at 11 o'clock during the night of May 30/31 and is dealt with later in the June section below.<sup>958</sup>

#### *Sweden – May*

By the end of April, the matter of Riga was becoming sensitive. Not negligible was that the Meijerfelt memorandum created a need for Wrede and the men around him to treat the question carefully. If there would be a day of reckoning,

---

<sup>954</sup> Anonymous, *Diary*, pp. 197–204.

<sup>955</sup> Leonhard Kagg's diary, p. 159.

<sup>956</sup> Anonymous, *Diary*, pp. 197–204.

<sup>957</sup> Tsar Peter's diary, pp. 311–315 and Anonymous, *Diary*, p. 204.

<sup>958</sup> Tsar Peter's diary, pp. 313 and 338–339 and Anonymous, *Diary*, p. 204.

the papers had to be in order, and no shadow should fall on the Council. On May 2, Riga was on the agenda of a meeting in the Defense Commission.<sup>959</sup> The meeting that day resulted in minutes of eighty-five pages, which is unusually long. Trying to summarize what happened, the meeting transpired as follows. Meijerfelt was called to the meeting, as were the generals present in Stockholm, Stenbock, Burenskiöld, Palmquist and Dücker. Meijerfelt was heavily attacked for filing his memorandum. Wrede led the charge, supported by everyone else. The arguments wore Meijerfelt down, and he left the meeting defeated, having offered to withdraw this memorandum.<sup>960</sup> The Defense Commission then listed twelve points to prove why it was impossible to do more for Riga than had already been done. The main points were lack of supplies and that the Danes were masters of the sea. In point number twelve, the Council made a vague statement indicating that they had not perceived any calls from Riga or Neumünde for anything more than what was sent.<sup>961</sup> Arfwidsson severely criticized these twelve points in his dissertation, not least so the statement that the Danes were masters of the sea.<sup>962</sup>

On May 11, a letter from von Schwengeln, the commander in Pernau, was read in the Defense Commission. Von Schwengeln had received information from several sources, all pointing in the same direction: the Russian cavalry in Livonia only counted seven depleted regiments and lacked horses. His estimate was that these units could be driven away by 2,000 or 3,000 cavalymen. Von Schwengeln further assumed that any Swedish offensive would be supported by thousands of farmers, who were deeply embittered at the Russians. The letter was placed *ad acta*.<sup>963</sup> On the following day, the members of the Council decided to send reinforcements of 500 men to Neumünde. On the 13<sup>th</sup>, the Council added 200 more men to the reinforcements. The Commission also made the decision to give the Admiralty in Karlskrona *carte blanche* to send ships to assist the transports taking supplies from Ösel to Neumünde/Riga. Thus, the Council had placed the responsibility for the success of the resupply operation in the hands of the Admiralty.

<sup>959</sup> Arfwidsson, *Försvaret*, pp. 313–314. (Minutes of the Defense Commission of May, 2 1710, referred to on page 313.)

<sup>960</sup> Minutes of the Defense Commission of May 2, 1710, Volume 7, s. p. [1–85] and Arfwidsson, *Försvaret*, pp. 313–321.

<sup>961</sup> Minutes of the Defense Commission of May 2, 1710, Volume 7, s. p. [68–77].

<sup>962</sup> Arfwidsson, *Försvaret*, p. 320.

<sup>963</sup> Arfwidsson, *Försvaret* pp. 322–323. (v. Schwengeln t. def. kom. d. 19 april 1710) and (Def. kom. prot. d. 11 maj 1710).

The 700-man force to be sent east was to consist of 450 men from the Västerbotten Regiment, led by Major G. H. Bröjjer, and 250 men from the Life Guards Regiment, led by Captain Carl Fleming.

On May 21, Frölich turned in a memorandum to the Defense Commission. He claimed that it would take 3,000 men to relieve Riga. This force could be organized with 600 men from each of the Hälsinge, Dals, Värmlands, Upplands, Sörmlands and Östgöta Regiments, a total of 3,600 men. The additional 600 would be sent to Pernau, from where they could harass the Russians with support of the local farmers. Frölich offered to lead this force. Frölich's memorandum was read in the Defense Commission on May 23, 1710, where it was placed *ad acta*, with no further action.<sup>964</sup> On the following day, Frölich raised the question of Riga to the Council members. He claimed that no more delay could be allowed. "Hwad kunne wij giöra?"<sup>965</sup> was Wrede's reply. Frölich stated that troops had to be sent, and that there was a large army in Sweden. Horn then joined in and claimed that Stenbock's army in Skåne had decreased to 8,000 men and was needed to hedge against the Danes. The discussion stopped here, and the meeting turned to a diplomatic matter with France.<sup>966</sup> In May, voices were heard, both in the Council and the Defense Commission for God to let supplies get through to Riga.<sup>967</sup>

#### *Ösel and the naval situation – May*

In the first days of May, eight transports from Stockholm had arrived at Ösel.<sup>968</sup> Two were rapidly loaded with food and then sailed for Neumünde, where they arrived on May 11. On May 2, Lieutenant ["skeppslöjtnant"] Swan and the brigantine *Skorpion* arrived at Ösel. It is possible that Swan brought a transport, since a letter from the Admiralty to the Council of May 7 mentions the fitting out of such a vessel<sup>969</sup>. On the following day he left, bringing with him letters from Provincial Governor Mannerburg to the general admiral in Karlskrona.

<sup>964</sup> Arfwidsson, *Försvaret*, pp. 323–324. (Frölich t. def. kom. d. 21 maj 1710.) and (Def. kom:s prot. d. 23 maj 1710.)

<sup>965</sup> Council minutes of May 24, 1710, Volume 101, p. 249. Translation: "What can we do?"

<sup>966</sup> Council minutes of May 24, 1710, Volume 101, p. 249.

<sup>967</sup> Arfwidsson, *Försvaret*, p. 327.

<sup>968</sup> Arfwidsson, *Försvaret*, p. 326. (Mannerburg t. def. kom. d. 13 maj 1710) and (Mannerburg t. def. kom. d. 7 maj 1710).

<sup>969</sup> Council minutes of May 17, 1710, Volume 101, s. p. [238b].

The letters stressed the need for men-of-war to escort the transports up the Düna River.<sup>970</sup> Having delivered the letters, Swan returned to Riga waters.

Of the remaining six ships in the transport fleet, four were destined for Riga; the other two would go to Pernau. These ships were also loaded, but their sailing was delayed by a rumor suggesting that the Russians had armed three ships at Windau to intercept transports for Riga. Mannerburg now decided to let the transports wait for the escorts coming from Karlskrona. Probably up until May 23, no escorts from Karlskrona arrived, and Mannerburg decided to let the transports sail without an escort.<sup>971</sup>

In his dissertation, Arfwidsson posed the question of how sufficient this re-supply operation really was – for how long Riga could survive on the provisions sent from Ösel? – without answering his own question.<sup>972</sup> An attempted answer, using the information provided in Arfwidsson's dissertation,<sup>973</sup> is that the total quantity of edible supplies that were shipped added up to around 535,000 kilos. Assuming that a ration of one kilo per day could sustain a person, the shipment would have kept 18,000 people alive for a month. If the supplies had been reserved for the garrison, they would have lasted for two months for 9,000 men and three months for 6,000 men.

Having received the letter that Swan conveyed from Mannerburg, General Admiral Wachtmeister in Karlskrona wasted no time waiting for orders from Stockholm. At once, he equipped and dispatched four men-of-war, the three frigates, *Oxen*, *St. Thomas*, and *Dromedarius*, and the bomb vessel *Stromboli*<sup>974</sup>. Under the command of Lieutenant [“kapten”] Peter Krook, these ships left Karlskrona on May 23. The frigate *Postilion*, with Lieutenant [“kapten”] Anders

<sup>970</sup> Arfwidsson, *Försvaret*, p. 325. (Mannerburg t. def. kom. d. 3 maj 1710), (Mannerburg t. def. kom. d. 7 maj 1710) and (a letter of May 17, 1710, with no sender or address, in *St. nord. krig.*, vol. 19).

<sup>971</sup> Arfwidsson, *Försvaret*, pp. 325–327. (Statskont:s prot. d. 3 juni 1710), (Mannerburg t. def. kom. d. 7 o. 14 maj 1710) and (Mannerburg t. def. kom. d. 3 juni 1710).

<sup>972</sup> Arfwidsson, *Försvaret*, p. 327.

<sup>973</sup> In total, the following amount of supplies had been shipped from Ösel to Riga, 1,992 barrels of rye, 282 barrels of malt, 2,800 barrels of “korn”, 74 barrels of “korngryn”, 45 barrels of peas, 104 “lisp” of butter, 420 “lis” of pork, 5,740 pounds [“skålp”] of dried meat and 19 “lisp” of hops. Arfwidsson, p. 327, note 94 and 95. (Statskont:s prot. d. 3 juni 1710).

<sup>974</sup> *Oxen*, built 1708, (36), renamed *Anklam* 1710, *St. Thomas* built 1706 (30), *Dromedarius* built 1708, renamed *Stralsund* 1712, *Stromboli*, built 1701 (6). [https://sv.wikipedia.org/wiki/Lista\\_över\\_svenska\\_seglande\\_örlogsfartyg#Fregatter](https://sv.wikipedia.org/wiki/Lista_över_svenska_seglande_örlogsfartyg#Fregatter), read May 20, 2017 and [https://sv.wikipedia.org/wiki/Lista\\_över\\_svenska\\_seglande\\_örlogsfartyg#Bombkitsar](https://sv.wikipedia.org/wiki/Lista_över_svenska_seglande_örlogsfartyg#Bombkitsar), read May 20, 2017.

Siöstierna as commander, was also dispatched. She was to leave for Stockholm to escort the 700-man transport mentioned above.<sup>975</sup>

The naval situation now began to get complex, with several sightings and ships involved. However, the general picture created, by the anonymous keeper of a diary and other sources, is quite consistent. On May 10 and 12, ships were sighted from Riga. They could have been the brigantine *Skorpion* and the transport that might have followed her. On the 20<sup>th</sup>, two ships arrived. These were most likely the first sailing from Ösel. On the 28<sup>th</sup> and the 29<sup>th</sup>, two ships arrived each day. These would most likely have been the four transports to sail later from Ösel, having been separated at sea.

The distance between Ösel and Riga is about 160 kilometers, or about 90 nautical miles. At three knots, the voyage could then be made in thirty hours. Since the prevailing winds in the Baltic Sea are from the south, it could, however, have taken considerably longer.

## JUNE OF 1710

### *Riga – June*

Around midnight between May 31 and June 1, a Russian attack on the suburbs was launched. There were around 2,500 men attacking on two fronts. Brigadier Schats led on the right flank, Colonel Lecci on the left. The Russians had the advantage of surprise, so Brigadier Schats could advance fast, taking sixteen prisoners. It was worse for Lecci on the left as he had to pass small but deep lakes. When alarmed, the garrison opened fire with artillery, which, however, did not stop the attack. At midday on the 1<sup>st</sup>, a Swedish counterattack against Schats's force began. The Swedes soon had to withdraw with heavy casualties. About 100 of 600 counterattackers were lost. In the following evening, Lecci would complete the conquest on the left flank. Thus, the suburbs were lost for Riga.<sup>976</sup>

On the following day, June 2, two Swedish ships arrived at Neumünde, according to the anonymous writer of a diary; later in the day, four more arrived. These ships were part of a Swedish resupply operation (see the section *The naval situation* below). The diary writer also told of a now desperate supply situation. No more supplies for the garrison came from the burghers but, on the 5<sup>th</sup>, the clergy and some others offered bread to the soldiers.<sup>977</sup> Adding to

---

<sup>975</sup> Arfwidsson, *Försvaret*, p. 325. (Am. koll. t. rådet d. 11 maj, t. def. kom. d. 18 o. 28 maj 1710).

<sup>976</sup> Tsar Peter's diary, pp. 312–316 and Anonymous, *Diary*, p. 204.

<sup>977</sup> Anonymous, *Diary*, pp. 204–209.

the misery in Riga was the outbreak of the plague. Arfwidsson claimed that this disease had not yet stricken the city of Riga before June 11. He pointed out that earlier researchers – among them Otto Sjögren and Ludvig W:son Munthe – had assumed that the plague had arrived earlier.<sup>978</sup>

The Russian bombardment got more intense. On the 16<sup>th</sup>, almost 400 bombs were fired into the city.<sup>979</sup> On the 17<sup>th</sup>, around 300 bombs were shot into Riga, and on the 18<sup>th</sup>, almost 500. The heavy bombing caused extensive damage in the city, so much that the clergymen did not dare go out and visit the sick and dying. Arfwidsson assumed that the intensified bombardment broke morale and the will to resist, at least among the civilian defenders of Riga.<sup>980</sup>

There is a persistent idea, described in a comment added to the original text of the anonymous diary, that Riga repelled a Russian storm during June of 1710. The comment dates the storm to the 20<sup>th</sup>, and the statement is more convincing, since the diary ended on the 18<sup>th</sup>. In the comment, it was suggested that the keeper of the diary, obviously an officer, perhaps was killed in this storm. The comment also states that five Swedish ships managed to get provisions into Riga in June.<sup>981</sup> In his work on Swedish history, Fryxell referred to the storm and dated it to around midsummer. He also told of a successful Swedish resupply operation in June.<sup>982</sup> Arfwidsson noted that the storm was mentioned in Nordberg's work on the Great Northern War, and claimed that it was based on a rumor which, at the time, spread all the way to Bender. Arfwidsson concluded just briefly that the rumor was false.<sup>983</sup> No source used for this study provides a reason to argue with Arfwidsson on this point.

### *The Russians – June*

Having captured the suburbs, the Russians built three batteries there. They were armed with fourteen mortars, three of 360 pounds and eleven of 200 pounds. Their proximity to the city made them highly efficient. The Russians noted a strong Swedish naval build up at Neumünde in the beginning of the month (see below). On the 11<sup>th</sup>/12<sup>th</sup>, an exchange of letters began which ended with the surrender of the city (see the section *The Surrender* below).<sup>984</sup>

<sup>978</sup> Arfwidsson, *Försvaret*, pp. 334–335. (Rådets i Riga prot. d. 11 juni 1710) and p. 334, note 28.

<sup>979</sup> Anonymous, *Diary*, pp. 204–209.

<sup>980</sup> Arfwidsson, *Försvaret*, pp. 341–342.

<sup>981</sup> Anonymous, *Diary*, “Comment”, p. 210.

<sup>982</sup> Fryxell, *Del 24* (Stockholm 1857), p. 142.

<sup>983</sup> Arfwidsson, *Försvaret*, p. 342, note 68.

<sup>984</sup> Tsar Peter's diary, pp. 317–318.



*The naval situation - June*

A large fleet of Swedish ships was now assembling off Neumünde. Swan and the frigate *Skorpion* should have arrived. Six transports from Stockholm, carrying supplies from Ösel, should also have been there.

On June 1, Krook's flotilla of three frigates and a bomb vessel entered the waters off Neumünde. On the following day, the 700-man transport from Stockholm arrived. *Siöstierna* with the frigate *Postilion* was detached to escort the transport. She was built in 1701 and was armed with twenty-two cannons<sup>985</sup>. The expedition should also have included one or more transports for the troops.

A task force for breaking through to Riga was now organized. Two large boats were attached to each of the three largest ships, each of which was fitted with one cannon. They also took aboard petards, saws, axes and boxes of explosives to demolish the Russian bar across the Düna River. Eighty men from the garrison of Neumünde, trained in the handling of explosives, manned the boats. Five transports carrying supplies had their crews augmented by one subaltern officer from the garrison and twenty men from the Västerbotten Regiment.<sup>986</sup>

Krook, his ships' commanders and Stackelberg then had a conference to discuss the attempted break through to Riga. The circumstances were not promising. They recognized that the shores and skerries along the navigable channel were heavily defended by enemy batteries. A fairly large enemy army was camped along the river. Three barriers, made up of logs connected by iron chains, blocked the river. Three enemy ships were also seen farther upriver. This observation of three Russian ships makes Arfwidsson's comment in April, about three Dutch ships taken into Russian service, a lot more likely. The three ships were augmented by more than seventy large boats ["strussar"], sitting in a row. There were also a number of small patrolling boats. It was also concluded that the sailing would be hazardous. No one knew how the out-flowing ice had affected the navigable channel that year.

It was ultimately decided to risk the least valuable of the ships. The transports would lead, sailing in a column. To facilitate the break through, Krook would sail up to Hästhölm and take on the Russian batteries. Stackelberg

---

<sup>985</sup> P. O. Bäckström, *Svenska flottans historia* (Stockholm 1884), p. 421.

<sup>986</sup> Arfwidsson, *Försvaret*, p. 328 and p. 328, note 98. (Stackelberg to the Defense Commission June 3, 1710, reference on page 328).

would use two small ships, each armed with one 16-pound howitzer, to suppress the Russians on Licentet. If Krook managed to break through the Russian barrier, he would then bring the supply ships and anchor upriver.<sup>987</sup>

However, adverse winds stopped the execution of the plan, and Krook soon had second thoughts. He tried to get Stackelberg to make a decision on whether or not to attack, but Stackelberg refused to interfere in naval matters. Finally, Krook settled for a new plan, under which the frigates would lead. They would pass Hästholmen and proceed farther upriver to get a better idea of the situation. In the days from June 3 to June 10, Arfwidsson saw a deteriorating mood among the crew and soldiers on the Swedish ships. The period document implies that Krook had no hope of success; his only aim was to make an effort that appeared as though he had not neglected his duty. Arfwidsson also found an overriding concern that many people on the ships wanted to get away from the plague-infested Neumünde as soon as possible.<sup>988</sup>

On June 10, the Swedish ships sailed up the Düna River. They stopped off at Hästholmen, engaging in a five-hour artillery duel with the Russian batteries. The howitzer boats bombarded the Russians on Licentet. The Swedish attack precipitated a great deal of activity in the Russian camp. Russian troops could be seen all along the river. Where the bridge across the Düna River connected to land, there were around 2,000 Russian soldiers. The fire from the Swedish ships was ferociously answered. The Swedes shot four bombs into a Russian battery redoubt. Other Swedish bombs fell into the Russian camp. Despite the intense fire, neither side achieved any decisive result. The Swedish gunners could not silence the Russian batteries, and the Russians could not inflict serious damage on the Swedish ships. A few hits cut off some of the rigging on the frigate *Oxen*, and the frigate *St. Thomas* was hit by a few cannonballs that penetrated its hull. However, not a single man on the Swedish ships was killed or wounded. This long artillery duel indicated the relative inefficiency of the artillery shooting iron balls.

At 7 o'clock in the evening, the Swedish ships withdrew and stopped under the guns of Neumünde. The attempt to bring in supplies to Riga had failed. Both Krook and Stackelberg agreed that there was no use in trying to repeat the attempt, so they both wrote letters to the Defense Commission. Krook claimed that a large relief army was the only practical solution now. Stackelberg com-

---

<sup>987</sup> Arfwidsson, *Försvaret*, pp. 328–329.

<sup>988</sup> Arfwidsson, *Försvaret*, pp. 329–330. (Def. kom. ink. handl 1710.)

mented that the entire Swedish fleet could not reach Riga by itself.<sup>989</sup> Swan with the brigantine *Skorpion* was detached to Stockholm with the letters. According to Russian General Hallart, the remaining Swedish ships then set to sea on June 29.<sup>990</sup> It should be noted that neither Arnold Munthe nor Ludvig W:son Munthe mentioned this naval operation. Otto Sjögren commented on it with only a single sentence.

**Table 4.18** Swedish ships involved in Riga support operations

Ship	Type of ship/ Commander	Comments
APRIL OF 1710		
Kräftan	Brigantine/Wall	To escort transport from Ösel to Neumünde.
Jungfrun	Brigantine/Fegerman	To escort transport from Ösel to Neumünde.
Skorpion	Brigantine/Swan	To reconnoiter between Ösel and Neumünde.
A transport?		Sailing with Swan?
Two small ships	Merchants	Bringing supplies from Ösel to Neumünde.
MAY OF 1710		
Two transports	Merchants	Leaving Ösel for Neumünde early in the month.
Four transports	Merchants	Leaving Ösel for Neumünde late in the month.
Oxen	Frigate/Krook	Left Karlskrona for Neumünde 23 May.
St. Thomas	Frigate	Left Karlskrona for Neumünde 23 May.
Dromedarius	Frigate	Left Karlskrona for Neumünde 23 May.
Stromboli	Bomb-ship	Left Karlskrona for Neumünde 23 May.
Postilion	Frigate	Left Karlskrona for Stockholm in the end of May.
JUNE 1710		
Transports?		Ships carrying the 700-man reinforcement?

Source: See above.

### *Surrender*

On June 28, Stromberg requested a ceasefire to be effective from 7 o'clock in the evening of June 27<sup>991</sup>. For all intents and purposes, the struggle for Riga was over. After some lengthy negotiations, much of which concerned the status of the Livonian noblemen in Swedish service, Stromberg signed the surrender document on July 4/5.<sup>992</sup>

<sup>989</sup> Arfwidsson, *Försvaret*, pp. 330–331. (Kapt. Krook t. def. kom. d. 12 juni 1710), (Stackelberg t. def. kom. d. 13 juni 1710), (Major Bröijer t. def. kom. d. 13 juni 1710) and (Kapt. Carl Fleming t. def. kom. d. 14 juni 1710).

<sup>990</sup> Arfwidsson, *Försvaret*, pp. 332–333 and p. 333, note 21. (Hallart t. kon. August med extrakt ur ryska lägerjournalen (Schirrens saml.)),

<sup>991</sup> Leonhard Kagg's diary, p. 164.

<sup>992</sup> Tsar Peter's diary, p. 325 and Arfwidsson, *Försvaret*, p. 354.

### Sweden – June

During the siege, at least one inventor appeared, Christopher Justenstole. He was called to the Defense Commission to present his suggestion on June 28, 1710. His idea was to build an exploding ship which could destroy bridges and walls. The Defense Commission now feared that it was too late to do anything for Riga and showed the man a drawing of the situation off Neumünde. The inventor promised to present a list of required materiel, and then left.<sup>993</sup> The name Justenstole would not appear in siege history again.

### AFTER THE SIEGE

The siege had been costly in terms of human life. When the Swedish garrison marched out, there were 1,592 men well and 2,456 sick, for a total of 4,048<sup>994</sup>. Tsar Peter's diary described the remaining garrison at the surrender as 5,132 men of twenty-two regiments, of which 2,905 were sick.<sup>995</sup> Of these men, approximately 1,000 would be evacuated. Several died, and a number of others, coming from territories now occupied by Russia, were taken into Russian service.<sup>996</sup> The total cost in human life, including civilians, has been estimated as 22,000 to 60,000. Arfwidsson saw the latter figure as quite exaggerated, and estimated the human cost on the Swedish side at 30,000.<sup>997</sup> Swedish Livonia had now lost its anchor for defense and the substantial army garrisoned in Riga. Lars Ericson Wolke gave his article on the siege "Riga 1710" the subtitle "Det svenska Östersjöväldets fall" [The Fall of the Swedish Baltic Empire], which would be appropriate.<sup>998</sup>

### RIGA – CONCLUSION

The following could be concluded about Riga:

- It had a strong garrison, over 6,000 men.
- The works were strong. The weak part toward the Düna River was compensated by the wide river.
- Lack of drinking water is not mentioned in connection with the siege.

---

<sup>993</sup> Minutes of the Defense Commission of June 28, 1710, Volym 7, s. p.

<sup>994</sup> Arfwidsson, *Försvaret* pp. 356–357 and p. 357, note 40. (Rådets brev t. kon. d. 15 december 1710 (RR)).

<sup>995</sup> Tsar Peter's diary, p. 327.

<sup>996</sup> Tsar Peter's diary, p. 327 and Arfwidsson, *Försvaret*, pp. 358–359.

<sup>997</sup> Arfwidsson, *Försvaret*, p. 356.

<sup>998</sup> Lars Ericson Wolke, "Riga 1710: Det svenska Östersjöväldets fall", in Ericson Wolke, Lars and others *Svenska slagfält* (s. l. 2003), p. 312.

Matters of accessibility can be summarized as below.

**Table 4.19** Riga accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's high general accessibility was due to the road network and the control of the Düna River. The defender's general accessibility was low, since the Düna River was army blockable.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The location on a wide river was not enough to make a significant difference. The defender's local accessibility was low, since there was no sail-in function or protected discharge place there.

The attacker's tactic was blockade, which in the end succeeded. Looking at the process, it could be argued, with the advantage of hindsight, that Stromberg could have handled the riverine war more aggressively. He obviously had the strongest ships from the beginning, and should have been able to defeat the fleet of Russian small ships piecemeal as it was being built up. Not using the howitzer boats until the last phase of the siege also looks like a mistake. These boats, firing explosive shells, had a distinct advantage on cannons shooting solid cannonballs, as they could drive troops from anywhere within reach. The fact that Stromberg did not sally against an enemy that seemed to be numerically inferior is difficult to evaluate. A sally always meant a risk. To understand Stromberg's position, one must know how he felt about his troops, the officers under him, and his own ability to win a field battle under the circumstances. However, it looks like his refraining from an attack on the sometimes isolated Cobron's Redoubt could be considered a process error. In total though, the loss of Riga could not be explained by process errors; it fell because it could be blockaded.

## 4.12 NEUMÜNDE 1710 – Livonia (by today’s Riga in Latvia)

**Under siege from July 8/9 to August 9/10, 1710 (33 days). Surrendered.**

### *Introduction*

After the surrender of Riga (see Chapter 4.11 Riga), a letter from Neumünde fell into Russian hands. It was written by the garrison commander and told of a garrison strongly reduced by disease. The Russians then held a council of war meeting on July 7/8. It was decided to attack Neumünde at once.<sup>999</sup>

The mouth of the Düna River had been fortified for a long time. At the time of the Swedish conquest of Livonia in 1621, there was a medieval stone castle north of the river called Dünamünde Castle. Gustav II Adolf concluded that the old castle could not be improved to modern standards, so it was decided to build new works instead. In 1622, construction began on a five-corner earthen redoubt on the northern point of the island of Weiden created by the Düna River and the Bolderaa River. This fortification was soon called “Nymünde”, but “Neumünde” was used more and more frequently with time. The fortress was improved over the years.<sup>1000</sup> At the beginning of the Great Northern War, Neumünde was a modern fortification with six bastions and five ravelins. It had been prioritized before the war.<sup>1001</sup>

In the early phases of the Great Northern War, Neumünde was captured by Saxon troops storming on March 13, 1700. Swedish forces recaptured the fortress on December 11, 1701.<sup>1002</sup>

Neumünde was located almost directly on the Baltic Sea. However, there was no sail-in function or other discharge place which would not have been in peril of enemy siege artillery fire.<sup>1003</sup> Another important aspect of the location was that the fortress was sited on a large island, which it could not cover entirely. The location, thus, corresponded with one on plane land. It did not have any advantage of height. The problem of water supply was obviously well-solved, since there is no mention of a shortage. From the Swedish side, Neumünde could, thus, be reached with ease via the Baltic Sea; the same was true for the Russians via the Düna River.

---

<sup>999</sup> Tsar Peter’s diary, p. 341.

<sup>1000</sup> Ludvig W:son Munthe, Del I, pp. 286–287.

<sup>1001</sup> Ludvig W:son Munthe, Del III:2, pp. 260, 352 and 533 and Arfwidsson, *Försvaret*, pp. 93 and 246.

<sup>1002</sup> Sjögren, *Karl XII*, pp. 134 and 261.

<sup>1003</sup> Compare Picture 4.22.





**Picture 4.22** The picture above, of the Swedish siege of the fortress in 1701, provides a good idea of both the fortress and the location. It was a modern bastion fortress, sited on the outer tip of an island. The expanses of the Baltic Sea are seen in the background. (Source: *Die Königl Schwedische Bombardirung der Festung Dunamunde*, nr 1701:22, Volume 14 Omslag 1701–1704, Förteckning 426 Historiska planscher 1520–1904, Krigsarkivet.) (Detail)

Important terrain features around Neumünde were Licentet, the land east of the fortress, on the opposite side of the Bolderaa River; Magnusholm, an island opposite the fortress on the Düna River side; and Hästholmen, an island upriver on the Düna River.

#### *Earlier research and sources*

Fredrik Arfwidsson's dissertation *Försvaret av Östersjöprovinserna 1708–1710* from 1936<sup>1004</sup> is the major Swedish work on the siege of Neumünde. Ludvig W:son Munthe briefly covered the siege in his work on the Swedish fortification, mainly relying on Hillebard's report (see below).<sup>1005</sup> Arnold Munthe, focusing on the naval warfare, passed over Neumünde with a short sentence.<sup>1006</sup> Tsar Peter's diary devoted one page to the siege and surrender of Neumünde.<sup>1007</sup> Grigorjev and Bepalov only included a short passage on Neumünde.<sup>1008</sup>

<sup>1004</sup> Arfwidsson, *Försvaret*, mainly pp. 359–367.

<sup>1005</sup> Ludvig W:son Munthe, Del III:2, p. 539.

<sup>1006</sup> Arnold Munthe, Del II, p. 447.

<sup>1007</sup> Tsar Peter's diary, p. 341.

<sup>1008</sup> Grigorjev and Bepalov, p. 179.



The primary material on Neumünde in 1709 and 1710 is relatively rich, since the commander of the fortress wrote several long letters to the Defense Commission which have been preserved for posterity.<sup>1009</sup> There is also a report written by Colonel Erik Hillebard.<sup>1010</sup>

### *The garrison, artillery and supplies*

Colonel Carl Adam Stackelberg was the garrison commander. The Savolax and Nyslott Infantry Regiment made up the core of the garrison. They counted 1,033 men in list strength. Another core unit was a hired battalion of Livonian infantry under the command of Carl Adam Stackelberg. It had a list strength of 480 men.<sup>1011</sup> The garrison was reinforced by men from Johan Gustaf von der Osten gennant Sacken's battalion of country militia ["Öselska lantmilisbataljonen"].<sup>1012</sup> There were also over 100 men from the artillery under command of Captain Carl Rudebeck. At the beginning of the siege, there were 180 pieces of artillery in Neumünde; of these, about eighty were heavy.<sup>1013</sup> The supplies were limited (see below).

The Neumünde garrison counted a total of 1,548 men in October of 1709. Of these, a few hundred were already sick with dysentery ["rödsot"]. The health situation rapidly deteriorated, because the men were poorly dressed.<sup>1014</sup>

### *Prior to the Siege*

It is not obvious how to determine the starting date of the siege of Neumünde. When the siege of Riga began on October 29/30, 1709, it started to affect Neumünde, too, with Russian troops in the surroundings. Russian troops arrived in close proximity of Neumünde in July of 1710. In his diary, Kagg dated the complete encirclement to July 19.<sup>1015</sup> Tsar Peter's diary mentioned a decision, on an immediate attack, made on July 7/8. According to Ludvig W:son Munthe, the Russian blockade of Neumünde on the land side started in the

<sup>1009</sup> Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet

<sup>1010</sup> Erich Hillebard, *Kort relation om Riga stads så wähl som fästningen Neumündes öfwergång till Moscowiterne, Malmö 20 December 1710*, Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet, pp. 67–71. (Further on, "Hillebard's Report")

<sup>1011</sup> Sallnäs, pp. 75 and 108 and Arfwidsson, *Försvaret*, p. 198.

<sup>1012</sup> Sallnäs, p. 135 and Arfwidsson, *Försvaret*, p. 245.

<sup>1013</sup> Ulfhielm, "Karl XII:s tid", p. 448.

<sup>1014</sup> Arfwidsson, *Försvaret*, p. 246.

<sup>1015</sup> Leonhard Kagg's diary, p. 167.

beginning of February, 1710.<sup>1016</sup> According to the definitions in this study (see Chapter 3), the siege would have begun on October 29/30, 1709, since superior Russian forces then affected normal communication. However, since the Russians did not focus on the conquest of Neumünde until July 7/8, counting the days of siege from the end of October, 1709 would give a false impression of the resilience of the fortress.

After a Russian council of war on July 7/8, 1710, Major General Bouk was sent to Neumünde with a force of 2,000 infantry, and a large body of light cavalry. His orders were to blockade the fortress, build batteries and bring a letter to the garrison commander urging him to surrender.<sup>1017</sup>

Disease and lack of supplies were the major problems in Neumünde. In January of 1710, one man died every day while 300 lay sick. On February 10, Stackelberg wrote to the Council, informing it that despite strict rationing, the supply of food would run out by the end of April.<sup>1018</sup>

In the spring, Stackelberg and the Neumünde garrison got involved in the failed Swedish attempt to resupply Riga. That operation brought food and 700 troops from Sweden as reinforcements (see Chapter 4.11 Riga). When Stackelberg was informed of the surrender of Riga, the newly arrived soldiers from Sweden, previously having camped outside the walls, were called into the fortress.<sup>1019</sup>

### *The siege*

The Russians prepared for a conquest of Neumünde. A bridge was built across Bolderaa to stop Swedish reinforcements, a redoubt was built on Weiden to stop landings, and a large number of armed boats were concentrated behind Magnusholmen to attack landings. New batteries were built on Licentet and Magnusholmen.<sup>1020</sup>

The Russians opened fire with their guns, which forced the Swedish ships still sitting there to move farther out. The Swedish artillery returned fire with great efficiency. After the siege, a Russian officer stated that they had lost more than 600 men to the Swedish artillery on Magnusholmen alone. The Russian artillery failed to inflict any casualties on the Swedish garrison, but it damaged

---

<sup>1016</sup> Ludvig W:son Munthe, Del III:2, p. 533.

<sup>1017</sup> Tsar Peter's diary, p. 341.

<sup>1018</sup> Arfwidsson, *Försvaret*, p. 304 and p. 304, note 17.

<sup>1019</sup> Arfwidsson, *Försvaret*, pp. 360–363.

<sup>1020</sup> Arfwidsson, *Försvaret*, p. 360.

the walls. In the end, the Swedish artillery was largely manned by non-artillery men. This was the source of several accidents.<sup>1021</sup>

The situation in the fortress was soon desperate. Of the reinforcements, almost 300 were dead or sick. To make things worse, the windmill was damaged, and there was no one to repair it. On July 27, there were only fifty-one men in any condition to stand guard.<sup>1022</sup>

On August 1/2, hostages were exchanged and negotiations for a surrender ensued. The Russians signed the surrender document on the 8<sup>th</sup>/9<sup>th</sup>, and Stackelberg signed on the following day. The terms were safe conduct with weapons and property.<sup>1023</sup>

#### *After the siege*

The Swedish garrison marched out three or four days after the surrender. The Swedes then counted less than thirty men in good health and 230 sick.<sup>1024</sup> Of the survivors, very few would ever see their homes again. Carl Adam Stackelberg was one of the few to get away. He was released on the condition he never serve against Russia or any of her allies again. Stackelberg broke that oath and later served as the garrison commander in a Swedish fortress in Germany.<sup>1025</sup>

#### *Neumünde – conclusions*

The following could be concluded about Neumünde:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were strong.
- Lack of drinking water is not mentioned in connection with the siege.

The matter of accessibility can be summarized as below.

**Table 4.20** Neumünde accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	High	Low

Source: See above.

<sup>1021</sup> Hillebard's Report, pp. 69 and 70.

<sup>1022</sup> Arfwidsson, *Försvaret*, pp. 362–364.

<sup>1023</sup> Arfwidsson, *Försvaret*, pp. 365–367.

<sup>1024</sup> Hillebard's Report, p. 70.

<sup>1025</sup> Arfwidsson, *Försvaret*, pp. 365–371.

The attacker's high general accessibility was due to the road network and the control of the Düna River. The defender's general accessibility was high. With control of the Baltic Sea, Swedish ships could come close to Neumünde.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The location on the tip of a large island was not enough to make a significant difference. The defender's local accessibility was low, since there was no sail-in function or protected discharge place there.

The attacker's tactic was blockade, which in the end succeeded. As it turned out, the plague, in reality, defeated the garrison. Stackelberg cannot be burdened with any major process errors.

#### 4.13 PERNAU 1710 – Livonia (today's Pärnu in Estonia)

**Under siege from July 22/23 to August 14/15, 1710. (25 days.) Surrendered.**

##### *Introduction*

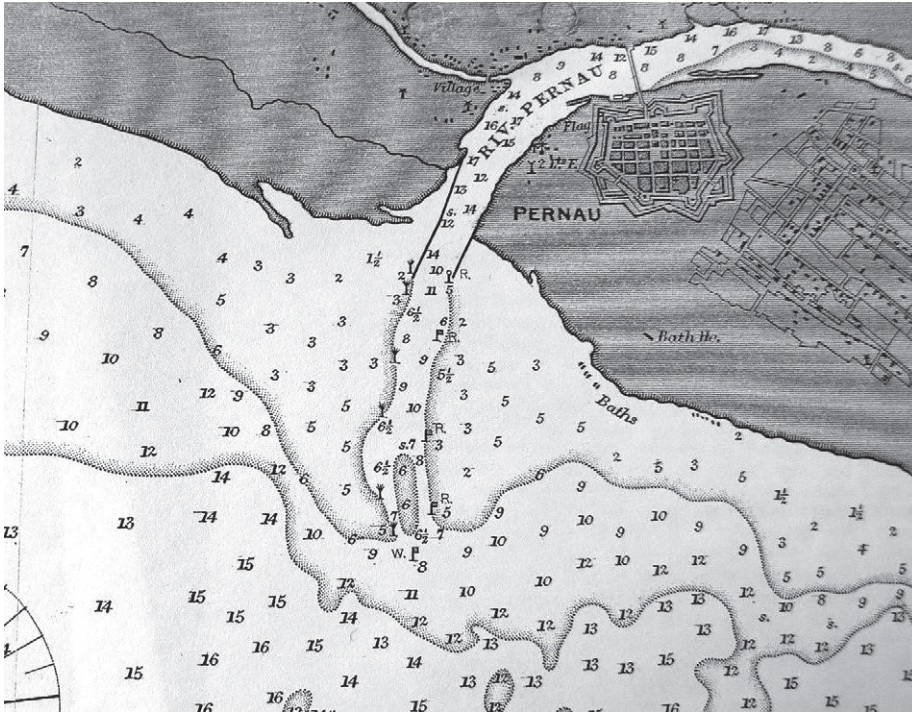
Besieging Riga (see Chapter 4.11 Riga), the Russians, by the end of June, 1710, had sent forces to blockade Pernau.

The first city and castle of Pernau were founded on the right shore of the Pernau River by the bishop of Ösel-Wiek in the middle of the thirteenth century. In 1599, Pernau was captured and razed by the Poles. Later in the century, a new fortified city was built on the left shore. In 1617, the city and the castle were captured by Swedish troops and from then on were under Swedish control. The old fortifications were razed to be replaced by modern ones. The new works were just halfway complete in 1657, when they were blockaded by the Russians. Despite the incomplete works, Pernau could be defended. In 1677, a new design was approved, and then modern fortifications were built around the city.<sup>1026</sup> Ludvig W:son Munthe stressed how important Pernau was to the Swedish postal system.<sup>1027</sup> Most likely, its importance came from ice conditions being better at Pernau than, for example, at Reval.

---

<sup>1026</sup> L. W:son M., "Pernau", in *Nordisk familjebok*, Del 21, (Stockholm 1915), column 508.

<sup>1027</sup> Ludvig W:son Munthe, Del III:2, p. 539.



**Picture 4.23** Pernau. The chart above shows Pernau in 1891. The basic conditions then were no different from 1710. It can be seen that the location allowed for an army to block the entrance. The chart also shows the difficult conditions for reaching Pernau by ship. There was a narrow passage that had to be negotiated on the way into the city. (Source: *Pernau Roadstead*, 1891, British Library, System number 004910425.) (Detail.)

The picture above is from 1891, but is largely relevant to conditions in 1710. The fortified city of 1710 is the area by the bridge on the right side of the picture. The water in the lower part of the picture is the Baltic Sea. Swedish forces could thus reach the proximity of Pernau by sea. Russian forces depended on land transport, as long as the Swedish Navy controlled the Baltic Sea. Older maps show a seemingly navigable stretch of rivers from Lake Peipus, via Lake Võrtsjärv, to Pernau<sup>1028</sup>. If that stretch really was navigable, it would have increased Russian accessibility to Pernau.

The picture above shows that the mouth of the river was army blockable. Thus, Pernau with a very small margin was wrongly located for direct access to the sea. Even if a Swedish resupply operation managed to get ships to the

<sup>1028</sup> See for example *Estland och en del af Lifland*, nr 61b, Volume 32 Ryssland, detaljkartor, Förteckning 403 Utländska kartor 1632–1931, Krigsarkivet.





Ludvig W:son Munthe<sup>1032</sup> and even more briefly by Otto Sjögren<sup>1033</sup>. The siege is briefly mentioned in Tsar Peter's diary.<sup>1034</sup> Russian researchers Grigorjev and Bespalov dedicated just a few lines to the siege.<sup>1035</sup>

*The garrison, artillery and supplies*

Financial Lord Lieutenant [“ekonomiståhållare”] Gustaf Adolf Strömfelt was the highest commander in Pernau. Lieutenant Colonel Jakob Hinrik von Schwengeln was in command of the troops.<sup>1036</sup> The core regiments of the garrison were von Schwengeln's hired Livonian infantry regiment, with a list strength of 1,000 men, and Colonel Magnus Wilhelm Nieroth's hired Livonian infantry regiment with a list strength of 800 men. A contingent of sixty-four recruits for the Nyland Infantry Regiment, heading for Riga, augmented the garrison, since they could not go to their besieged destination. The fact that the senior Nieroth was under the command of von Schwengeln created a troublesome atmosphere.<sup>1037</sup> The garrison also had some cavalry. One hundred mounted men were sent there from Reval in the end of 1709, and von Schwengeln set up fifty dragoons in Pernau. In February of 1710, a roll call gave strength as 1,690 corporals and soldiers.<sup>1038</sup> Captain Jakob Pettersson was in charge of artillery.<sup>1039</sup>

The Artillery Plan of 1695 contained twenty-eight 24-pounders and twenty-eight 18-pounders, distributed with four cannons of each caliber on each of the seven bastions.<sup>1040</sup> At the beginning of the siege, there were 121 government-owned artillery pieces in Pernau. There could also have been some artillery owned by the city,<sup>1041</sup> which was probably the case, since the Russians captured 183 cannons of iron, fourteen of bronze and four howitzers after the siege.<sup>1042</sup> However, it seems that von Schwengeln lacked 18-pounder and 12-pounder cannons. On May 21, 1710, he wrote a letter to the War College [“Krigskollegium”] requesting, among other materiel, twenty-four 18-pounders, ten 12-pounders, eight 6-pounders, 200 grenades of 60 pounds, 200 gre-

<sup>1032</sup> Ludvig W:son Munthe, Del III:2, pp. 539–542.

<sup>1033</sup> Sjögren, *Karl XII*, p. 622.

<sup>1034</sup> Tsar Peter's diary, pp. 311 and 342–344.

<sup>1035</sup> Grigorjev and Bespalov, p. 179.

<sup>1036</sup> Arfwidsson, ”Pernau”, p. 179.

<sup>1037</sup> Sallnäs, p. 108 and 110 and Arfwidsson, ”Pernau”, pp. 149 and 157.

<sup>1038</sup> Arfwidsson, ”Pernau”, pp. 156–157.

<sup>1039</sup> Ulfhielm, ”Karl XII:s tid”, p. 449.

<sup>1040</sup> Bestyckningsplan 1695.

<sup>1041</sup> Ulfhielm, ”Karl XII:s tid”, p. 449.

<sup>1042</sup> Tsar Peter's diary, p. 344.



nades of 40 pounds, 22,020 hand grenades, plus 1,000 rixdollars in silver intended for the artillery laboratory.<sup>1043</sup> Regarding supplies, see below.

### *Prior to the siege*

On June 27, Russian Lieutenant General Baur was dispatched from the siege of Riga with six regiments of dragoons. His task was to blockade Pernau.<sup>1044</sup> Grigorjev and Bepalov added the information that the force also brought a number of 12-pounder cannons, to keep Swedish ships from reaching the city.<sup>1045</sup>

In the summer of 1709, the situation of supply and finance in Pernau had become difficult. There were 871 homesteads [“hakar”] that were supposed to pay taxes, of these 544 had been ravaged by the Russians since 1704 and could no longer contribute. Strömfelt tried to get the Defense Commission to arrange for deliveries of supplies and/or cash, but to little avail. The first relief came in June of 1710, with two ships bringing 1,200 barrels of rye and some meat. These ships had been destined for Riga but, on their own accord, decided to go to Pernau, since they could not get into Riga (see Chapter 4.11 Riga). In his article on Pernau, Arfwidsson implied (without stating it clearly) that these ships also brought the plague to Pernau. It is not clear exactly when, but Nieroth left Pernau for Reval, probably before the arrival of the Russians.<sup>1046</sup>

### *The siege*

According to Tsar Peter’s diary, Baur and his dragoons began the blockade of Pernau on July 22/23.<sup>1047</sup> With the Russians arriving, Strömfelt and many of the civil servants left the city for Stockholm, leaving von Schwengeln as the highest in command.<sup>1048</sup>

The following weeks were of a story of the plague killing the garrison and the burghers, with von Schwengeln trying to keep up the defensive spirit. On August 11, a council of war met. Von Schwengeln read a demand from Bauer to surrender, dated August 10. In the city, forty-seven burghers and nineteen apprentices were alive. In the garrison, sixteen men of the artillery were well, Nieroth’s regiment had counted forty-nine well on the day before, and

---

<sup>1043</sup> Kreüger, p. 67.

<sup>1044</sup> Tsar Peter’s diary, p. 311.

<sup>1045</sup> Grigorjev and Bepalov, p. 179.

<sup>1046</sup> Arfwidsson, “Pernau”, pp. 135, 136, 152 and 178.

<sup>1047</sup> Tsar Peter’s diary, p. 343.

<sup>1048</sup> Arfwidsson, “Pernau”, p. 179.

von Schwengeln's own regiment counted ninety-one.<sup>1049</sup> Bauer had previously threatened von Schwengeln, claiming that there would be no surrender on conditions, once the approaching Russian infantry and artillery had arrived. The council of war found it reasonable to surrender, and on the 14<sup>th</sup>/15<sup>th</sup>, the surrender documents were signed.<sup>1050</sup>

#### *After the siege*

After the surrender, the survivors of the garrison marched out on August 15/16. The estimate of healthy survivors varies between eighty and 120. All survivors, except the artillerymen, entered Russian service.<sup>1051</sup> Arfwidsson pointed out that Nordberg gave the number of surviving Swedish soldiers as 800, which he considered to be an error. This error spread to Ludvig W:son Munthe and also to Otto Sjögren. Ludvig W:son Munthe and Otto Sjögren also referred to Nordberg's claim of a stubborn defense with several sallies<sup>1052</sup>, which has no support in other texts.

On August 17, two ships carrying 1,000 barrels of rye and barley, other food and 5,310 rixdollars in silver arrived at Pernau. The ships had left Stockholm on August 1. Finding that Pernau had surrendered, the ships sailed for Reval.<sup>1053</sup>

#### *Pernau – conclusions*

The following could be concluded about Pernau:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were strong.
- Lack of drinking water is not mentioned in connection with the siege.

The matter of accessibility can be summarized as below.

**Table 4.21** Pernau accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

<sup>1049</sup> Arfwidsson, "Pernau", p. 185.

<sup>1050</sup> Tsar Peter's diary, p. 343.

<sup>1051</sup> Arfwidsson, "Pernau", pp. 191–192.

<sup>1052</sup> Ludvig W:son Munthe, Del III:2, pp. 539–540 and Otto Sjögren, *Karl XII*, p. 622.

<sup>1053</sup> Arfwidsson, "Pernau", p. 177.

The attacker's high general accessibility was due to the road network. The defender's general accessibility was low, because army forces could block the Pernau River.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The defender's local accessibility was low, since there was no sail-in function or protected discharge place there.

The attacker's tactic was blockade, which in the end succeeded. As it turned out, the plague, in reality, defeated the garrison. Von Schwengeln cannot be burdened with any major process errors.

#### 4.14 ARENSBURG 1710 – Ösel (Kuressaare in today's Estonia)

**Under siege from:**

**First siege: March 1/2 to March 7/8, 1710. (7 days.) Held.**

**Second siege: September 14/15 to September 14/15, 1710 (<1 day). Occupied.**

##### *Introduction*

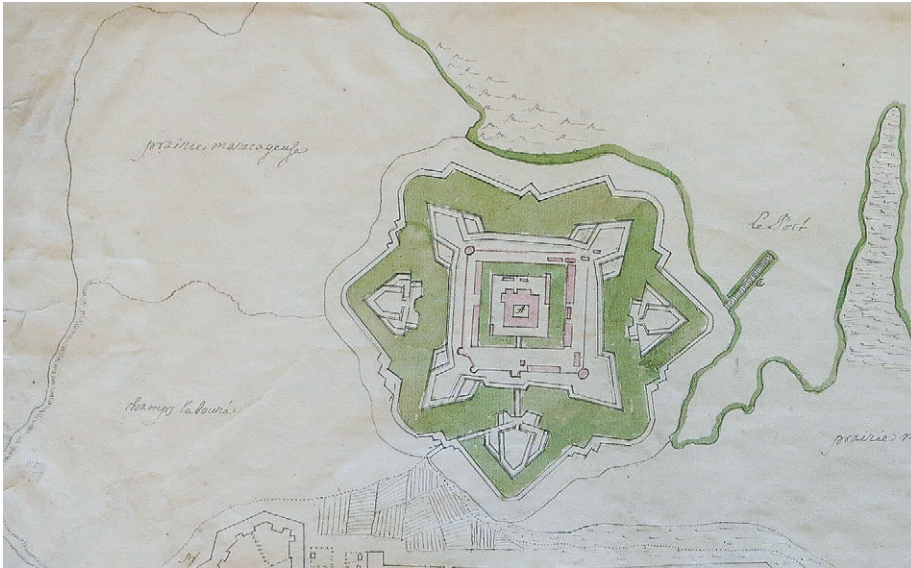
Arensburg was under siege twice in 1710, once in March and once in September. For practical reasons, both sieges are treated here under the same heading.

In the thirteenth century, the island of Ösel (Estonian: Saaremaa) was conquered by Livonian German crusaders. Ösel later became an independent bishopric. When threatened by the Russians in 1558, the bishop sold Ösel to the Danish king. In 1645, the island fell to Sweden in the Peace of Brömsebro. Arensburg Castle became the most important fortification on the island, on a site where the remains of an eleventh-century wooden fortification have been found.<sup>1054</sup> There were only two places suitable for harbors on the island, Arensburg was one.<sup>1055</sup>

---

<sup>1054</sup> Stephen Turnbull, *Crusader Castles of the Teutonic Knights (2): The stone castles of Latvia and Estonia 1185-1560*, (Oxford 2004), p. 39.

<sup>1055</sup> A. H-ld and L. W:son M, "Ösel", in *Nordisk Familjebok*, Del 34, (Stockholm 1922), columns 184 and 185.



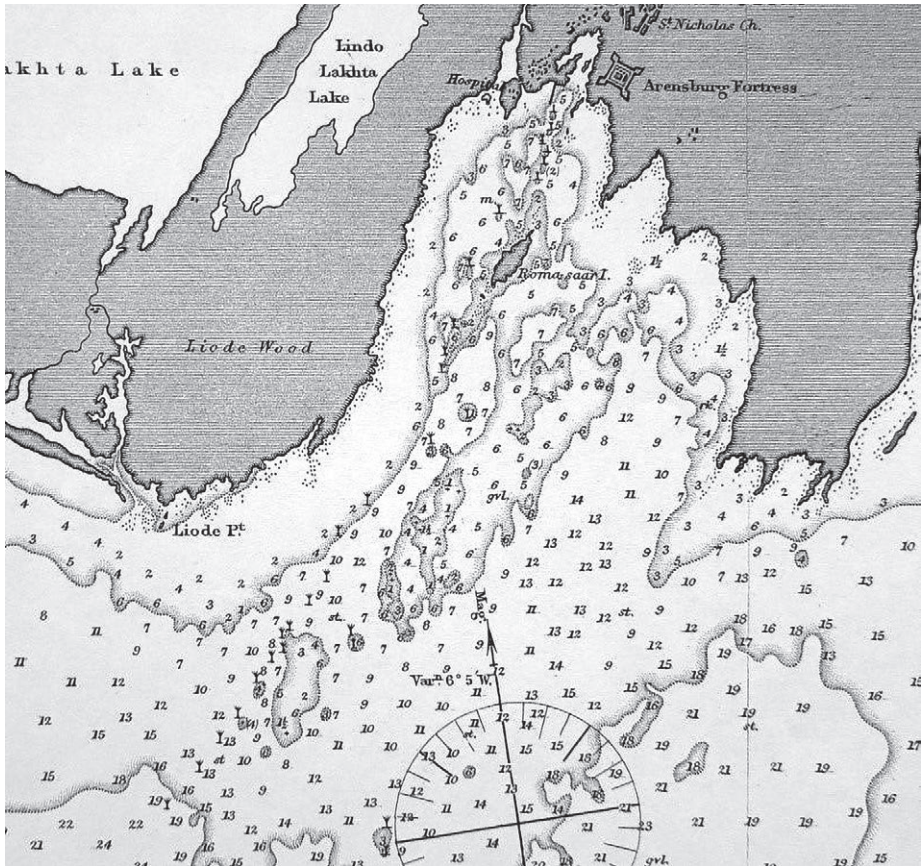
**Picture 4.25** The picture above shows Arensburg Castle in 1700, an old castle in the center with a bastioned line and three ravelins around it. (Source: *Östersjöprovinserna. Arensburg*, nr 21, Volume 2 Arensburg, 28 *Östersjöprovinserna (de baltiska staterna)*, Förteckning 406 Utländska stads- och fästningsplaner 1550–1989, Krigsarkivet.) (Detail.)

Arensburg Castle was fundamentally a medieval construction, adjacent to a small city without walls. During the seventeenth century, the castle had been modernized. Construction of the new works was begun in earnest in 1684. A wall with four bastions and three ravelins was built around the medieval castle. Outside the wall there was a moat and a covered way. Up until 1704, maintenance work was insufficient, but under the leadership of the governor and the commander of the castle, it had been put into good condition. In 1710, the Arensburg works had good defensive properties.<sup>1056</sup>

The narrow sounds, which allowed for access from the Estonian mainland to the island of Ösel, created a special situation. These sounds could be negotiated with smaller crafts, but they could also be blocked by naval forces. Thus, the Russian ability to reach the island hinged on the Swedish ability and propensity to block the sounds with naval forces, as long as ice did not hinder sailing. Ice would reverse the situation. The Swedish navy would be unable to sail and the Russians would be able to march across the ice.

<sup>1056</sup> Ludvig W:son Munthe, Del III:1, p. 276 and Del III:2, pp. 218, 221, 240, 251, 275, 276, 286 and 543.





**Picture 4.26** The map above shows the location of Arensburg Castle, on the southern side of the island of Ösel. The chart is from 1879, but largely represents the conditions in 1710. The fortress is seen in the upper center of the chart as a four-point star. The chart indicates a severe problem in resupplying Arensburg under the eyes of a determined siege force. The fortress is situated near, but not on, the water. Navigation up to the fortress was complicated, with narrow lanes not suitable for larger ships. (Source: Arensburg, 1879, British Library, System number 004793473.) (Detail.)

The fortress of Arensburg was located with access to open sea. The exact nature of that access seems to have changed over time. Illustrations showing the medieval castle render a construction sitting with one side directly on the water.<sup>1057</sup> There are also later drawings, from the seventeenth century, showing Arensburg on the sea.<sup>1058</sup> In 1869, there was a stretch of land separating the fortress

<sup>1057</sup> Stephen Turnbull, *Crusader Castles of the Teutonic Knights (2): The stone castles of Latvia and Estonia 1185-1560*, (Oxford 2004), p. 40.

<sup>1058</sup> Compare maps 5, 12b and 13, Volume 2 Arensburg, 28 Östersjöprovinserna (de baltiska staterna), Förteckning 406 Utländska stads- och fästningsplaner 1550-1989, Krigsarkivet.

from open water (see map above). These details could be of interest, but are not of crucial importance, since difficult navigation on the last stretch to the fortress, and the lack of a protected discharge place, would make resupply by sea impossible in any event. Since it was a large island, tactical conditions would resemble those of plane land. The fortress made no use of terrain features to enhance its defensive qualities, with the exception of the one side facing the water. No shortage of drinking water is mentioned.



**Picture 4.27** The map above gives a general idea of the geography around Ösel. Arensburg Castle is marked with a white star. The large island is Ösel (Saaremaa), the smaller island to the right of Ösel is Moon (Muhu), and the island above Ösel is Dagö (Hiiuma). The Estonian mainland is seen in the right of the picture. The lower right has an artistic decoration. (Source: *Der Arensburgsche Kreis oder die Provinz Öesel* [...], nr 072, Volume 32 Ryssland, detaljkartor, Förteckning 403 Utländska kartor 1632–1931, Krigsarkivet.) (Detail.)

### *Earlier research and sources*

An important Swedish secondary source to the 1710 sieges of Arensburg is Fredrik Arfwidsson's article "Förlusten av Ösel 1710" [The Loss of Ösel 1710] in *Karolinska förbundets årsbok* 1942.<sup>1059</sup> Fredrik Arfwidsson also covered Ösel and Arens-

<sup>1059</sup> Fredrik Arfwidsson, "Förlusten av Ösel 1710", in *Karolinska förbundets årsbok* 1942. pp. [192]–209. (further on, "Arfwidsson, Ösel")

burg in his dissertation of 1936, *Försvaret av Östersjöprovinserna 1708–1710*.<sup>1060</sup> The loss of Arensburg is touched upon in Ludvig W:son Munthe's work.<sup>1061</sup> Tsar Peter's diary briefly describes the September events, but lacks details.<sup>1062</sup> Grigorjev and Bepalov dedicated two lines to the capture of Arensburg.<sup>1063</sup>

Primary Swedish sources on the September siege are lacking, since the island by then had been deserted by the Swedish authorities.

### *The garrison and artillery*

Provincial Governor Engelbrekt Mannerburg was in total command of the defense of Ösel. Captain Johan Appelbom, temporarily made lieutenant colonel, was in command of the castle.

On February 27, 1710, the garrison of Arensburg counted one company of 100 men. The company was supplemented by two companies of 100 men each, coming from the Ösel countryside. Officers had been recruited from the local nobility. There were also some thirty cavalry on the island, new recruits for the Ösel Noble Banner. This force was augmented by armed burghers, farmers, tenant farmers and farmhands [“drängar”].<sup>1064</sup> It is unclear which unit the core company came from. The presence of Major Joachim Henrik von Wettberg, then serving in Carl Adam Stackelberg's Livonian infantry regiment, infers that it may have come from this regiment<sup>1065</sup>.

The artillery force consisted of forty-eight men.<sup>1066</sup> They were at first under the command of Second Lieutenant Reinhold Krankenhagen, who later fell ill and was replaced by the artillery clerk [“tygvaktare”], Peter Simming.<sup>1067</sup>

Arensburg is one of the few places where disposition of the forces is well-documented. The professional soldiers were to man one bastion and one ravelin, with the adjacent walls; the burghers, one bastion; the nobility, tenant farmers, other Germans and farmhands, two bastions. The farmers were to defend the walls facing the city. Two of the ravelins were left undefended.<sup>1068</sup>

<sup>1060</sup> Fredrik Arfwidsson, *Försvaret av Östersjöprovinserna 1708–1701*, Del I – II:1, (s. l. 1936), pp. 279–284. (Further on, ”Arfwidsson, *Försvaret?*.”)

<sup>1061</sup> Ludvig W:son Munthe, Del III:2, pp. 542–544.

<sup>1062</sup> Tsar Peter's diary, p. 345.

<sup>1063</sup> Grigorjev and Bepalov, p. 179.

<sup>1064</sup> Arfwidsson, *Försvaret*, pp. 280–281.

<sup>1065</sup> Arfwidsson, *Försvaret*, pp. 281 and Lewenhaupt, Del 2, ”von Wettberg, Joachim Henrik”, p. 753.

<sup>1066</sup> Ulfhielm, ”Karl XII:s tid”, p. 451.

<sup>1067</sup> Arfwidsson, *Försvaret*, p. 280.

<sup>1068</sup> Arfwidsson, *Försvaret*, p. 282, note 3.



Swedish sources indicate that the artillery counted fifty-five cannons and a few mortars.<sup>1069</sup> According to Tsar Peter's diary, the Russians captured sixty-six cannons, four mortars and 210 barrels of gunpowder in Arensburg.<sup>1070</sup>

### *The March siege*

On February 16, a Russian force, which has been estimated at a strength of 1,000 to 4,000 men, left the Russian siege of Riga. They were under the command of Brigadier Prince Miserski, one of General Bauer's subordinates. At 2 o'clock in the morning of the 28<sup>th</sup>, they had reached the Estonian side of the Moon Strait. On March 2, the Russians arrived at Arensburg, where Mannerburg was urged to surrender. He refused and the 250–300 man garrison prepared for defense. A lively cannonade was launched against Russians in sight. The Russians then left the vicinity of Arensburg and started to ravage the island. On the 7<sup>th</sup>, a storm blew up and the weather got warmer. The Russians now feared that the bridge of ice would disappear, so they left the island.<sup>1071</sup>

### *Prior to the September siege*

On July 12, 1710, Mannerburg wrote to the Defense Commission, informing it that the plague was ravaging Ösel.<sup>1072</sup> Among the victims was the commander of Arensburg Castle, Lieutenant Colonel Johan Appelbom. With him, much of the defensive ability at Arensburg died.<sup>1073</sup> The Defense Commission named Lieutenant Colonel Otto Magnus Wolffeldt as Appelbom's successor. When Wolffeldt arrived in Ösel on August 10, he found a deserted island. Those who were not dead had fled. He drew the conclusion that the situation was hopeless, and returned to Stockholm. Mannerburg had left Ösel for Dagö about a week before August 10.<sup>1074</sup>

When Wolffeldt left, Arensburg might have been deserted, but there were two sets of Swedish military assets on and around the island. One was sick soldiers from Riga and Neumünde, who were brought to Ösel by Swedish ships. They were on the southern tip of the island, led by Lieutenant Colonel Lorentz von Lauterbach. On August 13, the force counted 1,012 men.<sup>1075</sup> Sick men

---

<sup>1069</sup> Ulfhielm, "Karl XII:s tid", p. 451.

<sup>1070</sup> Tsar Peter's diary, p. 345.

<sup>1071</sup> Arfwidsson, *Försvaret*, pp. 279–284.

<sup>1072</sup> Ludvig W:son Munthe, Del III:2, p. 544.

<sup>1073</sup> Ludvig W:son Munthe, "Johan Appelbom", in *Svenskt biografiskt lexikon*, Del 2, (Stockholm 1920), p. 92.

<sup>1074</sup> Arfwidsson, "Ösel", pp. 195–196.

<sup>1075</sup> Lauterbach to the Defense Commission, August 19, 1710, Volume 14, *Avskriftssamlingen*, Krigsarkivet, p. 320.

might not look like a military asset, but Arfwidsson remarked that a number of them could be counted on to recover with time and, thus, be able to form a defense. The second asset was Lieutenant [“kapten”] Krook’s flotilla, which had brought the men to the island. For a closer presentation of that unit, see Chapter 4.11 Riga. There was also a ship loaded with provisions.<sup>1076</sup> None of the Swedish ships were positioned to block a Russian invasion of Ösel. In a letter to the Defense Commission of August 18, 1710, vice governor of Estonia, Friedrich Pattkull, commented that it could be important to station a few brigantines by Dagö, as he previously had pointed out to the Defense Commission as well as to Vice Admiral Wattrang, commander of the Swedish flotilla in the Gulf of Finland.<sup>1077</sup>

Tsar Peter’s diary contains very little information on Russian activities prior to the siege of Arensburg. It simply states that when Lieutenant General Bauer had captured Pernau, he proceeded to Reval, while dispatching a considerable force under the command of Major Ornheimon to the island of Ösel.<sup>1078</sup> Judging from events, Major Ornheimon must have made a considerable effort to gather boats and small ships locally, to somehow get from the mainland to the island of Ösel. A letter from Lieutenant Colonel Lauterbach to the Defense Commission, dated August 19, 1710, states that the enemy had gathered 200 to 300 boats in the sound by the island of Moon, which provides insight into Russian proceedings<sup>1079</sup>.

### *The September siege*

The story of the siege of Arensburg in September of 1710 is the story of Major Ornheimon and his men landing at Ösel and capturing the fortress of Arensburg on September 15.<sup>1080</sup> The Russians then sent a captain to von Lauterbach, informing him that he and his soldiers had to leave Ösel at once, otherwise they would be made prisoners of war, or would be massacred. The Swedish flotilla under Lieutenant [“kapten”] Krook then took von Lauterbach and his now 730 men aboard. The ships arrived at Sandhamn outside Stockholm on September 24.<sup>1081</sup>

<sup>1076</sup> Arfwidsson, “Ösel”, pp. 201–202 and 207–208.

<sup>1077</sup> Pattkull to the Defense Commission, August 18, 1710, Volume 14, Avskriftssamlingen, Krigsarkivet, p. 25.

<sup>1078</sup> Tsar Peter’s diary, p. 345.

<sup>1079</sup> Lauterbach to Defensionskommissionen, August 19, 1710, Volume 14, Avskriftssamlingen, Krigsarkivet, p. 320.

<sup>1080</sup> Tsar Peter’s diary, p. 345, Grigorjev and Bespalov, p. 179 and Arfwidsson, “Ösel”, p. 207.

<sup>1081</sup> Arfwidsson, “Ösel”, p. 208.

In his work on the history of Swedish fortification, Ludvig W:son Munthe presented a slightly different picture of the development, with Wolffeldt remaining until September 13, then handing over the keys to Arensburg Castle to the Russians, and subsequently leaving for Helsingfors with the remnants of the garrison.<sup>1082</sup> Arfwidsson had strong reservations about Munthe's description of the fall of Arensburg.<sup>1083</sup> It can, however, be noted that a Russian report related in Tsar Peter's diary claimed that there was a garrison in Arensburg. The report further claimed that the garrison surrendered when informed of the fall of Riga and Pernau.<sup>1084</sup> The general lack of any mention of a surrendering garrison in Swedish sources makes Arfwidsson's version more credible.

#### *After the siege*

After the Russians captured the island, they were not certain of their ability to hold it. In April 1711, they destroyed parts of the castle and left the island. Ösel then became no man's land for a few years. There were Swedish plans to reoccupy Ösel, but the plans were finally shelved in 1712.<sup>1085</sup> After the fall of Arensburg, only Reval remained for the Swedish Empire in the east.

#### *Arensburg – conclusions*

The following could be concluded about Arensburg:

- It had a small garrison, under 1,000 men.
- The works were strong.
- Lack of drinking water is not mentioned in connection with the siege.

The matter of accessibility is a clear example of ice or not making a difference, therefore, Arensburg accessibility is evaluated below with and without ice.

**Table 4.22** Arensburg accessibility

	General accessibility No Ice	Local accessibility No Ice	General accessibility Ice	Local accessibility Ice
Russian (attacker)	Low	High	High	High
Swedish (defender)	High	Low	Low	Low

Source: See above.

<sup>1082</sup> Ludvig W:son Munthe, Del III:2, p. 544.

<sup>1083</sup> Arfwidsson, "Ösel", p. 208, note 4.

<sup>1084</sup> Tsar Peter's diary, p. 345.

<sup>1085</sup> Ludvig W:son Munthe, Del III:2, pp. 565–566 and 586.

The attacker's high general accessibility was decided by ice conditions. With no ice, the Swedish navy could dominate the waters, and the general attacker's accessibility was low. With ice, the Swedish navy was neutralized, and there was an ice bridge, creating a high general attacker's accessibility. For the defender's general accessibility, the reverse conditions applied.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. The defender's local accessibility was low, regardless of the ice conditions, since there was no sail-in function or protected discharge place there.

In the first siege, the attacker's tactic was to break the defender's morale, which failed. In the second siege, the question of the attacker's tactics gets more complicated. It seems the attackers walked into an undefended fortification. Following the definitions suggested in Chapter 3, the tactic would have been "storming unbreached walls". The disadvantage here is that this view calls for designating an unopposed walk as a storm. It seems more reasonable to claim that, in this rare case, the attackers applied no tactics at all, since they met no opposition.

Referring to the discussion in Chapter 1, where it was stated that undefended fortifications would not be included in this study, the second attack on Arensburg creates a borderline case. Since the fall of Arensburg needs to be presented, for a complete picture of Swedish defensive fortress warfare 1702-1710, it is still included here.

#### 4.15 REVAL 1710 - Estonia (today's Tallinn in Estonia)

**Under siege from approximately August 10/11 to September 28/29, 1710. (49 days). Surrendered.**

##### *Introduction*

While the Russians were besieging Riga (see Chapter 4.11 Riga), they were also preparing for a conquest of Reval, in the Swedish province of Estonia. In the late summer of 1710, these preparations turned into a siege.

In 1219, Danish King Valdemar II founded a fortress on Domberget, a sizable mountain at the center of today's Tallinn. The Danes occupied large parts of Estonia, but sold most of the land to the Teutonic Order in 1346; Reval was included in that deal. When the Teutonic State began to break apart, Reval, with other parts of today's Estonia, turned to Sweden in 1561 and was admitted

under the Swedish Crown. During the Swedish war with Russia in 1570–1595, Reval was attacked twice, but was able to be defended.<sup>1086</sup>



**Picture 4.28** The photograph above shows the medieval western part of the Reval defenses. The flat ground in front of the walls created an example of high attacker's local accessibility, in other words, it was not difficult to reach the walls. The photograph was probably taken in the 1940s. (Source: Armin Tuulse, *Borgar i Västerlandet* (Stockholm 1952), Plate ["plansch"] 55. Photographer unknown.)

Reval was situated on the Bay of Reval, directly connected to the Gulf of Finland and on to the Baltic Sea. Thus, Swedish forces could reach Reval by sea. As can be seen in the picture above, there was a stretch of land separating city walls from the sea. As such, there was no sail-in function, and the discharge places could be disturbed by enemy siege force artillery. That last statement is not uncontroversial. It hinges on the typography around the shores of the Bay of Reval at the time, the capability of artillery, both on the attacker's and defender's side, and the attacker's field work construction ability. The basic geographical fact is that the Bay of Reval is about six by six kilometers large. However, any Swedish discharge would need to be carried out on a stretch of about one kilometer, north of the city. Note that the map below is oriented with north at the

<sup>1086</sup> L. W:son M., "Reval", in *Nordisk familjebok*, Del 23, (Stockholm 1916), columns 44–45.

bottom. In 1642–1651, a 15-pound cannonball could reach 2,400 meters in the extreme.<sup>1087</sup> The issue would then become whether or not the besieger could find or build defensible battery emplacements 1,400 meters out from a feasible discharge area. The assumption here is that he could. Supporting this assumption is the fact that there would be different demands on artillery fire from the fortress compared to fire from the siege force. The siege force would only need to shoot to make it unsustainable for the defenders to carry out discharge work. To destroy protective walls and silence siege force batteries, the fortress would need to fire shots that damaged earthen works, calling for shorter distances to be effective. Thus, it can be claimed that Reval lacked a protected discharge place.

When Reval became Swedish, the defensive works were largely obsolete. Up to 1609, Swedish fortifiers worked to modernize the defenses. They managed to do so, to a certain extent, but the works were substandard during most of the seventeenth century.<sup>1088</sup> Defensive works around Reval were divided into two types: ones for which the city was responsible and ones for which the Swedish Crown was to pay. During the prewar period, construction proceeded utterly slowly, and the city works were the most effected. When the war broke out, work was faster. However, by 1710, the fortifications were far from complete, so they were augmented by makeshift arrangements.<sup>1089</sup> Reval forms a difficult case in judging if the works were strong or weak. A fortress should be categorized by its weakest links, which is why they must, in the end, be considered weak.

---

<sup>1087</sup> H. C. B. Rogers, *Artillery Through the Ages* (London 1971), p. 43.

<sup>1088</sup> L. W:son M., "Reval", in *Nordisk familjebok*, Del 23, (Stockholm 1916), columns 46–47.

<sup>1089</sup> Ludvig W:son Munthe, Del III:2, pp. 540–541.





**Picture 4.29** Reval and the Bay of Reval in 1710. The fortified city of Reval is in the center of the picture. In the upper right-hand part of the city, the mountain Domberget, on which the castle was built, can be distinguished. (Source: [no title ["utan titel"] Reval], nr 038, Volume 40 Reval, 28 Östersjöprovinserna (de baltiska staterna), Förteckning 406 Utländska stads- och fästningssplaner 1550–1989, Krigsarkivet.) (Detail.)

### Earlier research and sources

The most important Swedish source on the siege is an account written by Lieutenant Colonel Fromholdt Rutenschiöld, a participant in the defense of Reval. The title was "Fromholdt Rutenschiölds berättelse om Revals inneslutning och kapitulation 1710" [Fromholdt Rutenschiöld's Report on the Blockade and Surrender of Reval in 1710] published by Fr. Rudolf Antoni in *Karolinska förbundets årsbok*<sup>1090</sup>.

The siege of Reval has been covered by two books in German. The first was written by W. Greiffenhagen, and then edited and published in Estonia in 1910 by the city's archivist O. Greiffenhagen. It was named *Die Belagerung*

<sup>1090</sup> Fr. Rudolf Antoni, "Fromholdt Rutenschiölds berättelse om Revals inneslutning och kapitulation 1710", *Karolinska förbundets årsbok* 1913, pp. 201–222. (Further on, "Rutenschiöld March 20, 1711")



und Kapitulation Revals im Jahre 1710<sup>1091</sup> [The Siege and Surrender of Reval in the year 1710]. The second, Stefan Hartmann's *Reval im Nordischen Krieg* [Reval in the Nordic War], came in 1973<sup>1092</sup>. The siege is also covered in Tsar Peter's diary<sup>1093</sup> and in Ludvig W:son Munthe's work on the history of Swedish fortification<sup>1094</sup>.

In Estonian, there are two modern works, A.Traat, *Liivi- ja Eestimaa kapitulatsioonaktid aastast 1710*, lk 120 and Aleksander Loit, *Appihüüd põrgust. Ümberpiiratud Tallinna viimased päevad Rootsi võimu all 1710*, Tuna 2010/3, lk 20–36, where the latter is based on a wide variety of sources, including Swedish.

Among the original documents, Vice Admiral Wattrang's journal (see Chapter 4.16 Viborg) is still interesting, since he cruised the Gulf of Finland at the time of the siege. A substantial number of letters from Vice Governor of Estonia Friedrich Pattkull, and previously mentioned Lieutenant Colonel Fromhold Rutenschiöld to the Defense Commission, are preserved<sup>1095</sup>.

### *The garrison and artillery*

Vice Governor of Estonia and Major General of the Cavalry Friedrich Pattkull was the highest commander in Reval. Pattkull had resigned from military service in June of 1706 and was promoted to major general on his resignation.<sup>1096</sup>

The descriptions of the strength of the garrison are compared below. The Sallnäs column, from his work on Swedish regiments in the Great Northern War, gives the list strength of the units. The Pattkull column is based on a primary source, and the Greiffenhagen column is from a secondary source, without reference to an original document.

<sup>1091</sup> W. Greiffenhagen, edited and published by O. Greiffenhagen, *Die Belagerung und Capitulation Revals in Jahre 1710* (Reval 1910). (Further on "Greiffenhagen".)

<sup>1092</sup> Stefan Hartmann, *Reval im Nordischen Krieg* (Bonn-Bad Godesberg 1973). (Further on "Hartmann".)

<sup>1093</sup> Tsar Peter's diary, pp. 349–355.

<sup>1094</sup> Ludvig W:son Munthe, *Del III:2*, pp. 540–542.

<sup>1095</sup> Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, *Avskriftssamlingen*, Krigsarkivet. (Further on "Pattkull" for Pattkull's letters and "Rutenschiöld" for Rutenschiöld's letters, pages as in the copy book.)

<sup>1096</sup> Lewenhaupt, *Del 2*, "Patkull, Didrik Fredrik", p. 500.

**Table 4.23** The Reval garrison according to various sources

<b>Commander (Type of unit)</b>	<b>Sallnäs<sup>1096</sup></b>	<b>Pattkull<sup>1097</sup></b>	<b>Greiffenhagen<sup>1098</sup></b>
	General	14.04.1710	July of 1710
Major General Hans Henrik von Liewen (Hired Livonian infantry battalion)	450	890	930
Major General Magnus Wilhelm Nieroth (Hired Livonian infantry regiment)	800	-	-
Colonel Bogislaus von der Pahlen (Hired Livonian infantry regiment)	1,000	1,086	1,153
Colonel Bernhard Johan Mellin (Estonian infantry regiment)	1,000	907	656
The City Major J. C. von Hüene (Hired battalion)	454	454	400
F. Wachtmeister (Estonian Noble Banner, hired)	..	542	236
Colonel J. H. von Tiesenhausen (Cavalry regiment)	800	421	316
Officers servants	-	227	-
Artillery	..	186	-
<b>Total, regular troops</b>	<b>4,504</b>	<b>4,713</b>	<b>3,691</b>

Source: See the references for each column.

There were also irregulars in the garrison. Greiffenhagen described them as a 100-man city militia, at least 100 men of the Schwarzenhäupter city guild, and eight burghers' companies, for a total of 400–500 men.<sup>1100</sup> Since 1700, the artillery commander was Major Johan Leonhard Kirstein.<sup>1101</sup> Swedish reinforcements arrived during the siege (see Table 4.24 below for an overview).

It is difficult to estimate the total civilian population of Reval at the beginning of the siege. Greiffenhagen claimed that there were 10,000 inhabitants in 1708<sup>1102</sup>.

The total artillery inventory is unclear, as there was both Swedish government and city artillery on the walls. After the Reval surrender, the Russians captured forty bronze cannons, ten mortars and four howitzers in the city works. The corresponding figures for the government works were seventeen bronze

<sup>1097</sup> Sallnäs, pp. 82, 108, 109 and 113. The commander's ranks and first names are according to Lewenhaupt (1977).

<sup>1098</sup> Pattkull, *Förslag på Garnizonen och Troupperna i Estland och uti Staden Reval*, Pattkull, April 14, 1710, s. p. [245].

<sup>1099</sup> Greiffenhagen, pp. 22–23.

<sup>1100</sup> Greiffenhagen, p. 23.

<sup>1101</sup> Ulfhielm, "Karl XII:s tid", p. 450.

<sup>1102</sup> Greiffenhagen, p. 17.

cannons, 174 iron cannons, twenty iron mortars and thirty-six howitzers, plus twelve smaller pieces.<sup>1103</sup> Regarding supplies see below.

*Prior to the siege*

After the 1704 Russian conquest of Narva, the Russians had expanded their sphere of influence westward. Of the provinces in Estonia, only the western province of Wijken (Wiek) and a small part of Harrien were under Swedish control. Of these, Wiek had been ruined by the last Russian ravaging. The eastern provinces of Jerwen and Wierland and the largest parts of Harrien were under Russian control and contributed nothing to the Swedish war effort.<sup>1104</sup> This is according to Vice Governor of Estonia Friedrich Pattkull. Greiffenhagen had a slightly different version, stating that Jerwen and Wierland were under Russian control, Harrien having been ravaged and Wiek having been spared, so far.<sup>1105</sup>

The Russian victory at Poltava in June of 1709 caused great alarm in the Swedish Senate and the Defense Commission with regard to the Baltic Provinces. In September of 1709, Governor General Nils Stromberg left Reval to assume command in Riga.<sup>1106</sup> Lieutenant General Carl Nieroth was named as governor general of Estonia on October 12, 1709. He, however, had not arrived there by the time of the siege, and Pattkull was in charge in Reval when the siege began.<sup>1107</sup>

During the winter and spring of 1710, Pattkull had written several letters to the Defense Commission, but he received no replies. On April 14, he called for food and funds, otherwise the city would be lost. He vividly described the desperate state of the city; some ten or twenty persons died from hunger each day, and cannibalism was spreading.

Pattkull also claimed that his garrison of 4,358 men was insufficient to defend the walls.<sup>1108</sup> On August 4, Pattkull wrote to the Defense Commission. He had now received a reply from them, dated June 30, 1710. This reply did nothing for Pattkull. There would be no reinforcements coming. Pattkull concluded his letter with almost total desperation. He urged one of the members of the Defense Commission to come to Reval to get an overview of the actual

---

<sup>1103</sup> Tsar Peter's diary, pp. 353-354.

<sup>1104</sup> Pattkull, April 14, 1710, s. p. [240].

<sup>1105</sup> Greiffenhagen. p. 43.

<sup>1106</sup> Hartmann, p. 9.

<sup>1107</sup> Sjögren, *Karl XII*, p. 622 and Lewenhaupt, Del 2, "Nieroth, Carl", p. 477.

<sup>1108</sup> Pattkull, April 14, 1710, pp. 235-242.

situation. At the very end of his letter, he expressed his desire to resign from his post.<sup>1109</sup> On August 11, the first case of the plague was registered in the city.<sup>1110</sup>

On the Russian side, while they were besieging Riga, orders were sent to the governor in Narva, Colonel Basil Zotov, to march west with three regiments of dragoons. Russian General Bauer was in overall charge of Zotov's operation and several times ordered the advance west to stop. However, in August, Zotov was ordered to move up to Reval.<sup>1111</sup>

The military situation was discussed within the Defense Commission on July 22, 1710. It then seemed urgent to send food and reinforcements to the besieged cities in the east. It was decided to dispatch a convoy of eight ships, four for Reval, two for Pernau and two for Dünamunde. These ships would bring 5,000 barrels of cereal and 300 barrels of salt. Reinforcements with 300 men would follow the transport.<sup>1112</sup> In the end, everything sent would end up in Reval, since both Neumünde and Pernau were to fall before the shipments could reach them. The escort mission was awarded to Lieutenant [“löjtnant”] Lars Fegerman on the brigantine *Jungfrun*. The transport sailed on August 1, 1710.<sup>1113</sup> From later development, we can see reinforcements as in Table 4.24 below.

**Table 4.24** Reinforcements from Sweden to going to Reval

Unit, Commander	Number of troops, arrived	Source
Hälsinge Battalion (Double), Böckler	200, arrived Reval early August of 1710?	Rutenschiöld 1
Västgöta Dahl Regiment, Colonel R. Patkull	300, arrived August 27, 1710.	Patkull
Dahl Regiment, Rutenschiöld	200, arrived September 1, 1710	Rutenschiöld 2
Västerbottens Regiment, Rutenschiöld	400, arrived September 1, 1710	Rutenschiöld 2
Hälsinge Regiment (Ordinary)	200, arrived September 9, 1710.	Greiffenhagen
<b>TOTAL</b>	<b>1,300</b>	

Source: “Rutenschiöld 1”, Rutenschiöld, October 4, 1710 (see above), p. 165, “Rutenschiöld 2”, Rutenschiöld, March 20, 1711 (see above), p. 208, “Patkull”, Patkull, August 29, 1710 (see above), p. 255 and “Greiffenhagen”, Greiffenhagen (see above), p. 23.

<sup>1109</sup> Patkull, August 4, 1710, pp. 246–253.

<sup>1110</sup> Greiffenhagen, p. 47.

<sup>1111</sup> Tsar Peter's diary, pp. 350–351.

<sup>1112</sup> Minutes of the Defense Commission of July 22, 1710, Volume 7, s. p. [5].

<sup>1113</sup> Arfwidsson, *Försvaret*, p. 363.

*The siege – August of 1710*

The exact date of the arrival outside Reval of the Russian advance guard under Zotov is not clear. It can be approximated to August 10/11. Upon arrival, the Russians rapidly blocked the canal, which supplied Reval with clean water. Reval then depended on a well in the city, where the water was not clean.<sup>1114</sup> Zotov also severed all land communication to and from Reval. On August 15, Brigadier Ivanitzki arrived off Reval with six regiments of infantry, plus a battalion of grenadiers. The next unit to arrive was a cavalry force led by Major General Prince Alexandre Wolkonski. Then Bauer arrived with six regiments of dragoons.<sup>1115</sup> Thus, by the end of August, the Russian force would count fifteen regiments, one battalion of grenadiers and an unknown number of cavalry.

On the 29<sup>th</sup>, Pattkull wrote a letter to the Defense Commission. He reported that the Russians had advanced toward the walls and had also opened fire with cannons and mortars. He finished his letter by stating that everything now depended on the arrival of a relief army.<sup>1116</sup>

At sea, Watrang was ordered by the Defense Commission on August 22 to send one of the largest ships to Reval, to keep seaside access open. On the next day, Watrang issued an instruction for the commander of the ship *Öland*, Lieutenant [“kapten”] Baron Johan Gustaf Anckarstierna, to keep the sea lane open. *Öland* left for Reval in the evening.<sup>1117</sup>

*The siege – September of 1710*

Swedish reinforcements from the Västerbotten and Dal Infantry Regiments arrived in Reval on September 1, led by Rutenschiöld. All the men were then healthy, well-fed, well-dressed, well-armed and willing to fight.<sup>1118</sup> Rutenschiöld wanted to attack the enemy at once, driving him away from the vicinity of the city. He approached Pattkull, who refused to allow an attack.<sup>1119</sup>

On September 1, the Swedish ship *Öland* had reached Reval, where there were also two Swedish brigantines. When the Russians completed a battery by

<sup>1114</sup> Rutenschiöld, March 20, 1711, p. 214.

<sup>1115</sup> Tsar Peter’s diary, p. 352.

<sup>1116</sup> Pattkull, August 29, 1710, pp. 255–[256].

<sup>1117</sup> Vice Admiral Gustaf Watrang, *Journal hållen på Kongl. Maj:ts örlåg skepp Estland under innewarande 1710, 22 and 23 August 1710*, Volume 1 Viceamiralen Gustaf Wattrangs expedition. *Journal på örlogsskeppet Estland, 33 Sjöexpeditioner, eskaderchefer 1642–1814, Förteckning 503a Amiralitetskollegiets med efterföljares kontor, Arméns flotta, loggböcker, rullor m. m., Flottans arkiv, Krigsarkivet*, s. p.

<sup>1118</sup> Rutenschiöld, September 5, 1710, p. 149 and March 20, 1711, p. 208.

<sup>1119</sup> Rutenschiöld, September 5, 1710, p. 150.

the harbor, the ground was set for a land-sea battle. The Russian and Swedish description of this battle varies considerably. Tsar Peter's diary says that enemy ships arrived during the siege and shot a few salvos against Brigadier Ivanitzki's camp, causing no damage. A Russian battery by the sea then opened fire, so the Swedish ships could no longer approach shore.<sup>1120</sup> Rutenschiöld, on the other hand, presented a picture of a more prolonged land-sea battle, where the Swedish ships kept up heavy fire. Rutenschiöld assumed that Swedish naval gunfire kept the Russians from building more works along the shores.<sup>1121</sup>

Tsar Peter's diary does not say much about actual Russian activities during the siege, except that the plague took a heavy toll among the Russians, too.<sup>1122</sup> Here, Rutenschiöld's account of March 20, 1711 contains more information. The Russians only built three works around the city. One was by the mill under the adjacent mountain, Laksberget. The second was between the woods and the shore by the harbor, and the third was outside the suburbs. Rutenschiöld noted that the work by the harbor was the only one from which cannons were fired. The Russians also dug a trench, to approach the city walls.<sup>1123</sup> Rutenschiöld, in his letter of September 8, 1710, reported that already three letters had been sent from the Russians to Vice Governor Pattkull, who refused to show them to anyone.<sup>1124</sup>

Rutenschiöld also indicated that the Russians were carrying out bacteriological warfare. He claimed that the disease in the city originated from the water in the city well, which took its water from the lake around which the Russians camped. The Russians could have infected that lake by throwing dead bodies into it. Rutenschiöld claimed that his statement was confirmed when oxen drank from the lake and then dropped down dead.<sup>1125</sup>

On September 8, Pattkull wrote to the Defense Commission again. He described the ravaging disease. Some thirty, forty or fifty men of the garrison died every day. The city doctor, named Stappel, had been called to Pattkull's office to explain which disease it was. Stappel did not name it, but claimed that the cold winds from the north created the illness. Pattkull concluded his letter by stating that a relief army now was his only hope.<sup>1126</sup>

<sup>1120</sup> Tsar Peter's diary, p. 352.

<sup>1121</sup> Rutenschiöld, March 20, 1711, p. 211.

<sup>1122</sup> Tsar Peter's diary, p. 353.

<sup>1123</sup> Rutenschiöld, March 20, 1711, p. 211.

<sup>1124</sup> Rutenschiöld, September 8, 1710, s. p. [154].

<sup>1125</sup> Rutenschiöld, March 20, 1711, p. 214.

<sup>1126</sup> Pattkull, September 8, 1710, pp. 257–258.

Rutenschiöld, writing a letter to the Defense Commission on September 15, stated that since his arrival, 1,234 of the men in the garrison had died. Rutenschiöld also reported on the beginning of a breakdown of morale among Swedish officers. He hoped for a swift arrival of a relief army, which should not enter the city, but instead defeat the Russians in the field.<sup>1127</sup>

The Russian batteries were soon completed, and on September 22 they opened fire. There are various pictures of the activity of the Russian artillery. However, Russian fire does not seem to have been intense.<sup>1128</sup> There were now just days left of Swedish rule in Estonia. On the 24<sup>th</sup>, there was a council of war with all officers of the garrison, the nobility and the burghers of the city. Everyone, except for the Swedish officers, was in favor of surrender. Rutenschiöld called for fighting to the last man. He was then physically and verbally attacked and had to yield.<sup>1129</sup>

The decision to surrender was quickly executed, and a truce was signed on September 25. On the 28<sup>th</sup>, the final surrender documents were signed.<sup>1130</sup> On September 29/30, the Russians entered Reval.<sup>1131</sup>

#### *After the siege*

On September 30, of the troops from Sweden, 560 were in good health and 297 were sick according to a table drawn up by Rutenschiöld (see below).<sup>1132</sup> In local regiments, ninety men remained in the strongest; the others counted sixty to seventy.<sup>1133</sup>

**Table 4.25** Strength of the Swedish Army units in Reval on September 30, 1710

Unit	Well	%	Ill	%	Dead	%	Deser- ted	%	Arres- ted	%	Total
Dahl Reg.	141		36		35		-		-		212
Västgöta Dahls Reg.	119		65		129		-		13		326
Hälsinge Reg.	138		40		41		-		-		219
Västerbottens Reg.	83		115		195		7		-		400
Hälsinge Bat.	79		41		65		1		36		222
<b>TOTAL</b>	<b>560</b>	<b>41</b>	<b>297</b>	<b>21</b>	<b>465</b>	<b>34</b>	<b>8</b>	<b>1</b>	<b>49</b>	<b>3</b>	<b>1,379</b>

Source: Rutenschiöld, October 4, 1710 (see above), pp. [164] – 165.

<sup>1127</sup> Rutenschiöld, September 15, 1710, pp. 155–[158].

<sup>1128</sup> Ludvig W:son Munthe, Del III:2, p. 542 and Sjögren, *Karl XII*, p. 624.

<sup>1129</sup> Rutenschiöld, October 4, 1710, pp. 159–161.

<sup>1130</sup> Rutenschiöld, October 4, 1710, p. 161.

<sup>1131</sup> Tsar Peter's diary, p. 353.

<sup>1132</sup> Rutenschiöld, October 4, 1710, pp. [164]–165.

<sup>1133</sup> Hartmann, p. 11.



The Swedish survivors were brought to the eight Swedish ships anchored off Reval. The force, first, was to sail for Finland. In the end, only a few of the remaining men would return home.<sup>1134</sup>

On December 2, 1710, clergyman Kristian Kelch died in Reval as the last victim of the plague. He had made himself known by writing the history of the Swedish period of Estonia and Livonia before he died; that was, for all practical purposes, over.<sup>1135</sup>

### *Reval – conclusions*

The following could be concluded about Reval:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were weak. The strength of the partly incomplete Reval fortifications is difficult to estimate, but here is considered weak.
- Lack of drinking water is mentioned in connection with the siege. It can, however, be assumed that lack of drinking water was not a decisive factor in the outcome.

Matters of accessibility can be summarized as below.

**Table 4.26** Reval accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	High	Low

Source: See above.

The attacker's general accessibility was high, due to the road system. The defender's general accessibility was also high, due to the location by open sea dominated by the Swedish Navy.

The attacker's local accessibility was high, since only parts of the fortification utilized the natural strength of the mountain Domberget. The defender's local accessibility was more complicated. The entrance to Reval was not army blockable, but it can be concluded that there was no sail-in function in Reval; in the introduction it was suggested that there probably was no protected discharge place either. Thus, the defender's local accessibility would be classified as low.

<sup>1134</sup> Rutenschiöld, March 20, 1711, pp. 291–221.

<sup>1135</sup> Sjögren, *Karl XII*, p. 624.

The attacker's tactic was blockade, which, in the end, succeeded. As it turned out, the plague, in reality, defeated the garrison. Pattkull cannot be burdened with any decisive process errors. It is unlikely that any process measures, except for the arrival of a considerable relief army, would have changed the outcome.

It is sometimes assumed that the fall of Reval was because of treason by Pattkull, suggested in Rutenschiöld's account of 1711 and brought forward by, for example, Ludvig W:son Munthe.<sup>1136</sup> The refusal to allow Rutenschiöld to sally, and the letters from the Russians being kept secret, have reinforced this picture. There is also reason to believe that Pattkull was weary of his office and saw little future for Swedish rule in Estonia. His offer to resign in August of 1710 (see above) looks like a clear sign of weariness. In the end, however, Reval was most likely doomed to fall, regardless of Pattkull's intentions.

#### 4.16 VIBORG 1710 – Finland (today's Vyborg in Russia)

**Under siege from March 21/22 to June 12/13, 1710 (83 days). Surrendered.**

##### INTRODUCTION

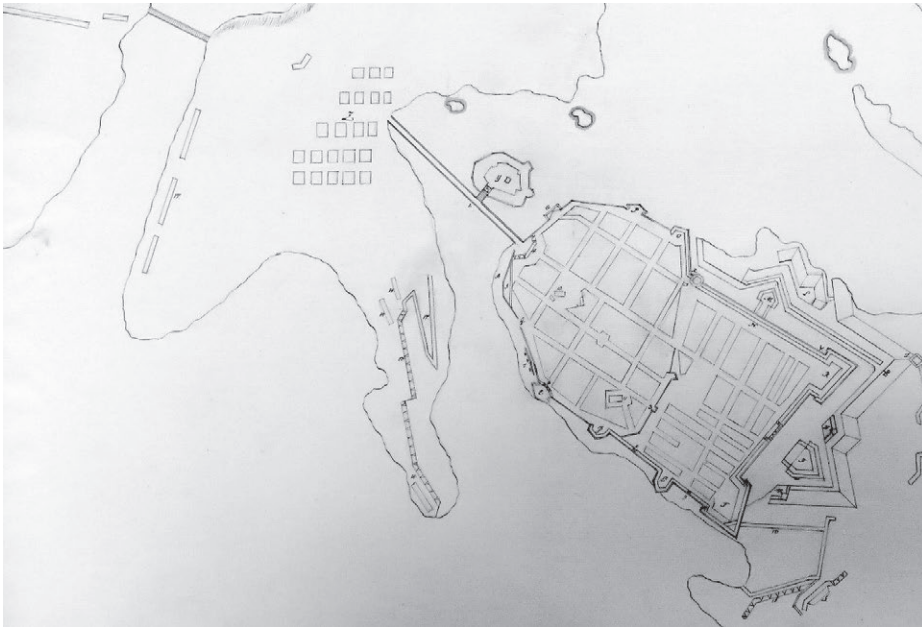
Besieging Riga after their victory at Poltava in June of 1709, the Russians later launched a parallel siege of Viborg, which was key to gaining Finland. The Russians had made an attempt to capture Viborg already in 1706, but that attempt had failed because of the Swedish Navy blocking sea lanes, dramatically lowering Russian general accessibility to Viborg, see Chapter 4.11 Riga 1710 and Chapter 4.10 Viborg 1706 for more background.

In 1707, a major effort to improve the Viborg fortifications began under the leadership of fortification officers Magnus Palmquist and Lorentz Christopher Stobée. In 1708, the garrison did almost 95,000 days of work. In 1709, substantial construction work was also carried out. When the Russians arrived in 1710, the walls and the batteries of the castle had been repaired, and the small bastions toward the waterfront had been put in working condition. On the land side, the irregular bastions, Pansarlaks and Äyräpää, were partially reconstructed. They are seen in the lower right of the picture below, with Pansarlaks as the most southern. A large ravelin, Carolus, had been built in the middle of the land front. A covered way and a wet moat had been constructed, but it did not stretch all the way down in the south. The Pansarlaks front in the south

---

<sup>1136</sup> Rutenschiöld, March 20, 1711, p. 220 and Ludvig W:son Munthe, Del III:2, p. 540.

was thus the weakest point on the land side. On the water side, the old city wall offered poor protection.<sup>1137</sup>



**Picture 4.30** The plan above shows Viborg in 1710. The peninsula pointing down in the middle of the picture is the Sikaniemi Peninsula. The castle is on the islet in the upper center. Russian siege works can be seen approaching the two large bastions on the eastern side and covering a long stretch on the Sikaniemi Peninsula. (Source: *Plan von der attaque der Stadt Wiburg wie solche den 21 Marty 1710 von dem General Admiral Graf Apraxin berennet und attackiret, und den 12 Juni durch accord übergangen*, nr 132, Volume 12 *Stora nordiska kriget 1699–1721*, Förteckning 425 *Sveriges krig 1521–1864*, Krigsarkivet.) (Detail.)

Apart from the works around the city of Viborg itself, there were redoubts built at villages nearby, one at Kivinebb and one at Suvenioia on the road to Nyen. On the road from Suvenioia to Kexholm, a redoubt was built at Kiviniemi.<sup>1138</sup>

Looking at the possibilities of resupplying Viborg by sea, it should be noted that the city had access to the sea, but only through an army blockable passage at Trångsund, a narrow strait south of the city. There was no sail-in function in the city or protected discharge place for ships. Normally, ships were unloaded

<sup>1137</sup> Ludvig W:son Munthe, Del III:2, pp. 544–545.

<sup>1138</sup> Ludvig W:son Munthe, Del III:2, p. 545.

at a bridge located along the southwestern part of the old city wall<sup>1139</sup>. For further comments on the fortified city of Viborg, see Chapter 4.10 Viborg 1706.

#### *Earlier research and sources*

One of the more important Swedish works on the siege of Viborg in 1710 is T. J. Petrelli, “Stridena kring Finska viken 1706–1710”<sup>1140</sup> [The Fighting around the Gulf of Finland 1707–1710], published in *Karolinska förbundets årsbok* 1904. He based his writing on two Russian articles published in *Vojennij Spornik* [Sbornik], where one written by B. Adamovitj, published in September 1903, dealt with the 1710 siege of Viborg. A later work is a short article from 2015 by Alexey Melnov, “The Siege of Vyborg and its Swedish Garrison” in the *Great Northern War Compendium*, Volume Two.<sup>1141</sup>

The 1710 siege of Viborg, to some extent, is covered in several general works. One more extensive text is found in J. W. Ruuth’s *Viborgs stads historia*, Part I, [The History of the City of Viborg], published in 1906.<sup>1142</sup> This work has been widely used by subsequent writers in Swedish. Ruuth dedicated sixteen pages to the siege of 1710. His main sources were letters published by Yrjö-Koskinen (see below) and Just Juel’s account of his journey to Russia (see below). Ruuth also had access to two Russian sources. Ludvig W:son Munthe described operations around Viborg in detail. Munthe based his writings on several letters and on the work of Petrelli mentioned above.<sup>1143</sup> Arnold Munthe dedicated five pages to Viborg.<sup>1144</sup>

In modern research, the siege is covered in Antti Kujala’s work *Miekka ei laske leikkiä. Suomi suuressa pohjan sodassa 1700–1714* (Historiallisia tutkimuksia Nr 211 Helsinki 2001). Kujala dedicated six pages to the siege. Eirik Hornborg’s *Gränsfästet Viborg: från korstågstiden till våra dagar* (Helsingfors 1942), Carl Jacob Gardberg’s *Wiborg: En stad i sten* (Esbo 1996) and Adolf Ivar Arwidsson’s *Handlingar till upplysning af Finlands häfder* (Stockholm 1846–1858) have proven to add relatively little to this study.

<sup>1139</sup> Eirik Hornborg, *Gränsfästet i öster: Viborg från korstågstiden till våra dagar*, (Stockholm 1942), map opposite to p. 177. (Further on, “Hornborg, *Gränsfästet*”)

<sup>1140</sup> T. J. Petrelli, “Stridena kring Finska viken 1706–1710”, in *Karolinska förbundets årsbok* 1904, pp. [113]–145. (Further on, “Petrelli”)

<sup>1141</sup> Alexey Melnov, “The Siege of Vyborg and its Swedish Garrison”, in Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium*, Volume Two, (St. Louis Missouri 2015), pp. 59–62. (Further on, “Melnov”.)

<sup>1142</sup> J. W. Ruuth, *Viborgs stads historia*, Part I, (Helsingfors 1906). (Further on, “Ruuth”.)

<sup>1143</sup> Ludvig W:son Munthe, Del III:2, pp. 544–551.

<sup>1144</sup> Arnold Munthe, Del II, pp. 448–452.

There is also Raimo Ranta's work *Viipurin komendanttikunta 1710–1721: valtaus, hallinto ja oikeudenhoito* (Helsinki 1987). The book has a summary in German: "Die Kommandantur Viborg 1710–21. Eroberung, Verwaltung und Rechtssprechung."

On the Russian side, Tsar Peter's diary dedicated about fifteen pages to the siege.<sup>1145</sup> There is also the contemporary account written by Danish Vice Admiral Just Juel. Published in Copenhagen in 1893, it was named *En rejse til Rusland under tsar Peter: dagbogsoptegnelser af Viceadmiral Just Juel Dansk gesant i Rusland 1707–1711 m. illustrationer och oplysende anmaerkninger ved Gerhard L. Grove* [A Journey to Russia under Tsar Peter: notes kept in a diary by Vice Admiral Just Juel Danish Ambassador to Russia 1707–1711 with illustrations and informative comments by Gerhard L. Grove].<sup>1146</sup> Almost fifty pages cover the period of the 1710 siege of Viborg. Since Juel often travelled with Tsar Peter, he offers deep insight into the parts of the history where Tsar Peter was personally involved. Several often-found statements regarding the siege can be traced back to Juel. Actually, there is a clue that Juel has been used as a source in later texts. He somehow misunderstood the fortress of Viborg and misnamed the large tower St. Olof,<sup>1147</sup> calling it Herman's tower instead. Thus, writers referring to "Herman's tower" have probably gotten their information from Just Juel. In Grigorev's and Bepalov's work, the chapter on the 1710 siege of Viborg covers sixteen pages.<sup>1148</sup> Just Juel wrote his account according to the Danish calendar, then ten days ahead of the Swedish calendar and eleven days ahead of the Russian. Dates from Juel's account are given as Julian (Russian)/Swedish/Gregorian (Danish).

Among the primary sources in Sweden, Vice Admiral Wattring's journal from 1710, presented on April 17, 1711, is one of the more important.<sup>1149</sup> As the commander of the Swedish flotilla in the Gulf of Finland, he had a crucial role in the events. From Finland, Yrjö-Koskinen's work contains fourteen let-

<sup>1145</sup> Tsar Peter's diary, pp. 288–301.

<sup>1146</sup> Just Juel, *En rejse til Rusland under tsar Peter: dagbogsoptegnelser af Viceadmiral Just Juel Dansk gesant i Rusland 1707–1711 m. illustrationer och oplysende anmaerkninger ved Gerhard L. Grove*, (Köpenhamn 1893). (Further on, "Juel")

<sup>1147</sup> See for example C. J. Gardberg and P. O. Welin, *Finlands medeltida borgar* (Esbo 1993), p. 70.

<sup>1148</sup> Grigorjev and Bepalov, pp. 208–223.

<sup>1149</sup> Vice Admiral Gustaf Wattring, *Journal hållen på Kongl. Maj:ts örlåg skepp Estland under innewarande 1710*, Volume 1 Viceamiralen Gustaf Wattrings expedition. Journal på örlogsskeppet Estland, 33 Sjöexpeditioner, eskaderchefer 1642–1814, Förteckning 503a Amiralitetsskollegiets med efterföljares kontor, Arméns flotta, loggböcker, rullor m. m., Flottans arkiv, Krigsarkivet. (Further on "Wattring")

ters concerning the siege of Viborg and the defense of Finland, primarily from the commander-in-chief of Swedish forces in Finland, George Lybecker.<sup>1150</sup>

There are several preserved letters to and from Lybecker. The real wealth of information from Lybecker is to be found in incoming letters to the Defense Commission in 1710<sup>1151</sup>. Several of these letters are found in a copy book of later date.<sup>1152</sup> The file "Handlingar gällande Viborgs belägring och kapitulation", in Volym 1(M 1364) Strödda handlingar och brev, 2 Kriget i Finland 1700–1716, XXIII, Karl XII:s krig. Stora Nordiska kriget, Militaria, Riksarkivet contains a few important documents.

One letter from garrison commander Stiernstråhle contains a reference to an attached report, which was supposed to cover the period from the beginning of the siege to April 24, 1710.<sup>1153</sup> However, that report seems to have gone missing. There is also a source at the Swedish Military Archives ["Krigsarkivet"] in Stockholm, here called "Kreüger". Edited by Kreüger, the letters to the War College ["Krigskollegium"] are listed with short summaries of their contents. The work only exists in one copy.<sup>1154</sup> Lybecker was later court-martialed for his actions as commander-in-chief in Finland. These documents have not been used for the study.

Polish Ambassador Wisthumb followed Tsar Peter like Just Juel did.<sup>1155</sup> It is possible that Wisthumb wrote something about the siege of Viborg, however, no such source has been found during the work on this study. Another potentially interesting person is French engineer de la Patrie, working for the Russians during the siege.<sup>1156</sup> He is also known as Colonel du Lapatrie.<sup>1157</sup> Attempts to trace his documents have not been made for this study.

<sup>1150</sup> Georg Zacharias Yrjö-Koskinen *Handlingar till upplysande af Finlands öden under det Stora nordiska kriget*, [Documents giving information on the destinies of Finland during the Great Northern War] (Helsingfors 1865). (Further on "Yrjö-Koskinen".)

<sup>1151</sup> Volym 206, Inkomna handlingar till Defensionskommissionen, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer, Riksarkivet.

<sup>1152</sup> Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet

<sup>1153</sup> Version af Hr: Öfwerste Stiernstråhls brief af d: 24 Aprilis 1710 fr Wiborg, "Handlingar gällande Viborgs belägring och capitulation", Volym M 1364 Strödda handlingar och brev, 2 Kriget i Finland 1700–1716, XXIII, Karl XII:s krig. Stora Nordiska kriget 1700–1720, Krigsarkivets ämnessamlingar 754 Militaria, Riksarkivet, s. p. [2].

<sup>1154</sup> S. Kreüger, *Register till Krigskollegii brevböcker. 1700–1722*, Krigsarkivet (s. l. s. a.). (Further on, "Kreüger".)

<sup>1155</sup> Juel, p. 226.

<sup>1156</sup> Petrelli, p. 133.

<sup>1157</sup> Grigorjev and Bepalov, p. 216.

Two things can be noted about the sources. They often refer to a type of “mile” with various spellings, which means a distance of about seven kilometers. The letters from Lybecker were written in various Finnish villages situated within a radius of up to 100 kilometers from Viborg.

### *The garrison, artillery and supplies*

Supreme command in Viborg was exercised by Colonel Magnus Stiernstråhle, since the governor of the city, Colonel Zacharias Aminoff, was ill.<sup>1158</sup> Captain George Kühn commanded the artillery.<sup>1159</sup> The staff of the fortification was led by General Quartermaster Lieutenant Lorentz Christopher Stobée.<sup>1160</sup> Regarding the size of the garrison, (see the section *Prior to the siege below*).

Eirik Hornborg claimed that not only was the soldiers’ equipment bad – many of them wearing civilian clothes because they had no uniforms – but training of new men also suffered from lack of supplies. The new soldiers were also either too young or too old to serve or suffered from physical defects.<sup>1161</sup>

The fortress was well-armed. After the siege, the Russians captured 138 iron cannons, three bronze cannons, two iron howitzers and eight iron mortars. The fortress was well-stocked with ammunition and gunpowder.<sup>1162</sup> The city was supplied to survive until mid-August.<sup>1163</sup>

## PRIOR TO THE SIEGE

### *Finland*

On January 2, 1707, George Johan Maydell resigned from his post as commanding general of Finland, commander of the Army of Narva.<sup>1164</sup> On March 13, 1707, the Defense Commission named George Lybecker as Maydell’s successor. Lybecker had no outstanding military qualities, but he had made himself known by defeating a superior Polish force at Lowicz in 1705; Lybecker was then a lieutenant colonel. In November of 1706, he was promoted to major general of the cavalry; he was created a baron in April of 1707.<sup>1165</sup> Apart from

<sup>1158</sup> Ruuth, p. 473, note 1.

<sup>1159</sup> Ulfhielm, ”Karl XII:s tid”, p. 439.

<sup>1160</sup> Ludwig W:son Munthe, III:2, p. 546 and Lewenhaupt Del 2, ”Stobée, Lorentz Christoffer”, p. 666.

<sup>1161</sup> Hornborg, *Gränsfästet*, pp. 206–207.

<sup>1162</sup> Tsar Peter’s diary, p. 298.

<sup>1163</sup> Lybecker to Kanslikollegium June 23, 1710, Yrjö-Koskinen, p. 135.

<sup>1164</sup> Alf Åberg, ”Georg Johan Maydell”, in *Svenskt biografiskt lexikon*, Del 25 (Stockholm 1987), p. 290.

<sup>1165</sup> Sven Åstrand, ”Georg Lybecker”, in *Svenskt biografiskt lexikon*, Del 24 (Stockholm 1984), p. 438.



Lybecker, Major General Baron Liwen [Hans Henrik von Liewen] was on the general staff of the Finnish army.<sup>1166</sup>

In the context of the siege of Viborg, the Swedish Army in Finland is interesting, since its ability to organize a regional relief force would depend on its strength. Among sources where compilation of army strength is rare, there are two on the Finnish army of 1710. The first is a list in the army accounts for 1710, see the first table below. The second is from one of Lybecker's letters, see the second table below. The first source, unfortunately, does not provide the strength of each unit, but the expenses for each unit are included in the table, since they ought to reflect the size and importance of the unit.

**Table 4.27** The Finnish Field Army in 1710, with 1710 spending

UNIT	Expenses (rixdollars)
Generalstaben	13,485
Artilleriet	2,035
Finska Adelsfanan	488
Åbo och Björneborgz Läns Caval. Reg:	14,921
Nylandz och Tafwastehus Läns Dito	14,683
Wijborgz och Nyslåtts Lähn	19,096
Karelske Landt Dragounderne	426
Öfwerste Brakels wärfwade Regemente Dragouner	23,968
Öfwerste Thure Bielkes Regemente Svenske Ståndz Drag:	1,189
Foot Dragounerne	16
Öfwerste Glasenaps Wärfwade Cavallerie	35
Åbo Läns Infanterie Regemente	19,979
Biörneborgz Lähns	5,440
Nylandz	411
Tafwastehus Lähns	479
Safwolax	2,516
General Major Horns Wärfwade Regemente	975
General Major Schyttes do.	404
Wijborgz och Nyslätz	8,576
Kexholms Lähns Dito	307
Öfwersten Hendrich Hastfertz do.	2,603
Wijborgz Lähns Fördubblingz Regem.	96
Wijborgz Slätz Såldater	176
Tafwastehus Läns Fördubbling Batalion	9,960
Österbottens Opbudzmaskap	1,047

Source: Finska arméns fältstatshuvudbok april–dec. 1710, Volym 14a, Avdelning 10 Finska armén, Förteckning 388 Krigshandlingar Stora nordiska kriget 1699–1734, Krigsarkivet, pp. 1–5.

<sup>1166</sup> Lewenhaupt, Del 2, ”von Liewen, Hans Henrik”, p. 398.

In a letter to the King of April 18, 1710, Lybecker specified his military resources as below:

**Table 4.28** Lybecker's statement on armed forces April 18, 1710

CAVALRY	Total	In Viborg
Åboläniske Trippleringen och fördubblingen (Lieutenant Colonel Jacob Dufvalt)	900	
Nylenske Regementet (Colonel Anders Eric Ramse)	930	
Viborgska Regementet (Colonel Carl Gustaf Armfelt)	780	24
Wärfwade Dragoune Regementet (Colonel Heinrich Otto Brakel)	570	
Finska Adelsfanan (Cavalry Captain Claës Munck)	25	
<i>Total</i>	3,205	24
INFANTRY		
Åbo Lähns Bataillon (Krusenstierna)	476	
Biörneborgske Fördubblingen (Jacob Soves)	400	200
Nylands Fördubblingen (Rahm)	380	330
Tafwastehuus Ordinarie Regemente (Lieutenant Colonel Gustaf Zülich)	800	
Tafwastehuus Fördubbling (Major Petter Johan Meisner)	400	
Wijborgs Fördubbling (Lieutenant Colonel Carl Chr. Schönewau)	620	620
Nyslotts Fördubbling (Lieutenant Colonel Robert Scharpentier)	900	900
Carelska Wärfwade Regementet (Lieutenant Colonel Henric Hastfehr)	930	930
<i>Total</i>	4,906	2,980
<b>TOTAL</b>	<b>8,111</b>	<b>3,004</b>

Source: George Lybecker to the King, April 18, 1709, Vol. 14 1710–1711, Avd. 16 Avskriftssamlingen, Avskrifter ur riksarkivet, Förteckning 388 Stora nordiska kriget, Krigsarkivet, pp. [274]–[276].

Comment: In the source, there is an ambiguity regarding 230 cavalrymen with no horses, and the total for all troops is not provided.

From the table above showing Lybecker's list of military resources, we can see that a total of about 8,000 men was available. Of these, approximately 3,000 garrisoned Viborg. Also, the fortresses of Kexholm and Nyslott were garrisoned, which would leave a field force of a maximum of 4,000. The list strength of the units above, counting 1,000 men per regiment, is almost 12,000 men. The list

strength figure was quoted for the period by Julius Mankell in his work on the history of the Finnish Army, where he gave a total of 7,400 infantry, 3,000 cavalry and 1,000 dragoons. Mankell commented, however, that his table hardly could be correct.<sup>1167</sup>

There is also another problem with the table above. Lybecker did not have the Tavastehus Infantry Regiment [“Tafwastehuus Ordinarie Regemente”] listed as in Viborg. In its extensive list of Swedish officers taken prisoners at Viborg, Leonhard Kagg’s diary listed one lieutenant colonel, one major and five captains from the Tavastehus Infantry Regiment. The regimental commander, Zülich, was not listed as a prisoner. This points in one direction: one of the two battalions in the regiment was in Viborg and the other was outside.<sup>1168</sup> The garrison strength would then have been 3,404, with the field force reduced accordingly. A field force of around 3,500 men was not impressive – but not insignificant either – and the Swedish armed forces in Finland are generally believed to have been in poor condition. One example is offered by Colonel Henrik Otto Brakel, commander of a hired dragoon regiment. In a statement of April 20, 1710, he claimed a force of 671 men with only 100 horses<sup>1169</sup>.

Warning signs began to flare up in January of 1710. A number of letters from Lybecker to the War College [“Krigskollegium”] shows how these signals got stronger and stronger. On January 2, he reported on a Russian raid into the Viborg province. During the rest of January and for some weeks into February, there were signs of a Russian military buildup at Retusaari (today’s Kotlin). Then, on February 21, Vice Governor of Estonia Friedrich Pattkull, had reported that he had reliable information saying that Viborg was going to be attacked. In the beginning of March, three English merchants told of a peace treaty between Russia and the Ottoman Empire. On March 7, Lybecker wrote to the War College, saying that new units were steadily arriving in St. Petersburg, and that Viborg was going to be attacked from three directions. At the same time, Lybecker had learned that the Russians had gathered 9,000 horses for transports and that 9,000 shovels had been collected to clear the roads of snow. On the

<sup>1167</sup> Julius Mankell, *Anteckningar rörande finska arméens och Finlands krigshistoria: Särskildt med afseende på krigem mellan Sverige och Ryssland 1788–1790 samt 1808–1809*, Del I, (Stockholm 1870), p. 226.

<sup>1168</sup> Leonhard Kagg’s diary, p. 162.

<sup>1169</sup> Henrik Otto Brakel [Brackell], “Förslagh af mitt i nåder anförtrodde regemente te wärfwade dragoner huru manskapet det af beredne för tiden sig befinnes af”, April 20, 1710, Volym 206, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer, Riksarkivet, p. 740.

22<sup>nd</sup>, Lybecker, then sitting in Högfors, began to get worried. Some of his spies had reported a Russian advance party seen during the night between the 18<sup>th</sup> and 19<sup>th</sup> at Björkö, a large island close to the Ingrian coast, some forty kilometers south of Viborg.<sup>1170</sup>

Military preparations, for meeting the apparent mounting threat, are somewhat difficult to follow. The best overview left to posterity is probably the one written by Johan Creutz, provincial governor of Nyland's and Tavastehus's Province, stationed in Helsingfors. He wrote a letter to Lybecker on April 8, 1710, clarifying his view of the situation.

During the winter, he had sent his military forces to the Kymmene River, which formed the border between the provinces of Viborg and Nyland-Tavastehus. Then a series of marches and countermarches were carried out. In Creutz's opinion, these marches destroyed what was left of the field forces.

On March 19, Lybecker and Creutz held a conference at Kymmenegård at the mouth of the Kymmene River. It is not clear exactly what was decided at that conference, but there were more marches for the troops. When it was obvious that the Russians were coming, Lybecker held a conference with the Åbo officers where they all agreed that it was impossible to move, due to lack of fodder for the horses.

Having reviewed recent events, Creutz turned to future actions, expressing the hope that Lybecker would concentrate available troops to Veckelax (today's Hamina/Fredrikshamn) and then attack the enemy. In Creutz's opinion, the Finnish army could do considerable harm to the Russians off Viborg, and, perhaps, even drive them off.

Creutz concluded his letter in a pessimistic way. He stated that the letter was written as self-preservation for times to come, and that he did not believe that Lybecker would follow the plan outlined above, especially since Lybecker was more inclined to build fortifications far from Viborg, rather than to attack. He also pointed out that the Finnish army lacked rifles and ammunition, and that Lybecker had not worked to solve that problem. In his final sentences, Creutz was almost prophetic, when he claimed that the only thing that could save Finland was the prompt arrival of the Swedish Navy, especially since the two brigantines at hand in Finland were stuck in ice.<sup>1171</sup>

---

<sup>1170</sup> Kreüger, pp. 39–40.

<sup>1171</sup> Creutz to Lybecker, April 8, 1710, Yrjö-Koskinen, pp. 125–128.

*The naval and litoral resources*

In the Gulf of Finland, three units from the Swedish Navy had wintered in 1709–1710; the ship *Halland*, anchored at Reval, and the two brigantines mentioned above, one at Korpoström and the other at Barösund, on the southern coast of Finland.<sup>1172</sup> A further presentation of Russian and Swedish naval resources added over time is presented in the text on the siege below.

*Viborg*

When the Russians approached, some preparations had been made in Viborg. The ice had been sawed up all around the fortress, and the bridge between the city and the castle partially destroyed. The suburbs had not been burned.<sup>1173</sup> Due to a lack of sources, we cannot get a more precise picture of how Stiernstråhle prepared the city for the siege. However, in hindsight, we can see that Swedish patrol activity was low, and that the Russians could almost reach the city walls without being detected.

*Russia*

On February 21/22, 1710, the tsar arrived in St. Petersburg and immediately ordered Apraksin to march on Viborg. Already on March 12/13, the Russian advance guard began to move. The Russians started out from the island of Retusaari, which was the assembly point for their army. To avoid early detection, the attackers marched across the ice. The distance was 150 kilometers. While en route, the Russians passed the island of Björkö.<sup>1174</sup>

The exact date of Russian departure from Retusaari is subject to some confusion, probably generated by a printing error in the French edition of Tsar Peter's diary. Here, it is stated that Apraksin set out on his march on March 21<sup>1175</sup> (Russian style). Petrelli, working from Russian secondary sources, claimed that the march began on March 12.<sup>1176</sup> It thus looks like the "21" mentioned in Tsar Peter's diary is an inverted number. Compared to their arrival date, a Russian departure on March 21 would have been impossible.

The size of the marching Russian force is not clear. Just Juel's diary claimed that Tsar Peter returned to St. Petersburg from Retusaari, having inspected 13,000 men with twenty-four cannons and four mortars, a force that then

---

<sup>1172</sup> Creutz to Lybecker, April 8, 1710, Yrjö-Koskinen p. 128.

<sup>1173</sup> Petrelli, p. 134.

<sup>1174</sup> Petrelli, p. 133 and Tsar Peter's diary p. 286.

<sup>1175</sup> Tsar Peter's diary, p. 288.

<sup>1176</sup> Petrelli, p. 133.

marched on Viborg. Thus, the first wave of Russians has often been assumed to have counted 13,000. Finnish historian Antti Kujala claimed that Apraksin counted 7,500 or slightly more, since any larger force would have been difficult to supply in Finland in the winter<sup>1177</sup>. In the same entry, Just Juel commented that this march was a considerable feat, and that any other army would have succumbed on the ice.<sup>1178</sup>

In the beginning of 1710, Tsar Peter established new organization of the Russian army forces. They were to consist of thirty-three regiments of infantry and twenty-four regiments of cavalry, plus garrisons of 58,000 men.<sup>1179</sup> If a Russian regiment, on the average, would count 1,000 men, there would then be 57,000 men in the Russian field army at the time. A complete picture of Russian dispositions at the time is beyond the scope of this study, but it should be noted that perhaps 40,000 Russian soldiers then were involved in the siege of Riga. If the Russian siege army at Viborg counted 13,000, most of the Russian field forces would have been committed to these two sieges.

## THE SIEGE

### MARCH OF 1710

#### *Viborg - March*

When the Russians arrived off Viborg, Stiernstråhle was in total command of defense, as his superior Lybecker by then had left the city. As the Russians began to construct their siege works, the fortification staff led construction of three batteries to counter those works. That action might seem natural, but construction of new batteries, after an enemy has shown his intentions, is actually only mentioned from Viborg. Regarding the mood in the besieged fortress, Ludvig W:son Munthe made a comment claiming that the city trusted the Swedish Navy and also hoped for a relief army led by Lybecker.<sup>1180</sup>

#### *The Russians – March*

Having endured a long march across the ice, the advance guard of the Russian siege army came ashore fifteen kilometers west of Viborg. Petrelli dated the

---

<sup>1177</sup> Antti Kujala, *Miekka ei laske leikkiä. Suomi suuressa pohjan sodassa 1700–1714* (Historiallisia tutkimuksia Nr 211 Helsinki 2001), pp. 239–240.

<sup>1178</sup> Juel, p. 205.

<sup>1179</sup> Tsar Peter's diary, p. 280.

<sup>1180</sup> Ludvig W:son Munthe, Del III:2, pp. 545–546.

arrival of the Russian advance party at the suburbs of Viborg to 7 o'clock in the morning of March 21. Assuming that Petrelli used Russian style, the siege began on March 21/22.

Upon arrival, the Russian advance guard drove two Swedish regiments out of a northwestern suburb and into the city. Before they withdrew, the retreating Swedes set fire to the flour magazine, the tar magazine and the artillery warehouse, although they were stopped from burning the suburb itself.<sup>1181</sup> Thus, the Russians acquired good lodgings. When the tar magazine burned, 26,000 barrels of tar turned into ashes<sup>1182</sup>. Tsar Peter's diary specified Apraksin's arrival as on the 22<sup>nd</sup>, which then would be the 23<sup>rd</sup> Swedish style. He at once reconnoitered Swedish defenses together with French engineer de la Patrie.<sup>1183</sup>

Siege works were immediately begun, with trenches being dug on the Sikanieni Peninsula southwest of the city, facing the weak southern wall and the castle. The frozen and stony ground made work strenuous for the Russian soldiers. Major General Bergholtz (Birkholtz) was soon detached with six regiments, to begin the siege works on the eastern side of the city.<sup>1184</sup> Having arrived, the Russians launched a heavy patrolling activity, reaching some ten to twelve "mil" outside of Viborg. At Lomäki, a Swedish post under the command of Major Jacob Danielsson, retreated to Keltis. A magazine with cereal and other food then fell into Russian hands. The supplies were intended for Viborg, but had remained in Lomäki for lack of transport. The Russians did not stretch their patrols beyond Keltis, where Lybecker had troops.<sup>1185</sup>

In the last days of March, a rumor spread in the Russian camp that two Swedish regiments stood sixty kilometers from the Russian camp, and that Lybecker's full force was to come over them soon. The Russians were worried and sent Tjernischeff with 2,000 infantry and 6,000 cavalry to reconnoiter. That Russian force only found a Swedish major and 120 men.<sup>1186</sup>

### *Lybecker – March*

Having left Viborg, Lybecker soon set up headquarters in Pyttis. On March 29, he wrote a letter to the Chancellery ["Kanslikollegium"]. Lybecker told of a

---

<sup>1181</sup> Petrelli, p. 133.

<sup>1182</sup> Ruuth, p. 474, Petrelli, p. 133 and Tsar Peter's diary, p. 288.

<sup>1183</sup> Tsar Peter's diary, p. 288 and Petrelli, p. 133.

<sup>1184</sup> Tsar Peter's diary, pp. 288-289.

<sup>1185</sup> Creutz to Lybecker, April 8, 1710, Yrjö-Koskinen, pp. 126-127.

<sup>1186</sup> Petrelli, p. 135.



letter from Viborg, dated March 22, noting that at 5 o'clock in the morning on the same day, the Russians had appeared on the ice off Viborg.<sup>1187</sup>

### *The naval situation– March*

In Karlskrona, it was taken for granted that a strong flotilla was going to sail for the Gulf of Finland that year also. It was becoming clear that the former commander of the flotilla, Anckarstierna, was not in the best condition. On March 2, the matter was addressed in the Admiralty. From its minutes, it is obvious that the members of the Admiralty did not know what instructions King Karl XII had given Anckarstierna, when the latter first was named Commander of the Gulf of Finland flotilla by royal letter. The Admiralty, too, was not sure if Anckarstierna was fit to serve that year. To resolve both matters, Admiral Ruuth and Vice Admiral Sparre were sent from the meeting to interview Anckarstierna; they soon returned with answers. Regarding his instructions, Anckarstierna said there was only one thing special about them: Karl XII had ordered him to have several prams and pontoons built at Viborg. The order seems odd, but that equipment could be used to facilitate an attack on the Russian fortress and naval base in Kronstadt. Regarding Anckarstierna's health, he explained that now he was in no condition to sail but, if he recovered, he would follow the fleet. With this, the matter was temporarily settled for the Admiralty.<sup>1188</sup>

The March 2<sup>nd</sup> minutes also provide a picture of the general naval situation in the southern Baltic Sea at the time. Vice Admiral Sparre asked if two galiots could now leave Karlskrona, fully loaded, ready to sail and destined for Simrishamn, a harbor town in Skåne. The general opinion was that they could not, since the Danes were already on the sea with a few ships, and the Swedish cruisers were not yet out.<sup>1189</sup>

At the same meeting, final decisions about manning Swedish cruisers were made. The ship *Wachtmeister* and the frigates *Falken* and *Viborg* were to go out.<sup>1190</sup> Thus, the general picture seems to be that the Danes were the first to get their cruisers out, making Swedish shipping unsafe. However, as soon as the Swedes had their cruisers out in the water, it would be safe for Swedish ships.

<sup>1187</sup> Lybecker to Kanslikollegium, March 29, 1710, Yrjö-Koskinen, p. 124.

<sup>1188</sup> Amiralitetskollegium protokoll, 2 mars 1710, Volym 58 (NAD), Protokoll 1710 (manual system), A I Protokoll, äldre nummerserie, 1 Amiralitetskollegium, kansliet 1630–1807, Förteckning 500 Flottans centrala ledning, Flottans arkiv, Krigsarkivet, pp. 53–55. (Further on, "Amiralitetskollegium, Minutes")

<sup>1189</sup> Amiralitetskollegium, Minutes of March 2, 1710, pp. 52–53.

<sup>1190</sup> Amiralitetskollegium, Minutes of March 2, 1710, pp. 49–50.

## APRIL 1701

*Viborg - April*

On April 1/2, the Russians began to bombard Viborg. The fire was not heavy, because only light artillery had been brought across the ice. The Russians now had ten cannons of twelve pounds and three mortars.<sup>1191</sup> They managed to set St. Olof's tower in the castle on fire. The fire was soon put out, and the cannons in it then continued their counterfire. The Russian fire otherwise only caused slight damage, which was quickly repaired.<sup>1192</sup>

The Swedish counter-battery shooting here had an effect. On April 26, Lybecker reported that two Russian cannons had been rendered ineffective by Viborg artillery.<sup>1193</sup> On April 12/13, the garrison made a sally in force. This was beaten back with losses. A Swedish deserter reported to the Russians that by April 22, there were 600 killed, and 300 of the garrison were sick; the others were burdened with hard work.<sup>1194</sup> There could be reason to question the figure of 600 dead in the fortress after a month of siege; there was no starvation and no plague. Six hundred killed in battle is a high figure.

On the basis of information from prisoners, Stiernstråhle believed that Swedish artillery fire had caused 700 casualties in the Russian camp.<sup>1195</sup> By the end of the month, Stiernstråhle reported that the enemy trench works were advancing, and that batteries for twenty-four cannons had been built on the Sikaniemi Peninsula, facing the southwestern part of the old city wall. They were not yet armed, however. He also reported that the Russians were shooting incendiary bombs, but that the fire patrols in the city had been able to deal with the ensuing fires.<sup>1196</sup>

In a letter written on April 24, Stiernstråhle expressed hopes for a relief army and for the Swedish Navy to arrive in time to cut off Russian supply lines. Stiernstråhle also noted that the Russians had already begun to build redoubts by Trångsund.<sup>1197</sup>

<sup>1191</sup> Tsar Peter's diary, p. 289.

<sup>1192</sup> Ludvig W:son Munthe, Del III:2, p. 547.

<sup>1193</sup> Kreüger, p. 42.

<sup>1194</sup> Petrelli, pp. 136–138.

<sup>1195</sup> Version af Hr: Öfwerste Stiernstråhls bref af d: 24 Aprillis 1710 fr Wiborg, Handlingar gällande Viborgs belägring och capitulation, Volym M 1364 Strödda handlingar och brev, 2 Kriget i Finland 1700–1716, XXIII, Karl XII:s krig. Stora Nordiska kriget 1700–1720, Krigsarkivets ämnessamlingar 754 Militaria, Riksarkivet, s. p. [1].

<sup>1196</sup> Ludvig W:son Munthe, Del III:2, p. 547.

<sup>1197</sup> Version af Hr: Öfwerste Stiernstråhls bref af d: 24 Aprillis 1710 fr Wiborg, Handlingar gällande Viborgs belägring och capitulation, Volym M 1364 Strödda handlingar och brev, 2 Kriget i Finland 1700–1716, XXIII, Karl XII:s krig. Stora Nordiska kriget 1700–1720, Krigsarkivets ämnessamlingar 754 Militaria, Riksarkivet, s. p. [2].

*The Russians – April*

The Russians to some extent were suffering from Swedish guerrilla warfare around Viborg. On April 2, Apraksin sent out a patrol on skis, led by a lieutenant. Their mission was to strike against Swedish partisans. The Russian patrol found a mounted unit of thirty men and attacked them; all the Swedes were killed or captured. Shortly afterward, the Swedish partisans attacked a convoy led by a Russian lieutenant colonel who was bringing a letter to St. Petersburg. The attack was beaten off, and the letter safely arrived to Tsar Peter.

The letter brought by the lieutenant colonel could have concerned a potential storm. Apraksin, who was accused in Petrelli's article of being phlegmatic and slow moving, was urged to storm by his closest subordinates. On April 5, Apraksin wrote to Tsar Peter suggesting a storm, and enclosed a plan for the operation; Peter wrote his reply two days later. Apraksin had his permission to storm, if he was sure of success. If the storm failed, Apraksin would have to suffer the consequences. The answer made Apraksin refrain from further plans for any storm.

During April, the Russians continued to improve their trenches. Apraksin did not want to make it look like the Russians were slowing down their work, because he believed this would improve the defender's courage.<sup>1198</sup> The siege army now had supply problems. In the beginning of April, Apraksin informed Tsar Peter on shortages of food and fodder. He also explained that he saw it as impossible to live off local resources around Viborg.<sup>1199</sup> For lack of supplies, Apraksin requested that no more troops should be sent. The lack of fodder made him return the cavalry.<sup>1200</sup>

The month of April otherwise was a period of unimportant events. Tsar Peter's diary claimed that nothing of consequence happened around Viborg from April 12/13 to May 9/10, 1710.<sup>1201</sup>

*Lybecker – April*

During April, Lybecker tried to keep informed on developments around Viborg. One party, advancing through the woods, reported that the Russians had officers who spoke Finnish. The officers had told local farmers about large reinforcements being on their way for the siege army. Four regiments in St.

---

<sup>1198</sup> Petrelli, pp. 136–137.

<sup>1199</sup> Grigorjev and Bespalov, p. 217.

<sup>1200</sup> Petrelli, p. 138.

<sup>1201</sup> Tsar Peter's diary, p. 289.

Petersburg and eight in Livonia, heading for Viborg, were mentioned. The officers also said that the Russians would advance toward Helsingfors as soon as there was grass on the ground.<sup>1202</sup>

On April 5, Lybecker had moved his headquarters to Filpola. On the same day, he reported to the War College [“Krigskollegium”] that the Russians had attacked a Swedish post in the vicinity, which is why he had moved out with one battalion of infantry and 100 cavalry. The enemy had counted 100 dragoons, a 600-man infantry unit and a number of men on skis. The Russians had withdrawn before the arrival of Lybecker’s force. On April 11, Lybecker had moved to Pyttis. He then reported on a Russian attack on a Swedish party which was to recover a small stock of supplies outside of Viborg. Then, on April 19, he had moved to Abborfors. From there he reported that nothing was heard from Viborg, which he explained with the fact that the snow was over a meter high [two “alnar”]. Lybecker also reported that he had spies as far off as Narva, but because of the snow it was difficult for them to report. By the end of the month, Lybecker wrote to the War College stating that there was a shortage of gunpowder and ammunition, since the stock was left in Viborg. New supplies would be needed before the grass started growing.<sup>1203</sup>

### *Russia - April*

In St. Petersburg, Tsar Peter had a relief fleet organized by the mouth of the Neva River. The sailing of the relief fleet depended on the ice in the inner parts of the Gulf of Finland. According to Just Juel, the ice in the Neva River broke on April 13/14/24 with such force, that from dawn to noon the river was all cleared. One of the remaining problems was the ice from Lake Ladoga. After the ice had broken on the Neva River, the ice from Lake Ladoga could be expected to flow through the Neva River, some ten to twelve days later. The Lake Ladoga ice came with strong force, threatening ships in its way. It then blocked the mouth of the river, until it was driven out by winds. An additional problem was that a westerly wind could drive the ice back to the mouth of the river. This problem with ice would remain until it melted.<sup>1204</sup>

On April 17/18/28, nine frigates left the St. Petersburg harbor. They were under the command of Vice Admiral Cornelius Cruys. On the 18<sup>th</sup>/19<sup>th</sup>/29<sup>th</sup>, snows – small sailing ships – left their moorings and formed a unit over which

---

<sup>1202</sup> Lybecker to Kanslikollegium, April 26, 1710, Yrjö-Koskinen, pp. 128–129.

<sup>1203</sup> Kreüger, pp. 41–42.

<sup>1204</sup> Juel, pp. 219–221.

Tsar Peter assumed command. On the 19<sup>th</sup>/20<sup>th</sup>/30<sup>th</sup>, five galleys under the command of Rear Admiral Count Jean de Bouzy [Botsis] arrived.<sup>1205</sup> The commander's galley had twenty-eight pairs of oars, with five or six prisoners to each oar<sup>1206</sup>. Set out below, several types of ships will be mentioned. The nomenclature is varied depending on the sources. For example, the Dane Just Juel did not use the same terms as Russian Sozaev, writing with British writer Tredera. If there is no special comment on a ship's type, it can be assumed to have been a smaller sailing vessel.

The smaller ships to sail in the fleet gathered on the roadstead on April 20/21/May 1. They were "flöjter", "galiots", "skuder", Dutch brigantines and Russian "carbasser", the last type was a larger rowing boat. On the 21<sup>st</sup>/22<sup>nd</sup>/2<sup>nd</sup>, messengers were sent out to see if the ice had left the banks by the mouth of the Neva River, which the fleet had to cross on its way out to sea. The messengers advised that there now were ten to eleven feet of water risen over the banks, and that the frigates could get over them if guns and cargo were temporarily removed. Once over the banks, there would be enough water for even the largest ships. On the 23<sup>rd</sup>/24<sup>th</sup>/4<sup>th</sup>, the vice admiral [Cornelius Cruys] set sail shortly after noon and left with his frigates.<sup>1207</sup> On the 25<sup>th</sup>/26<sup>th</sup>/6<sup>th</sup>, Botsis departed with his galleys, followed by Tsar Peter's snow force and several small brigantines full of people.<sup>1208</sup>

On the 27<sup>th</sup>/28<sup>th</sup>/8<sup>th</sup>, Juel and Polish Ambassador Wisthumb went aboard the galiot *Alexandr*. At 2 o'clock in the afternoon, they anchored with the rest of the fleet, two "miile" from St. Petersburg. All the ships by then had gotten across the banks, which was a hazardous operation. On the 29<sup>th</sup>/30<sup>th</sup>/10<sup>th</sup>, at 1 o'clock in the afternoon, there was an easterly wind. The fleet weighed anchor and sailed through the drifting ice to the Kronslott Fortress on the island of Retusaari, where it anchored around 5 o'clock in the afternoon. Two ships were dispatched to cruise and reconnoiter.<sup>1209</sup>

None of the sources above provide any detailed insight into the names, the fighting qualities or even the exact number of Russian ships involved. One of the best sources would be Just Juel's diary, which claims there were 270 vessels. Just Juel was a vice admiral, which made him a stable witness. There is also

---

<sup>1205</sup> Juel, p. 221.

<sup>1206</sup> Juel, p. 225.

<sup>1207</sup> Juel, pp. 222–223.

<sup>1208</sup> Juel, p. 225.

<sup>1209</sup> Juel, pp. 227–228.

what looks like a contemporary print showing the Russian fleet of twenty-nine larger vessels, nineteen mid-size vessels, 114 smaller vessels and five galleys, for a total of 169 vessels.<sup>1210</sup> The problem then is that these two sources do not coincide. Further guidance is found in the work of Tredera and Sozaev on Russian naval vessels<sup>1211</sup>.

The Tredera and Sozaev work, however, does not include a specific section on the 1710 Viborg fleet, so the picture here has to be created from information on various individual ships. Also, Tredera and Sozaev does not contain detailed information on operation of the smallest vessels. It should be noted that Tsar Peter's diary contains no information on the strength nor the composition of the relief fleet.<sup>1212</sup> It should also be noted that Grigorjev and Bespalov mentioned a transport fleet of twenty-two ships.<sup>1213</sup>

According to the Tredera and Sozaev work, core ships in the man-of-war section were the seven frigates of *Mikhail Arkhangel*-class. They were lightly armed, carrying 6-pounders as their heaviest guns, up to twenty of them.<sup>1214</sup>

Russian writers Grigorjev and Bespalov classified one of the ships in the relief fleet, *Ivan-Gorod*, as an artillery galiot.<sup>1215</sup> However, Tredera and Sozaev claimed that the *Ivan-Gorod* was a *Mikhail Arkhangel*-class frigate, armed with eighteen to twenty 6-pounders and eight to ten 3-pounders and that the only bomb vessel available to the Russians in the Baltic Sea in 1710 was *Khobot*, with twelve 20-pounders and two 3-pod howitzers.<sup>1216</sup> Tsar Peter's diary also mentions a bombardier galiot. The diary does not give the name of the ship, but states that its commander was Captain Walrant.<sup>1217</sup> Whether *Khobot* followed the fleet remains unclear. At first glance, this might not seem important, but it is obvious that a heavily armed ship like her would have changed the rules of an engagement between the Swedish and Russian naval forces, since the other Russian ships were only lightly armed.

The Tredera and Sozaev work also allows insight into the transport fleet. There were seven galiots, all captured from Sweden at Narva in 1704, five

---

<sup>1210</sup> Melnov, p. 62.

<sup>1211</sup> John Tredera and Eduard Sozaev, *Russian Warships in the Age of Sail 1696–1860: Design, Construction, Careers and Fates*, (Barnsley 2010). (Further on "Tredera and Sozaev".)

<sup>1212</sup> Tsar Peter's diary, pp. 289–293.

<sup>1213</sup> Grigorjev and Bespalov, p. 219.

<sup>1214</sup> Tredera and Sozaev, pp. 142–144.

<sup>1215</sup> Grigorjev and Bespalov, p. 219, Swedish: "artillerigaljot".

<sup>1216</sup> Tredera and Sozaev, pp. 142 and 152. One Russian "pod" was equal to about sixteen kilos.

<sup>1217</sup> Tsar Peter's diary, p. 291.

“shmaks”, two “buers”, two “fleyts”, one pilot boat and two tartans.<sup>1218</sup> This provides an account of nineteen of the twenty-two vessels mentioned by Grigorjev and Bespalov, with three unaccounted for. There were also twelve snows available to Tsar Peter in the Baltic Sea, including his favorite ship, *Lizette* (*Mon Ceoeur/Monker*).<sup>1219</sup> Three of the snows could have meant the difference of three that we saw above. The Russians also possessed a large number of strugs, with 783 of them having been built in 1701–1703. These were flat-bottomed boats of a length of sixty to 150 feet, often used for troop transport.<sup>1220</sup> It appears to have been a considerable risk to take these vessels out into severe ice conditions, but Juel, Lybecker and the print of unknown origin indicate that a large number of them were in the fleet. Thus, we get a fairly clear picture of the fleet sailing for Viborg, although their exact amount remains open. In general, it can be concluded that the Russian relief fleet was weak, both as a fighting force and in regard to seaworthiness. It was a gamble to send that force to sea.

#### *Sweden – Wattrang April*

In Sweden, preparations were made to send a flotilla to the Gulf of Finland. Swedish naval forces had customarily been sent there since 1704.<sup>1221</sup> The former flotilla commander, Anckarstierna, was too old and too ill to sail, so he was replaced by his former subordinate Vice Admiral Gustaf Wattrang for 1710.<sup>1222</sup> On April 1, Wattrang had begun to function in his new command.<sup>1223</sup> On April 12, the Admiralty confirmed instructions for Wattrang, and on April 14 he received that document. He was to lead a flotilla of sixteen ships going east. Wattrang’s force consisted of the larger ships: *Estland* (which was the flag ship), *Gotland*, *Ösel*, *Göteborg*, *Livland*, *Wrede*, *Öland*, *Reval*, *Viborg*, *Falken* and *Wolgast*; the brigantines *Göja* and *Oden*; the fireship *Fama*; the transport [“krejare”] *St. Johannes*; and the hospital ship *Persianska Köpman*.<sup>1224</sup> Of these, *Estland*, *Gotland*, *Livland*, *Ösel*, *Öland* and *Göteborg* were ships with 18-pounders as their main armament. *Falken*, *Wrede*, *Reval* and *Viborg* were frigate types of ships, carrying 18-pounders or 12-pounders as their heaviest weapons.<sup>1225</sup>

<sup>1218</sup> Tredera and Sozaev, pp. 364, 366–369 and 400.

<sup>1219</sup> Tredera and Sozaev, pp. 150 and 151.

<sup>1220</sup> Tredera and Sozaev, p. 362.

<sup>1221</sup> Ericson Wolke, *Rysshärjningar*, p. 113,

<sup>1222</sup> Arnold Munthe, *Del II*, p. 453.

<sup>1223</sup> Amiralitetskollegium, Minutes of April 1, 1710, pp. 333 and 335.

<sup>1224</sup> Wattrang, s. p. [1].

<sup>1225</sup> P. O. Bäckström, *Svenska flottans historia*, (Stockholm 1884), pp. 412–413 and p. 421.



The instructions given Wattrang are of interest, in regard to the siege of Viborg. The instructions consisted of three major parts. The first named the ships involved and an order to sail to Reval and acquire information from a messenger sent to the local governor. This might seem like unnecessarily detailed regulation, but it could also be seen as a warning not to get his ships too deep into the Bay of Reval, thereby becoming too dependent on the winds to get them out. Wattrang was then to go to the area of Viborg and Retusaari, where he was to stop the Russians from going to sea and block any transport of supplies going to the enemy. The second part was that Wattrang should deal with neutral merchants, according to instructions issued earlier by the Council and, lastly, that Wattrang should aim to stay in the Gulf of Finland until winter forced him out.<sup>1226</sup>

Wattrang left Karlskrona for Kalmar on April 15, travelling by land. Four of his ships had been sitting there since last year's cruise in the Gulf of Finland. He arrived in Kalmar on the 17<sup>th</sup>. The other ships of the flotilla were to sail from Karlskrona under the command of Rear Admiral Erik Johan Lillie, and the forces were to meet up north of the island of Öland. A week later, all the ships were ready to sail from Kalmar, and Lillie was at the rendezvous off Öland. However, adverse winds kept Wattrang in harbor. On the same day, which was the 24<sup>th</sup>, Wattrang received instructions from Admiral General Wachtmeister in Karlskrona. If Wattrang encountered delays that could not be avoided, he should let Lillie's force sail ahead to the Gulf of Finland.<sup>1227</sup> Wachtmeister here revealed a sense of urgency not seen elsewhere in the Swedish camp.

On the 25<sup>th</sup>, the winds were still not suitable for sailing but, on the following day, they changed for the better, and Wattrang was able to leave Kalmar. The forces joined there before noon, but then two days of adverse winds stopped the journey eastward. On the 29<sup>th</sup>, the flotilla proceeded, despite weak wind.<sup>1228</sup> The following day, it became obvious that the brigantine *Oden* and the hospital ship *Persianske köpman* were slower moving than the other ships. The solution was to take those ships in tow behind better sailing ones. During the night, course was set for Hoburg, the southern tip of the island of Gotland.<sup>1229</sup>

---

<sup>1226</sup> *No title* – Instruction for Wattrang, dated Carlskrona April 12, 1710, 1710 Äldre volym nr 91 (the manual system), (assumed to be Volume 84 in NAD), a/huvudserie, BI Registratur, 1 Amiralitetskollegium kansliet 1630–1807, Förteckning 500, Flottans centrala ledning, Flottans arkiv, Krigsarkivet, pp. 758–762.

<sup>1227</sup> Wattrang, s. p. [2], [4] and [8].

<sup>1228</sup> Wattrang, s.p. [14].

<sup>1229</sup> Wattrang, s.p. [16].

## MAY 1710

*Viborg – May*

In Viborg, Stiernstråhle and his men were working hard to maintain and bolster the defense of the city. Wooden houses were torn down for material to build large enclosures at the weakest places in the city wall. These were then filled with various material. Two new bastions were built along the waterfront, in addition to a covered bridge leading out to the castle from the city. The bridge was essential, because the provisions were stored in the castle.<sup>1230</sup>

*Lybecker – May*

In May, Lybecker wrote several letters from his headquarters at Abborfors. On May 3, he informed the Chancellery [“Kanslikollegium”] of a report from a spy sent to the enemy camp. The spy reported that Viborg had been under heavy fire for four days, and that the Russian redoubts by Trångsund were getting stronger. He also reported that 8,000 Russian cavalry were expected to arrive at St. Petersburg at first grass for their horses, and that 300 Russian strugs were prepared to ship bread and flour to the siege army. Having delivered its supplies to Viborg, the fleet could sail for Stockholm.<sup>1231</sup> On May 6, Lybecker wrote a new letter to the Chancellery, reporting that Russian artillery had caused much damage in the city, but that the inhabitants were surviving quite well. He also reported that a sally, and fortress artillery fire, had cost the Russians 700 men.<sup>1232</sup> On the same day, Lybecker wrote another new letter, pleading in a bit of desperation. He had found it necessary to send Colonel Armfelt to Stockholm to discuss the situation.<sup>1233</sup> In a letter of May 10 to the Chancellery, Lybecker noted that the weather now favored the Russians. There had been easterly winds, clearing the sea from ice. He concluded that the survival of Viborg now hinged on the arrival of the Swedish Navy.<sup>1234</sup>

From Kupis, Lybecker sent a letter to the War College [“Krigskollegium”] dated May 20, 1710, reporting on an interview with a Russian prisoner, who was captured when his unit went out to gather wood for the batteries at Trångsund. The prisoner told Lybecker that the siege force had counted sixteen regiments of infantry, two of dragoons and some 600 Cossacks. The dragoons were soon

---

<sup>1230</sup> Ludvig W:son Munthe, Del III:2, p. 548.

<sup>1231</sup> Lybecker to Kanslikollegium, May 3, 1710, Yrjö-Koskinen, pp. 129–130.

<sup>1232</sup> Lybecker to Kanslikollegium, May 6, 1710, Yrjö-Koskinen, p. 130.

<sup>1233</sup> Lybecker to Kanslikollegium, May 6, 1710, Yrjö-Koskinen, p. 131.

<sup>1234</sup> Lybecker to Kanslikollegium, May 10, 1710, Yrjö-Koskinen, pp. 131–132.

forced to leave due to lack of fodder. The prisoner belonged to Colonel Vasilij Ivanovitj Borosin's infantry regiment. This is one of the rare insights, offered in Swedish sources, as to which Russian units actually were outside Viborg.<sup>1235</sup>

In May 27 follow-up letter to the Chancellery, Lybecker explained that on the day before, he had received two letters from Stiernsträhle, dated May 11 and 14, which told of the arrival of the Russian supply fleet, and the fact that he had heard nothing from the Swedish Navy. Stiernsträhle also told of Russian breach shooting, but that the garrison was prepared to do its utmost to resist.<sup>1236</sup>

#### *The Russians – May*

On May 8, Apraksin wrote to Tsar Peter explaining the supply situation. There was virtually no food left, and from the 9<sup>th</sup>, it would hardly last for four days.<sup>1237</sup> According to Petrelli, the Russian reserves of flour would last for ten days on May 1, oat for fourteen.<sup>1238</sup> Apraksin was now obviously in a difficult position. The only alternative to a successful Russian resupply operation was a long march back to St. Petersburg, with very little to eat.

#### *Sweden – May*

A relief expedition to Viborg was not high on the agenda in Stockholm. On May 2, 1710, the Defense Commission had a long and heated meeting, primarily dealing with the possibility of resupplying besieged Riga. During that meeting, Pernau and Reval were also mentioned, but not Viborg.<sup>1239</sup> During another meeting of the Defense Commission on May 13, Finland was discussed twice. The first matter concerned an ammunition transport. Sometime later in the meeting, a letter from Major General Lybecker, dated April 18, was read. Attached to Lybecker's letter was a letter from Stiernsträhle, which stated that morale in Viborg was high and that they had complete confidence in a relief force to come from Major General Lybecker.<sup>1240</sup>

On May 21, a letter to Karl XII was discussed in the Council. Horn suggested that the King should be informed about what had occurred during the meeting with the Committees of Parliament when they recently met. Count

---

<sup>1235</sup> Kreüger, p. 43.

<sup>1236</sup> Lybecker to Kanslikollegium, May 27, 1710, Yrjö-Koskinen, pp. 132–133.

<sup>1237</sup> Grigorjev and Bespalov, pp. 217–218.

<sup>1238</sup> Petrelli, p. 138.

<sup>1239</sup> Minutes of the Defense Commission of May 2, 1710, Volume 7, s. p.

<sup>1240</sup> Minutes of the Defense Commission of May 13, 1710, Volume 7, s. p.

Wrede added that information on the precarious situations for the cities of Riga and Viborg should be included in the letter.<sup>1241</sup>

*The naval situation – Russia – May*

On the 30<sup>th</sup>/1<sup>st</sup>/11<sup>th</sup>, the wind was easterly at 8 o'clock in the morning. The Russian resupply fleet was off Kronslott. The small ships and the galleys were ordered to sail at once. Around noon, the larger ships set sail. During the afternoon, the wind turned westerly. The fleet was now widely spread out across the sea; Juel could hardly see the squadron of small ships. During the afternoon, the two reconnoitering ships returned, having cruised to Björkö. It was reported that there were no hostile ships to be seen up to Björkö. The sailing now became more difficult, as the westerly wind brought ice in from the sea. Some ships collided; one snow sprung a leak and had to return to Kronslott. During the night, the vice admiral gave the signal to anchor. There was now no wind, but ice was everywhere.<sup>1242</sup>

The 1<sup>st</sup>/2<sup>nd</sup>/12<sup>th</sup> was a day of difficult sailing. At 3 o'clock in the morning, a stiff wind from the west-southwest began to blow. At 4 o'clock in the afternoon, the fleet anchored again. Juel then went to visit the Tsar on his ship. Tsar Peter told him that he had been to Björkö to reconnoiter the ice. Although prying with an iron crowbar, he had been unable to break the ice between Björkö and land. During the night, several ships lost their anchors in the drifting ice. On the following day, May 2/3/13, the wind was westerly and the fleet sailed until noon, when it anchored under a small island, Seitskär, two "miles" from land. The snow *Lizette* (*Mon Coeur/Monker*), with the ministers and the chancellery aboard, joined the fleet. In the afternoon, the fleet sailed on an easterly wind in the evening, until anchoring for the night. The ice drifting from land caused severe problems.<sup>1243</sup>

On the 3<sup>rd</sup>/4<sup>th</sup>/14<sup>th</sup>, the fleet sailed on a westerly wind and anchored at 10 o'clock in the morning. The fleet was now still, with ice everywhere. Tsar Peter returned to St. Petersburg, and Juel sent his sloop ashore to buy fish. He noted the poor conditions under which the local population was living; people were prepared to sell themselves to avoid starvation. The calm continued on May 4/5/15. The galleys and brigantines often opened fire, thinking that the Swedes

---

<sup>1241</sup> Council minutes of May 21, 1710, Volume 102a, p. 313.

<sup>1242</sup> Juel, p. 228.

<sup>1243</sup> Juel, pp. 228–229.

were coming. Juel remarked that people on the fleet were now afraid of their own shadows.

The fleet sailed at 9 o'clock in the morning on the 5<sup>th</sup>/6<sup>th</sup>/16<sup>th</sup>, having ice on both sides. The wind was then easterly, but later during the day changed to northeast. When the wind changed, Juel noted that the small ships were trapped in the ice, and that the wind had taken them out to sea. In his opinion, it looked bad. The small ships were carrying 5,000 men of the Guards regiments and all the supplies for the army off Viborg. Tsar Peter had now returned to the fleet. He ordered the ship *Dum-krafft* to act as an ice-breaker. A small cannon should be mounted on the bowsprit, and arranged so it could drop and break the ice below it.<sup>1244</sup>

On the morning of the 6<sup>th</sup>/7<sup>th</sup>/17<sup>th</sup>, there was a crisis in the Russian fleet. The small ships were now widely separated from the larger. Wind was blowing quite hard from the northeast, too hard, in fact, for the small ships to use their oars. Juel estimated that the small ships were doomed to drift to the Livonian coast and fall into Swedish hands. Juel actually referred to Livonia, and not Estonia which would have been more correct. Two frigates, however, were dispatched to save the small ships, and somehow they completed their mission. In the evening, the entire fleet steered toward Björkö.

The morning of the 7<sup>th</sup>/8<sup>th</sup>/18<sup>th</sup> also started badly for the Russian fleet. During the night, a strong wind had again sent the small ships out to sea. The larger ships weighed anchor and sailed up to under Björkö, where they anchored again.<sup>1245</sup>

The wind slackened on the 8<sup>th</sup>/9<sup>th</sup>/19<sup>th</sup> and changed to east-southeast. Tsar Peter now left the main force and sailed toward Viborg. In the evening, the wind died down, but Peter by then was just two "miile" from Viborg. Apraksin came to join him, and there was a great amount of celebration on Peter's ship. On the 9<sup>th</sup>/10<sup>th</sup>/20<sup>th</sup>, Juel noted that the weather was calm and, contrary to everyone's fears, all small ships, including the galleys, had been recovered. The only exceptions were four small vessels ["carbasses"], which had sunk. Most of the men and supplies on the four sunken ships had been saved, however. Tsar Peter's diary has a slightly different version of this event, claiming that three boats from Novgorod were broken apart by the ice<sup>1246</sup>.

---

<sup>1244</sup> Juel, pp. 229-230.

<sup>1245</sup> Juel, p. 231.

<sup>1246</sup> Tsar Peter's diary, p. 291.

The fleet sailed up to within a “miil” of Viborg. There, Tsar Peter was saluted from the two works Apraksin had had built at the entrance, to block Swedish resupply operations. Tsar Peter dedicated the 10<sup>th</sup>/11<sup>th</sup>/21<sup>st</sup> as a day of celebration while supplies were discharged.<sup>1247</sup> With these reinforcements, the Russian siege artillery now rose to eighty cannons of 24 and 18 pounds, three mortars of 360 pounds and twenty-three mortars of 120 to 200 pounds.<sup>1248</sup>

The arriving ships could not be identified from Viborg, and Swedish guards within earshot of Russian guards asked their opponents where the ships were coming from. The reply was Russia, which spread a feeling of uneasiness in Viborg.<sup>1249</sup> Tsar Peter’s diary informs us that cargo was discharged from the 10<sup>th</sup>/11<sup>th</sup>/21<sup>st</sup> to the 14<sup>th</sup>/15<sup>th</sup>/25<sup>th</sup>. On that last day, the transports returned to St. Petersburg, leaving Botzis and his galleys with the siege force. The diary further noted that the Swedish fleet arrived at Björkö [“Beresowia”] on the 18<sup>th</sup>/19<sup>th</sup>/29<sup>th</sup>.<sup>1250</sup>

There is a story of a Russian ruse used when entering Viborg. It is claimed that the Swedish artillery could reach the approaches to the place where the Russians discharged their ships. The story is found, for example, in Grigorjev and Bespalov<sup>1251</sup>. It continues with the Russians hoisting Swedish flags on some of their ships and arranging mock artillery duels with their own batteries. The Swedes were to have believed that their own ships were arriving, and would not have opened fire. Thus, the Russian ships could reach the discharge place unmolested. According to any map of the Bay of Viborg, it is unclear how that might have worked. Having no contemporary sources to confirm and/or explain the incident, the assumption must be that it is the product of misunderstanding.

### *Sweden – Wattrang – May*

On May 1, Wattrang’s flotilla was sailing toward the southern tip of the island of Gotland. However, once there, they concluded that there was not enough wind to take them around southern Gotland, so Wattrang had to sail north again and round the northern tip of Gotland. In the morning of the 2<sup>nd</sup>, they passed the island of Gotska Sandön. On the 3<sup>rd</sup>, the flotilla reached Reval, where it entered

<sup>1247</sup> Juel, p. 231.

<sup>1248</sup> Tsar Peter’s diary, p. 299.

<sup>1249</sup> Ruuth, p. 475.

<sup>1250</sup> Tsar Peter’s diary, pp. 292–293.

<sup>1251</sup> Grigorjev and Bespalov, p. 219.

the roadstead during the following morning. Here the ship *Holland* waited. Its captain, Herman Schnack, explained that the ship was in a good condition and ready to join the flotilla. Schnack also told Watrang that he was under orders to cruise toward the island of Hogland, deep in the Gulf of Finland, but he had been told that there was still ice between the skerries, and therefore he had not yet sailed.<sup>1252</sup>

In Reval, there were also some thirty Dutch merchant ships, which would cause Watrang much concern. These ships could be suspected of carrying goods for Russian-occupied Narva or any other Russian-held port. Watrang also made an effort to familiarize himself with the current situation in the Gulf of Finland in general, and around Viborg in particular. He knew that Viborg was under siege, but otherwise did not learn much more.

On the 5<sup>th</sup>, the ship *Öland* and the brigantine *Falken* were sent to reconnoiter the waters around the island of Hogland.<sup>1253</sup> Then on the 6<sup>th</sup>, a period of weather unsuitable for Watrang began. His winds were either contrary, or there was no wind at all. Finally, on the 13<sup>th</sup>, Watrang's flotilla was able to leave Reval and sail east.<sup>1254</sup> It is about eighty nautical miles from Reval to Hogland, and 135 nautical miles from Reval to Björkö. The winds were not favorable at this time, and it was not until the morning of the 15<sup>th</sup> that Ekholmen, a small island in the Gulf of Finland, came into sight. On the same day, the fireship *Fama* was sent in advance to Hogland. Watrang's main concern at this point was still the Dutch merchants, which now were escorted by various Swedish ships.<sup>1255</sup>

On the 17<sup>th</sup>, Watrang arrived at Hogland. He then proceeded east, and in the early morning of the 19<sup>th</sup>, the brigantine *Göja* joined the flotilla off Torsaari, an island just northwest of Björkö. At 7 o'clock in the morning, the flotilla arrived at Björkö.<sup>1256</sup> Swedish history writer Arnold Munthe claimed that on the 22<sup>nd</sup>, the ship's boats ["espingar"] were sent out to reconnoiter, and that they reached the Russian batteries at Trångsund.<sup>1257</sup> Watrang's journal testifies to the fact that the ship's boats were sent out, but there is no mention of them reaching Trångsund. On the following day, Lieutenant ["kapten"] Bluhm was ordered to a position close to Viborg ["Röhäll"] with *Göteborg*, *Reval*, *Viborg* and *Fama*.

---

<sup>1252</sup> Watrang, s. p. [16–19].

<sup>1253</sup> Watrang, s. p. [19, 21 and 24].

<sup>1254</sup> Watrang, s. p. [26–39].

<sup>1255</sup> Watrang, s. p. [39–40].

<sup>1256</sup> Watrang, s. p. [43] and [46–47].

<sup>1257</sup> Arnold Munthe, Del II, p. 454.



Their task was to block the Russian ships still at Viborg and, if possible, to attack and destroy them.<sup>1258</sup> On the 28<sup>th</sup>, Wattrang received a letter from Bluhm saying that Bluhm's ships had hunted eleven smaller enemy ships to Trångsund, where those ships took cover under Russian batteries. Bluhm then explained that he could not attack the enemy without lighter ships. Wattrang immediately issued orders to *Falken* and *Wolgast* to join Bluhm. On the 30<sup>th</sup>, it became obvious that it was difficult to establish communication between the flotilla and the besieged Viborg. Wattrang sent a local official ["länsman"], named Brodde, and a farmer to get a letter to Stiernstråhle. On the 30<sup>th</sup>, they returned, stating that it had been impossible to pass the Russian cordon and get into the city.<sup>1259</sup>

#### *The siege after Russian reinforcements – May of 1710*

After the arrival of the resupply fleet, the Russians had strong siege artillery. Ludvig W:son Munthe described the Russian siege artillery as thirty 18-pounder and 24-pounder cannons and twenty-six mortars. To that the armament of the Russian galleys should be added. On May 11, Stiernstråhle wrote a document saying that the Russians had now begun to shoot at the wall opposite Sikaniemi. The fire was obviously not very effective in the beginning. On the 19<sup>th</sup>, a rider left Viborg for Nyslott, and he relayed that the works had suffered little damage.

On the 17<sup>th</sup>, about a week after the arrival of the supply fleet, the Russians started constructing a new forty-cannon breach shooting battery, opposite the old city wall in Sikaniemi, and a twenty-cannon battery opposite Pantsarlaks. Several mortar batteries also were built. Stiernstråhle had counter-batteries built in the city, which caused substantial losses among the Russians. Swedish fire, however, did not stop the Russian work. On the 24<sup>th</sup>, the battery facing the old city wall was fully completed. The day before, on the 23<sup>rd</sup>, a smaller breach was shot there.<sup>1260</sup>

## JUNE OF 1710

### *The siege – June*

At 7 o'clock in the evening of June 1/2, the Russian siege batteries opened a devastating fire. Forty cannons worked on the old city wall at musket range. Thir-

---

<sup>1258</sup> Wattrang, s. p. [55], [56] and [57–58].

<sup>1259</sup> Wattrang, s. p. [67–68] and [70].

<sup>1260</sup> Ludvig W:son Munthe, Del III:2, pp. 548–549.

teen cannons shot at the Pantsarlaks bastion, while twenty-six large mortars threw bombs into the city.<sup>1261</sup> According to Ludvig W:son Munthe, the Swedish ships now turned out to sea. These Swedish ships were most likely Bluhm's, possibly joined by *Falken* and *Wolgast*. Any hope of attacking the Russian ships on inshore waters was now given up. In Viborg, nothing was heard from Lybecker. Fire destroyed the city, and the streets could no longer be recognized; only heaps of rubble remained. On the 5<sup>th</sup>, the entire old city wall, facing the side of Sikanieme, fell.

Also on the eastern side, the Russians made strident advances. The garrison had to desert a stone redoubt in front of the Äyräpää bastion, and the Russians now had access to the moat. The trenches toward Pantsarlaks had advanced almost to the wall. During this onslaught, the Pantsarlaks bastion proved to be very strongly built and Bergholtz, the Russian commanding general on the eastern side, decided to use a mine – an “infernal machine” – in the language of the days. Before the mine could be dug for, the Russians needed to conquer a work adjacent to the bastion. After one night of heavy fighting, during which the Russian grenadier regiment suffered heavy casualties, that conquest was completed.

Apraksin held a conference on June 6/7 to determine future actions. It was decided to storm, so preparations for the attack were made. The mine under the Pantsarlaks bastion was to be blown and a storm at this point was to follow. Using pontoon bridges, Russian infantry would also storm into the city from the south. When the storm was to be launched, hard winds and a heavy rain made the operation unfeasible. As the Russians waited for better weather, orders arrived to delay the final storm until Tsar Peter's arrival on June 9/10.<sup>1262</sup>

The final stages of the siege are somewhat unclear. However, it appears as though Russian Major General Bergholtz, in the first days of June and on his own accord, ordered a storm of the Swedish detached works on the eastern side. This attack was obviously beaten back with heavy Russian casualties. Bergholtz was subsequently placed under arrest.<sup>1263</sup> In convincing terms, Kagg's diary described a Russian attack on the 6<sup>th</sup>, when they captured a Swedish work but were driven out. The story gets more convincing as Kagg named Captain Michael von Buttner of the Tawastehus Infantry Regiment as the leader of the

---

<sup>1261</sup> Tsar Peter's diary, p. 293 and Grigorjev and Bepalov, p. 221.

<sup>1262</sup> Tsar Peter's diary, p. 293 and Ludvig W:son Munthe, Del III:2, p. 550.

<sup>1263</sup> Lybecker to Kanslikollegium, June 23, 1710, Yrjö-Koskinen, p. 135.

counterattack, and mentioned the taking of forty-nine Russian prisoners by von Buttner and his men.<sup>1264</sup>

On June 4, a lieutenant by the name of Ritz<sup>1265</sup>, for unknown reasons, had been sent to the Russian camp, where he had been detained for some time to watch the siege. The lieutenant had the opportunity to talk to Stiernsträhle and others in Viborg. Stiernsträhle had explained that there were 2,000 barrels of cereal, but that the garrison was worn down by exhaustion, disease and ferocious enemy activity.<sup>1266</sup> Ludvig W:son Munthe added that the garrison had also run out of ammunition, using bows and arrows, slings and throwing stones to fight.<sup>1267</sup> The claim does not go well with the quantity of ammunition captured by the Russians after the siege (see below).

Stiernsträhle now obviously saw further resistance as futile. He sent Stobée out during the evening of the 9<sup>th</sup>/10<sup>th</sup> to negotiate surrender on good conditions. Stiernsträhle wanted the garrison to march off with their weapons, families, belongings and enough provisions for the march, however without any flags and music. On the night of the 11<sup>th</sup>/12<sup>th</sup>, Tsar Peter arrived in the siege camp, where he agreed to the conditions; the surrender was signed the following evening, the 12<sup>th</sup>/13<sup>th</sup>. The Russians, however, soon broke the agreement and all men, except for the sick and wounded, were made prisoners of war. On the morning of the 13<sup>th</sup>/14<sup>th</sup>, Russian troops entered the city.<sup>1268</sup>

#### *Lybecker – June*

During June, Lybecker hoped to concentrate troops, until the beginning of July, in order to defeat the Russian siege army. It was, however, too late to do so. On June 23, Lybecker wrote to the Chancellery [“Kanslikollegium”] informing them about the surrender of Viborg.<sup>1269</sup>

#### *The naval situation - June*

During the month of June, Watrang continued his operations, mainly directed toward keeping the Russian Navy in harbor. His journal does not reveal any sense of urgency regarding Viborg. Located off Björkö, Watrang received a letter from Lybecker on June 14, asking if the flotilla could provide soldiers and

---

<sup>1264</sup> Leonhard Kagg's diary, p. 161.

<sup>1265</sup> Ludvig W:son Munthe, Del III:2, p. 551, note 1.

<sup>1266</sup> Lybecker to Kanslikollegium, June 23, 1710, Yrjö-Koskinen, p. 135.

<sup>1267</sup> Ludvig W:son Munthe, Del III:2, p. 551.

<sup>1268</sup> Ludvig W:son Munthe, Del III:2, p. 551 and Tsar Peter's diary, pp. 293 and 295.

<sup>1269</sup> Lybecker to Kanslikollegium, June 23, 1710, Yrjö-Koskinen, p. 135 and p. 135, note.

food for the garrison in Viborg.<sup>1270</sup> Lybecker suggested an alternate route into Viborg, east of the Trångsund passage. Wattrang started asking some fishermen and others about the suggested passage and then called a meeting with the commanders of divisions and ships. None of Wattrang's ships' captains wanted to try this new route.<sup>1271</sup> Wattrang remained steadfast in his attempts to get in contact with the garrison. On the 16<sup>th</sup>, he again sent out the local official, Hans Brodde, and the farmer to acquire information on the state of Viborg. It was not until the 21<sup>st</sup> that Wattrang got the first news indicating the fall of Viborg. Swedish Colonel Baron Rehbinder had been exchanged for a Russian prisoner and was brought to Wattrang's flotilla on a galiot commanded by Russian Lieutenant Vitus Bering. After the exchange, Rehbinder told Wattrang that Viborg had surrendered on the 13<sup>th</sup> or the 14<sup>th</sup>.<sup>1272</sup>

#### AFTER THE SIEGE

The Russians complimented the bravery of the defense. Nowhere else had they seen such strong shooting and sallying. The Russians had planned to proceed to Åbo after Viborg, but the rumor of a defeat in Poland changed these plans. Seven thousand men were left, and the rest of the Russian army marched for St. Petersburg.<sup>1273</sup>

The number of survivors in Viborg at the time of the surrender is a question with several suggested answers. Tsar Peter's diary, seemingly reliable in these cases, presented a total of 3,880 prisoners. Of these, 3,485 were corporals, soldiers and musicians and 130 were officers. The remaining 265 were various military office holders, such as barbers and bookkeepers.<sup>1274</sup> Petrelli, writing on Russian sources, claimed that 135 officers and 3,700 men surrendered, for a total of 3,835, which is not far off from the information in Tsar Peter's diary.<sup>1275</sup> The situation is made complicated by Just Juel, claiming that the garrison consisted of 1,800 effectives at the time of surrender, with 400 sick and wounded.<sup>1276</sup> Ludvig W:son Munthe claimed that there were 1,440 healthy men in the garrison, and 200 too sick to serve.<sup>1277</sup>

---

<sup>1270</sup> Wattrang, p. [85].

<sup>1271</sup> Arnold Munthe, Del II, p. 455 and Wattrang, p. [88-89].

<sup>1272</sup> Wattrang, [96] and [100].

<sup>1273</sup> Lybecker to Kanslikollegium, June 23, 1710, Yrjö-Koskinen, pp. 135 and 136.

<sup>1274</sup> Tsar Peter's diary, pp. 297 and 298.

<sup>1275</sup> Petrelli, p. 144.

<sup>1276</sup> Juel, p. 255.

<sup>1277</sup> Ludvig W:son Munthe, Del III:2, p. 551.

Eirik Hornborg, in his work *Viborg: Gränsfästet i öster*, discussed the obvious discrepancies. He commented that if the Russian figure of 3,880 was correct, they must have counted not only burghers, civil servants, school youths and refugees from the countryside, but also train hands [“trossdrängar”] and, in general, all non-fighting personnel.<sup>1278</sup> Hornborg’s claim is in stark contrast to the information given in Tsar Peter’s diary.

The number of Swedish casualties during the siege is then difficult to calculate. Since unit strength normally was given without officers, the amount of 3,400 men in the garrison, as suggested in the beginning of this chapter, fits quite well with the 3,485 soldiers taken prisoner. This then means that virtually no one was killed in Viborg. That could be reasonable, since there was no starvation, no plague and no storm. However, almost 900 of the garrison were sick. Of the prisoners, the sick were to be evacuated to Swedish-held territory. A total of 877 officers and men were evacuated, together with 169 wives and a number of children<sup>1279</sup>. Except for the prisoners, the Russians also captured 75,600 pounds of gunpowder, 1,660 new muskets, 1,950 old muskets, 1,700 new carbines, 7,550 cannonballs and 9,644 grenades.<sup>1280</sup>

On July 1, 1710, Vice Admiral Wattrang had to write a difficult letter to the Defense Commission. It was a reply to their letter of June 6, which reached Wattrang on June 24. The Defense Commission referred to a May 14 letter from Stiernstråhle in Viborg, which passed along the information that the Russian fleet had arrived off Viborg on May 11, and that Stiernstråhle had heard nothing from Wattrang, nor seen anything of his ships. The Defense Commission regretted that the Russians had been presented with the opportunity to get into Viborg. All Wattrang could do was explain that, at the time, he was locked in Reval by contrary winds.<sup>1281</sup> In his letter, Wattrang conveyed the information that the King of Denmark had undertaken to send ten men-of-war to the Gulf of Finland but, to Tsar Peter’s great anger, failed to do so.<sup>1282</sup> In October, the

<sup>1278</sup> Hornborg, *Gränsfästet*, pp. 214–215.

<sup>1279</sup> Wattrang, s. p. [111].

<sup>1280</sup> Tsar Peter’s diary, pp. 298–299. The French word “fusil” is here translated with “musket”.

<sup>1281</sup> Vice Admiral G. Wattrang to the Defense Commission, July 1, 1710, Volym 14 Vederbörande auctoritetens skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet, pp. 356–362.

<sup>1282</sup> Vice Admiral G. Wattrang to the Defense Commission, July 1, 1710, Volym 14 Vederbörande auctoritetens skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet, p. 360.

Russian fleet laid up for the winter, and on November 29, Wattrang and his flotilla left Björkö and sailed west.<sup>1283</sup>

## VIBORG - CONCLUSIONS

The following could be concluded about Viborg:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were medieval in places, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.29** Viborg accessibility

	General accessibility	Local accessibility
Russian (attacker)	Low/High/Low	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility changed twice during the siege. At first it was low, hampered by a long stretch of barren land, but was overcome by a tough march across ice in the Gulf of Finland. Then, for a short period, the ice had broken and the general accessibility was high, due to the absence of the Swedish Navy. When the Swedish Navy arrived, the attacker's general accessibility went back to low. The defender's general accessibility was low, since Swedish ships could be blocked in the Bay of Viborg.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. Location on a peninsula was not enough to make a significant difference. The defender's local accessibility was low, since there was no sail-in function or protected discharge place there.

The attacker's tactic was to breach-and-storm, which, in the end, succeeded although Stiernstråhle surrendered before any storm. Looking at the process, Stiernstråhle could be burdened with being surprised by the arrival of the Russian advance guard. His only opportunity to defeat the Russian siege army was when it came in piecemeal from the ice, most likely exhausted after the march.

<sup>1283</sup> Arnold Munthe, Del II, p. 456.

It could also be asked if the stationing of the ship *Holland*, still in Reval during winter, at Viborg, could have changed the course of history.

On the regional level, Lybecker had limited resources. Still, it must be asked if he could have carried out the small war around Viborg more vigorously. Small bands of Swedes seem to have caused some problems for the Russians, but in the long run lost the struggle. Thus, the Russians were obviously more suited to this type of warfare. A more agile Swedish small war could have made Russian supply problems, prior to their resupply, even more serious than they already were. However, the major problem with Viborg, from a Swedish perspective, was that the fortification could not be resupplied or reinforced from sea under the eyes of a siege army.

#### 4.17 KEXHOLM 1710 – Finland (today's Priozersk in Russia)

##### **Under siege from:**

**First time:      March 22/23 to May 19/20, 1710. (59 days.) Held.**

**Second time:    July 9/10 to September 8/9, 1710 (62 days). Surrendered.**

##### *Introduction*

During the siege of Viborg (see Chapter 4.16 Viborg), the Russians dispatched a force to blockade the Swedish fortress of Kexholm, located by Lake Ladoga. The force was withdrawn and, after the fall of Viborg, a more determined attack was launched.

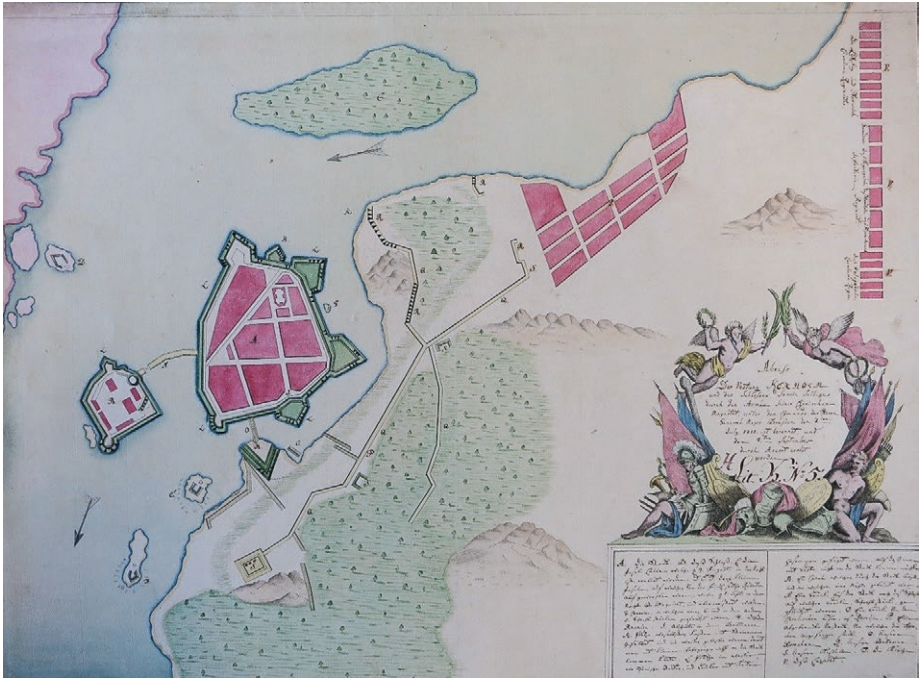
The existence of a fortification in the Kexholm area dates back to prehistoric days, where a place by the name of Korela can vaguely be defined. It was fought over in the wars between Sweden and Russia from the thirteenth century, until it became Swedish in the Peace of Stolbova in 1617. The works were improved in the seventeenth century, and the city and the fortress were successfully defended when attacked by the Russians in 1656.<sup>1284</sup>

Kexholm was located in the relatively large Vouksen River, by its outlet into Lake Ladoga. In the opposite direction, the Vouksen River leads to the large Finnish inland water system of Saimen (Finnish: Saima). In the picture above, the Vouksen River is on the right and Lake Ladoga on the left. Kexholm was also located on a road leading eastward down from Finland into Ingria.

---

<sup>1284</sup> L. W:son M., "Kexholm", in *Nordisk familjebok*, Del 13, (Stockholm 1910), columns 1457–1458.





**Picture 4.31** The picture above shows the Russian siege. The city of Kexholm might look like a modern bastion fortress, but in reality, the works were a patchwork of repairs. (Source: *Abriss Der Vestung Kexholm [...]*, nr 139, Volume 12 *Stora nordiska kriget 1699–1721*, Förteckning 425 *Sveriges krig 1521–1864*, Krigsarkivet.) (Detail.)

Access to navigable water was a sensitive matter in both directions. The Vouksen River was army blockable. The entrance from Lake Ladoga to the fortress creates a borderline case as to whether or not it was army blockable. At a minimum, it would have been quite difficult for an army unit to block this entrance, which is why the assessment here is that the entrance was not army blockable. However, any transport from Sweden would need to pass through the Neva River, which was army blockable. With Russian control of Lake Ladoga, this matter became highly theoretical. Further, any ship arriving at Kexholm would have no sail-in function or safe discharge area. Most important though, was that the safety of Kexholm depended on maritime superiority on Lake Ladoga.

Location on an island somewhat increased Kexholm's defensive qualities, but not to a decisive extent. There are no signs of the fortress lacking drinking water.

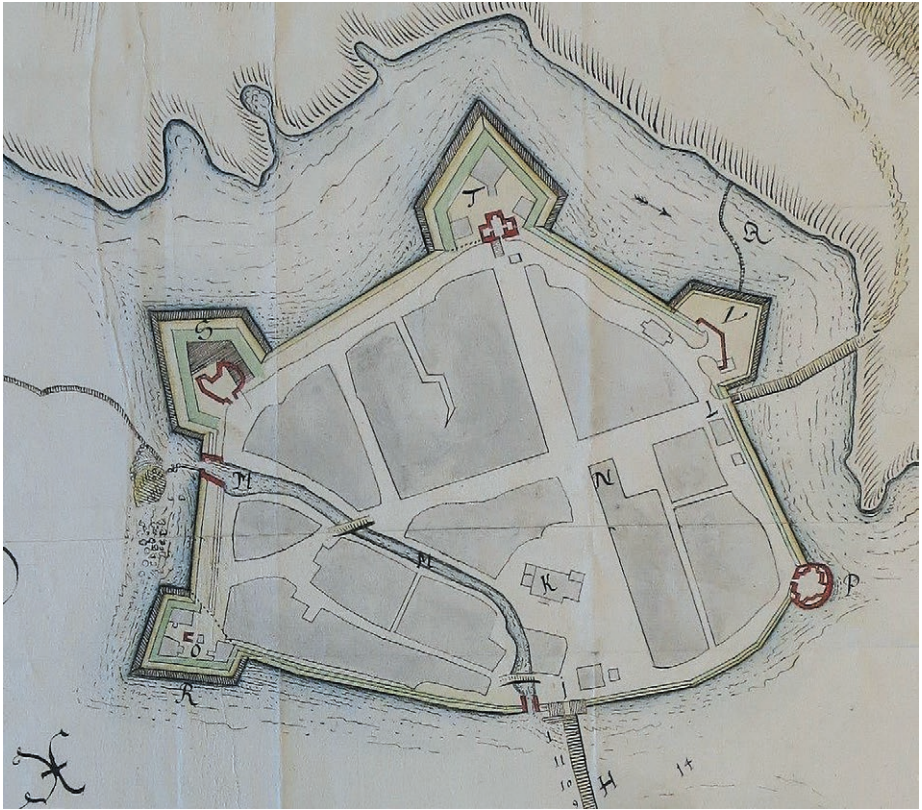
Fortifications consisted of those of city, the larger fortifications in Picture 4.31, and the castle, the smaller fortification on the lower left from the city. In 1683, there was a discussion about razing the works, but Erik Dahlbergh opposed the move, so fortifications were rebuilt instead.<sup>1285</sup> The reconstruction was not fundamental and, in the end, Kexholm was a patchwork of repairs. Basic construction was weak, with cobblestones and sandy peat in the walls. When Colonel Stiernschantz assumed command, improvement work began. Stiernschantz was a skilled fortification officer. Among other works, barracks and bombproof lodgings for the garrison were built.<sup>1286</sup>



**Picture 4.32** The map shows the location of Kexholm and the road network in Ingria. There were two ways to get from Finland to St. Petersburg, via Viborg or via Kexholm. (Source: *Öfversiktskarta till Striden om Finland 1808–1809*, in Hugo Schulman, *Striden om Finland 1808–1809*, (Borgå 1909). s. p.) (Detail.)

<sup>1285</sup> L. W:son M., "Kexholm", in *Nordisk familjebok*, Del 13 (Stockholm 1910), columns 1458–1459.

<sup>1286</sup> Ludvig W:son Munthe, Del III:2, pp. 553–554.



**Picture 4.33** There is one striking feature to Kexholm. In the plan above, from 1650, a sail-in function can be clearly seen in the lower left quadrant. This made Kexholm one of the very few Swedish fortifications to ever have had such a facility. The function seems to have been abolished in the works of the late seventeenth century. (Source: *Geometrischer Grundt Riss des Schlosses undt der Stadt Kexholm sambt des umbliegenden orthes beschaffenheit wie dieselben Anno 1650 an Monadt Octobri befunden undt zu Papier gebrecht von Heinrich Seulenberg*, nr 3, Volume 22 Kexholm/Käkisalmi, 12 Finland, Förteckning 406 Utländska stads- och fästningsplaner 1550–1989, Krigsarkivet.) (Detail.)

#### *Earlier research and sources*

An important Swedish source on the siege of Kexholm is “Journal uppå det som är passerad weed Kiexholms belägring åhr 1710” [Journal on What Came to Pass at the Siege of Kexholm in the year 1710] written by N. Qwistbergh, the garrison judge-advocate, and published in *Karolinska krigares dagböcker*



[The Diaries of Carolean Warriors].<sup>1287</sup> Ludvig W:son Munthe dedicated five pages to the siege, largely supported by the Qwistbergh work mentioned.<sup>1288</sup> The siege is also described in Raimo Ranta's work *Viipurin komendanttikunta 1710–1721: valtaus, hallinto ja oikeudenhoito* (Helsinki 1987). The book has a summary in German: "Die Kommandantur Viborg 1710–21. Eroberung, Verwaltung und Rechtssprechung."

The siege is covered in Tsar Peter's diary.<sup>1289</sup> A good overview of earlier Finnish and Russian research on Kexholm, from the earliest of times, is given by Hannu-Matti Wahl in an article in *Meddelande 55 Armémuseum*.<sup>1290</sup>

### *The garrison, artillery and supplies*

Colonel Johan Stiernschantz, commander of the Savolax and Nyslotts Regiment, assumed command at Kexholm on March 4, 1710, relieving Colonel Magnus Stiernstråhle, who moved to Viborg. A table compiled after the siege provides an unusually detailed picture of the garrison. To sum it up, there were 562 men in total at the beginning of the siege, of them, seventy were sick.<sup>1291</sup> None of the primary sources state which regiments the troops came from, but a comparison of officers mentioned in Qwistbergh's journal, with the units they belonged to, according to Lewenhaupt's *Karl XII's Officerare* [Karl XII's Officers], indicates that the units represented were Horn's hired infantry regiment (The Narva Garrison Regiment) and Skytte's hired Livonian infantry regiment.<sup>1292</sup>

An artillery inventory of July 1, 1699 gives detailed insight into armament, which consisted of a rich variety of artillery. The main guns were twelve 24-pounders, nineteen 18-pounders and twenty-six 12-pounders. Of these, eight 24-pounders, seven 18-pounders and twenty 12-pounders were in Nyenskans at the moment. Then there were twenty-nine other pieces, mostly smaller cannons of iron. The bronze cannons numbered nineteen of various calibers, of which six were Russian trophies of war, and four were for shoot-

<sup>1287</sup> N. Qwistbergh, "Journal uppå det som är passerad weed Kiexholms belägring åhr 1710", in August Quennerstedt (red.), *Karolinska krigares dagböcker jämte andra samtida skrifter*, Del 11, (Lund 1916). pp. [133]–170. (Further on "Qwistbergh"). The article contains several other documents, references to these are given as "Quennerstedt".

<sup>1288</sup> Ludvig W:son Munthe, Del III:2, pp. 552–556.

<sup>1289</sup> Tsar Peter's diary, pp. 140–143.

<sup>1290</sup> Hannu-Matti Wahl, "Kexholms slott. 700-årig historia från karelsk befäst centralort till svensk fästning", in *Meddelande 55 Armémuseum* (Stockholm 1995).

<sup>1291</sup> H. Gyllenspongh, Förslag uppå Kiexholms Gwarnizon, huru stark den varit, enär fienden d. 6 Julij sistl. ryckte under staden, [...], in Quennerstedt, pp. 154–155.

<sup>1292</sup> Compare for example "P. Törne", in Qwistbergh, p. 163 and Lewenhaupt Del 2, p. 717 and "H. I. Gyllenpångh", in Qwistbergh p. 163 and Lewenhaupt Del 1, p. 261.

ing scrap. In addition, there were seven small caliber falconets and four mortars.<sup>1293</sup> There was a shortage of ammunition, with only 126 balls per cannon, on average. Artillery staff counted thirty-two men under the command of the non-commissioned officer Abraham Enqvist.<sup>1294</sup> Kexholm was relatively well stocked with food, although salt was in short supply, as was tobacco.<sup>1295</sup>

### *The first siege*

Sources on the first siege are scarce. While the Russians were besieging Viborg, they dispatched Brigadier Secchin with his unit to Kexholm. The Russians arrived on March 23, and remained off Kexholm until May 20. They kept up a distant blockade, which stopped all deliveries from the surrounding countryside to the fortress.<sup>1296</sup>

### *Prior to the second siege*

When the second siege of Kexholm began, the siege of Viborg had ended in Swedish surrender in June of 1710. The Swedish Army in Finland was only of a few thousand men (see 4.16 Viborg 1710). Swedish naval forces controlled the Gulf of Finland, but Lake Ladoga had been a Russian water since October of 1702 (see Chapter 4.4 Nöteborg).

When Viborg surrendered, Russian Major General Romain Bruce was dispatched to Kexholm with three regiments of dragoons and two companies of grenadiers. His instructions were to capture Kexholm by bombardment, not risking any troops in a storm. On July 8/9, Bruce and his forces had arrived at the shores of the Vouxen River and, on the following day, he approached Kexholm.<sup>1297</sup>

Stiernschantz was aware of the approaching Russians on July 6, when he wrote a letter to the Defense Commission. Stiernschantz pointed out that he had requested salt, tobacco and 100 men from the commander of the Finnish Army, Major General Lybecker, but had not yet received any reply to his letters. Stiernschantz otherwise expressed a willingness to stubbornly defend Kexholm, as he hoped for the arrival of a relief army in the near future.<sup>1298</sup>

<sup>1293</sup> *Förslagh uppå Kiexholms arthelie aff den 1 julij Pro Anno 1699*, Volume 1 Inventarier och förslag från fästningar 1697–1699, III:a Förslag, G: Räkenskaper, Förteckning 3 Krigskollegium Artilleridepartementet, Krigsarkivet, s. p.

<sup>1294</sup> Ulfhielm, "Karl XII:s tid", pp. 441–442.

<sup>1295</sup> Ludvig W:son Munthe, Del III:2, p. 554.

<sup>1296</sup> Qwistbergh, s. p. [133].

<sup>1297</sup> Tsar Peter's diary, p. 140.

<sup>1298</sup> Stiernschantz to the Defense Commission, July 6, 1710, Volym 14 Vederbörande auctoritetens skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet, p. 370.

*The second siege*

The Russians arrived off Kexholm on July 9/10. On the following day, they started to dig trenches and build batteries. From Kexholm, heavy artillery fire was kept up, but failed to stop the Russian works from advancing.<sup>1299</sup> Stiernschantz was soon urged to surrender, but he refused. A battalion of Russian infantry joined Bruce's force on the 20<sup>th</sup>/21<sup>st</sup>. A major Russian step was taken on August 3/4, when the bulk of the siege artillery was landed, having been transported by sea from Schlüsselburg (Nöteborg). The Russian arsenal would, in the end, consist of five mortars, twenty-five cannons and two howitzers of 40 pounds. Of the cannons, Tsar Peter's diary claimed that nine were extra heavy, eight 80-pounders and one 40-pounder.<sup>1300</sup>

On August 7/8, according to Tsar Peter's diary, the Russians opened fire.<sup>1301</sup> The Swedish account of the events tells of bombardment already from July 15/16.<sup>1302</sup> According to Stiernschantz, the Russians by then had already received six mortars.<sup>1303</sup> The different number of mortars in the two sources could stem from Tsar Peter's diary having confused 80-pounder mortars with cannons, or heavy Russian cannons or howitzers were confused with mortars by Stiernschantz.

Grenade fire from the Russian howitzers caused severe problems in the fortress. Wooden bombs loaded with 6-pound grenades were also particularly destructive. Much of the siege work was carried out in the dark of night, and Stiernschantz described in detail how the garrison struggled to illuminate the night by various techniques.<sup>1304</sup>

In Kexholm, the intense bombardment wore the garrison down. A council of war was held on August 27/28, with all officers present. The main points presented were that the fortress was running low on ammunition; the fortress had been hit by 1,680 bombs, 2,000 stones, 100 "wall bombs", 230 mortar grenades and 100 chemical shells; that the enemy trenches were getting close; the garri-

<sup>1299</sup> Qwistberg, pp. 134–135 and Tsar Peter's diary, p. 140.

<sup>1300</sup> Tsar Peter's diary, pp. 141 and 143.

<sup>1301</sup> Tsar Peter's diary, p. 141.

<sup>1302</sup> Qwistberg, p. 136.

<sup>1303</sup> Stiernschantz to the Defense Commission, July 22, 1710, Volym 14 Vederbörande auctoriteters skrivelser till defensionskommissionen 1710–1711, Avskriftssamlingen, Krigsarkivet, p. 371.

<sup>1304</sup> Qwistberg, p. 140 and 142.

son was exhausted and not reliable; and, finally, that conditions for surrender probably would worsen with time.<sup>1305</sup>

On September 2/3, negotiations began; thereafter, on September 8/9, the surrender document was signed. The garrison was granted safe conduct with arms, but without flags and music. On the same day, Russian troops marched into the fortress.<sup>1306</sup> This time, the Russians did very little to interfere with the departure of the Swedes. The garrison left on the 25<sup>th</sup> and was escorted by 300 Russians to the Savolax border; on October 3, the survivors arrived in Nyslott.<sup>1307</sup>

### *After the siege*

The meticulous table about the garrison shows that 417 survivors left Kexholm. Of the original garrison, sixty were dead, nine had been taken prisoner in skirmishes during the siege, and seventy-eight had deserted.<sup>1308</sup> Of Swedish fortifications in Finland and Ingria, only the weak Nyslott and the even weaker Kajaneborg remained. Nyslott would fall in 1714, with Kajaneborg following in 1716.

### *Kexholm – conclusions*

The following could be concluded about Kexholm:

- It had a small garrison, under 1,000 men.
- The works were old and had a patchwork of repairs, thus weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.30** Kexholm accessibility

	General accessibility	Local accessibility
Russian (attacker)	High	High
Swedish (defender)	Low	Low

Source: See above.

The attacker's general accessibility was high, primarily by the use of Lake Ladoga. The defender's general accessibility was low, depending as it did on long and

<sup>1305</sup> The Officers in Kexholm, *Oför]griipelig utlåtelse uppå de af H:r Öfwersten och Commendanten Wälborne Johan Stiernschantz wid det sammankallade Consilio militari förestellte fråge pun[c]ter*, in Quennerstedt, pp. 160–163.

<sup>1306</sup> Tsar Peter's diary, p. 142 and Qwistbergh, p. 146.

<sup>1307</sup> Ludvig W:son Munthe, Del III:2, p. 556.

<sup>1308</sup> H. Gyllenspongh, *Förslagh uppå Kiexholms Gwarnizon, huru stark den varit, enär fienden d. 6 Julij sistl. ryckte under staden*, [...], in Quennerstedt, p.155.



poor roads through barren land, and because the Vouxen River was not feasible to use and was also army blockable. Access via the Neva River and Lake Ladoga was army blockable, although it is suggested here that the actual entrance to the fortress from Lake Ladoga was not army blockable.

The attacker's local accessibility was high, since no height or other terrain features decisively enhanced the defensive properties of the fortification. Its location on an island was not enough to make a significant difference. The defender's local accessibility was low, since there was no sail-in function or protected discharge place there.

In the first siege, the attackers used the tactic of blockade, which did not yield any result. In the second siege, the Russians used bombardment to break morale, which succeeded.

Stiernschantz could not be burdened with any major process errors. The hope for Kexholm in 1710 can be seen as forlorn, from the beginning.

#### 4.18 LANDSKRONA 1709–1710 – Skåne, Sweden

**Under siege from November 17/27, 1709 (estimated) to February 27/March 9, 1710 (estimated) (93 days). Held.**

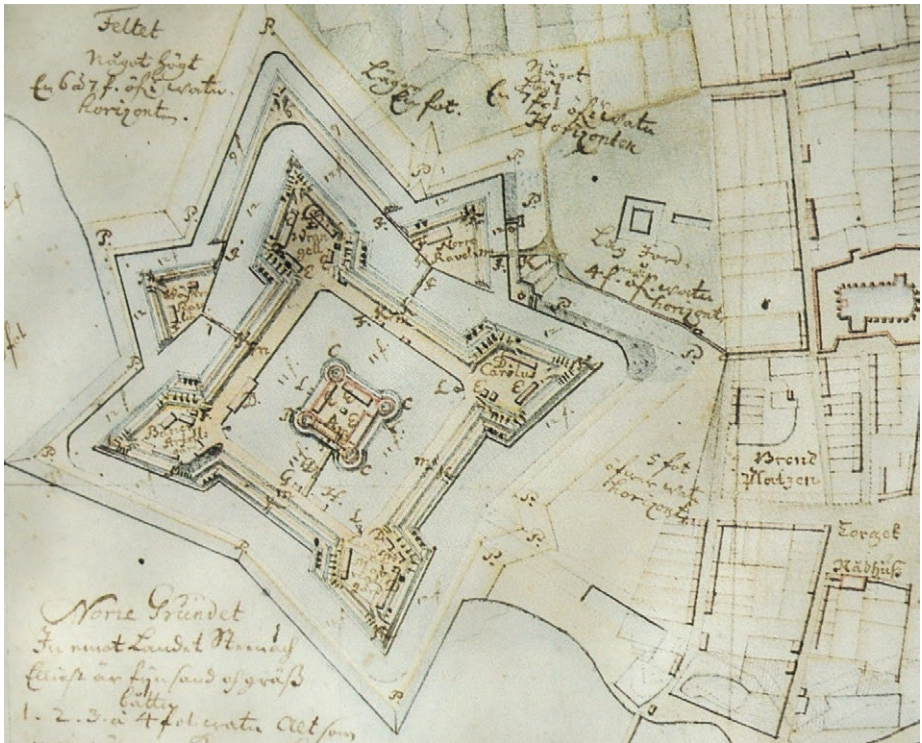
##### *Introduction*

Parallel to the siege of Riga in the eastern part of the Swedish Empire, Skåne, in the southern part of today's Sweden, became a battleground. Seeing the Swedish defeat at Poltava, Frederick IV of Denmark declared war on Sweden on October 18/28, having renewed his pact with Tsar Peter two days earlier.<sup>1309</sup>

The stakes were now high. Serious Swedish setbacks in the war against Denmark could entail the loss of the newly conquered provinces in the south, Skåne, Blekinge and Halland. Sweden's destiny, to a certain extent, now depended of the fortifications of Malmö and Landskrona in Skåne, Karlskrona in Blekinge and Halmstad and Varberg in Halland. If the Danes could conquer one of those fortifications, it would be difficult for the Swedish Army to dislodge them. Landskrona was the first defended Swedish fortification to be reached by Danish troops. It should be noted that Denmark was using the Julian calendar, so all Danish dates are ten days ahead of the Swedish.

---

<sup>1309</sup> Wikander, p. 153 and August Peter Tuxen, *Bidrag til det store nordiske krigs historie*, II, (Köpenhamn 1903), p.45. (Further on, "Tuxen, Del II")



**Picture 4.34** The picture above shows the Landskrona fortress. The construction in the center is the old castle, with four towers. The four bastions and three ravelins are additions from the 1670s. The adjacent water is the Sound. At the bottom right of the picture, a black line can be seen. This is a bridge leading out to the island of Gråen, situated just south of the city. (Source: *Landskrona d: 7 Jan: A: 1707*. Map by Clas Bödker 1707, Åke Jönsson, *Historien om en stad. Del 1 Landskrona 1413–1804* (Landskrona 1993), p. 192. (Detail.)

Landskrona originated as a fishing village, becoming a city in 1413. The castle was completed around 1560, confirming the importance of the place, which had one of few good harbors in Skåne. When the city fell to Sweden in the Peace of Roskilde in 1658, the castle had recently been improved by the Danes. From 1667 to 1675, Landskrona was further improved by Swedish fortifiers.<sup>1310</sup> Erik Dahlbergh was opposed to plans for improving Landskrona, which he thought were too costly. Karl XI, however, forced an ambitious plan on his fortification people.<sup>1311</sup>

<sup>1310</sup> M. af R., L., W:son M. och A. S., "Landskrona" in *Nordisk familjebok*, Del 15, (Stockholm 1911), columns 1032–1033 and Törnquist, p. 44.

<sup>1311</sup> Alf Åberg, "Erik Dahlbergh och planerna på Landskronas befästning åren 1679–1680", in *Karolinska förbundets årsbok* Stockholm 1947, p. 72.

In 1709, defensive works consisted of the castle and works around it. In improvement works of the 1670s, an earthen wall with four bastions and three ravelins had been built around the castle. The earthen wall was to provide cover from modern artillery. The walls around the city had been razed.<sup>1312</sup> An example of “not defending population centers” can be seen here.

Landskrona was situated directly by the sea on the opposite side of the Sound from Denmark. The water seen in Picture 4.34 is the Sound. It should be noted here, that the Swedish Navy would hesitate to operate in and beyond the Sound, due to difficult navigation and the presence of the Danish fleet and fortifications. Thus, the conditions for fortress warfare here were different than those of the fortresses located by the Baltic Sea. Since the waterway to Landskrona was made unsafe by the Danish Navy, sending Swedish sea transports to Landskrona involved a risk. The Danes, however, could transport troops and siege artillery by water with greater security.

The Landskrona fortification did not decisively utilize terrain features to enhance its defensive properties. The waterroute to the fortress was not army blockable, but there was no sail-in function, and discharging along the side of the fortress turned toward the water would have been at risk of siege army artillery fire. There is no mention of any problem with drinking water in the sources used for this study.

#### *Earlier research and sources*

The siege of Landskrona is well-covered in two works published in 1903, August Peter Tuxen’s Danish *Bidrag til det store nordiske krigs historie* [Supplements to the History of the Great Northern War], Part 2<sup>1313</sup> and Arthur Stille’s Swedish *Kriget i Skåne 1709–1710* [The War in Skåne 1709–1710].<sup>1314</sup> In his work on the history of Swedish fortification, Ludvig W:son Munthe did not mention the siege of Landskrona.<sup>1315</sup>

In modern works, the siege is treated in Åke Jönsson’s, *Historien om en stad. Del 1 Landskrona 1413–1804* [The History of a City. Part 1 Landkrona 1413–

---

<sup>1312</sup> Jönsson (see below), pp. 109 and 157.

<sup>1313</sup> Tuxen, Del II, see reference above.

<sup>1314</sup> Arthur Stille, *Kriget i Skåne 1709–1710* (Stockholm 1903). (Further on, “Stille”).

<sup>1315</sup> Ludvig W:son Munthe, Del III:2, pp. 511–520.

1804.<sup>1316</sup> Leif Törnquist, as the main writer, has presented Landskrona in his work on major fortifications of today's Sweden, *Svenska borgar och fästningar*.<sup>1317</sup>

A collection of letters from Stenbock, the Swedish commander-in-chief in Skåne, has been preserved.<sup>1318</sup>

### *The garrison, artillery and supplies*

Colonel William Sinclair was in command of the fortress. The garrison consisted of three companies out of his own infantry regiment, “Västgöta och Närke-Värmlands fyr- och femmänningsregemente till fot”, and sixty-eight artillery men. In full strength, the three companies would have counted approximately 450 men. Before the Danes appeared, the garrison was reinforced by one company and a few saltpeter workers [“saltpetersjudare”]. There was a lack of officers; Sinclair only had six of them.<sup>1319</sup> The total garrison could be estimated at around 600 men.

According to the Artillery Plan of 1695, Landskrona should have eighteen 24-pounders and twenty-four 18-pounders.<sup>1320</sup> When the Danes appeared, the fortress was relatively well stocked with supplies. Stenbock estimated that it could hold out for eight or nine months on short rations.<sup>1321</sup>

### *Prior to the siege*

On August 26, 1709, the first case of the plague was detected in Stockholm. For weeks, hundreds of people died every day.<sup>1322</sup> At the same time, the Danes were preparing for an attack on Sweden. The Danish army counted 22,000 hired soldiers, 14,000 conscripted [“nationala”], and 12,000 men who were serving against France in the parallel War of the Spanish Succession.<sup>1323</sup>

After Poltava, the Swedish armed forces counted around 70,000 men, 17,000 in Sweden of today, 12,000 in Finland, 20,000 in the Baltic Provinces and 20,000

<sup>1316</sup> Åke Jönsson, *Historien om en stad. Del 1 Landskrona 1413–1804*, (Landskrona 1993), pp. 185–194. (Further on, “Jönsson”.)

<sup>1317</sup> Leif Törnquist (main writer), *Svenska borgar och fästningar: En militärhistorisk reseguide*, (Stockholm 2007), pp. 44–46. (Further on, “Törnquist”.)

<sup>1318</sup> For example, Volym 13 Vederbörande auctoriteters skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet.

<sup>1319</sup> Jönsson, p. 193 and Sallnäs, p. 131.

<sup>1320</sup> Bestyckningsplan 1695, pp. 21 and 22.

<sup>1321</sup> Stenbock to the Defense Commission, November 30, 1709, Volym 13 Vederbörande auctoriteters skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 111.

<sup>1322</sup> Sjögren, *Karl XII*, p. 647.

<sup>1323</sup> Stille, p. 6.

in the German possessions.<sup>1324</sup> In the Sweden of today, there were seven local military commands (see Table 4.31 below).

**Table 4.31** The regional military commands in the Sweden of today in 1709

No.	Regional Command	Commander
I.	Skåne	General Stenbock
II.	Halland	Lieutenant General Fersen
III.	Bohuslän and Gothenburg area	Lieutenant General Nieroth
IV.	Värmland-Dalarna	Lieutenant General Mörner
V.	Jämtland-Härjedalen	Lieutenant General Stromberg
VI.	Stockholm	General Spens
VII.	Karlskrona	General Admiral Wachtmeister

Source: August Peter Tuxen, *Bidrag til det store nordiske krigs historie*, II, (Köpenhamn 1903), p. 229.

In the following events, General Stenbock and the Skåne Command, together with General Admiral Wachtmeister and the Karlskrona Command, would be directly involved. To a certain, but lesser, extent, the events would touch General Fersen's Halland Command.

In 1709, Stenbock had a field army of 2,000–3,000 soldiers, consisting of three regiments of cavalry. The garrison in his main fortress of Malmö counted around 3,500 men and the garrison in Landskrona counted around 600.<sup>1325</sup> Stenbock wanted to supplement his regular troops with large numbers of civilians, armed with their own rifles and spears.<sup>1326</sup> These bands of civilians, however, did not play a significant role in the following events.

<sup>1324</sup> Tuxen, Del II, p. 218.

<sup>1325</sup> Wikander, p. 154.

<sup>1326</sup> Stenbock, *Kort relation om hwad i Skåne sedan den 20 oktober in till dato passerat*, Malmö November 6, 1709, Volym 13 Vederbörande auctoritetens skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 92.



**Picture 4.35** The map above shows the theater of operations in and around Skåne in 1709 to 1710. The text “Karlskrona”, the Swedish naval base, is slightly distorted but can be discerned under “Ronneby” on the far right of the map. The Swedish text reads: “The Winter Campaign in Skåne 1710”, “The Danish landing in 1709” and “The Danish offensive in January of 1710”. (Source: J. G. Wikander, *Översikt over Sveriges krig under 1700-talet* (Stockholm 1922), p. 155, Kartografiska institutet.) (Detail.)

On November 2/12, the Danish army landed about 14,000 troops under General Christian Ditlev Reventlow at the village of Råå, about four kilometers south of Helsingborg.<sup>1327</sup> For the army’s composition see Table 4.32 below, where the figures are rounded, the source actually summed up a total of 13,892.

<sup>1327</sup> Tuxen, Del II, p. 253.



**Table 4.32** The Danish Army in Skåne on November 10/20, 1710

Unit, Commander	Strength (rounded)
<b>CAVALRY and DRAGOONS</b>	
Royal Horse Guards [”Livgarden til Hest”], Mörner	400
First Sjaelland Regiment [”1ste Sjaellandske Regiment”], von See	350
Third Sjaelland Regiment [”3 dje Sjaellandeske Regiement”], Leegel	400
First Jutland Regiment [”1 ste Jyske”], Eyffler	400
Lifeguard Dragoons [”Livregiment Dragoner”], Rodsten	1,000
Hungarians [Dragoons] [”Ungarske”], Bülow	350
<b>INFANTRY</b>	
Lifeguard Infantry [”Garden til Fods”], Danckwardt	1,450
Grenadier Corps [”Grenaderkorpset”], Eickstedt	1,400
Queen’s Lifeguards [”Dronningens Livregiment”], Due	700
Prince Christian’s Regiment [”Prins Christians Regiment”], Lattorf	1,400
Fyn [”Fynske”], Eynden	1,350
Jutland [”Jyske”], Blücher	1,450
Prince of Hessen’s [”Prinsen af Hessens”], Prince Karl of Hessen-Philippsthal	1,350
Marine Regiment [”Marineregimentet”], Gaffron	1,400
Holstein Artillery [”Holstenske Artilleri”]	450
<b>TOTAL</b>	<b>13,850</b>

Source: August Peter Tuxen, *Bidrag til det store nordiske krigs historie*, II, (Köpenhamn 1903), p. 255, unit commanders according to Arthur Stille, *Kriget i Skåne 1709–1710* (Stockholm 1903), pp. 7–8 and August Peter Tuxen, *Bidrag til det store nordiske krigs historie*, II, (Köpenhamn 1903), p. 422.)

Note: This force would not change significantly during the campaign, however, around December 5/15, the Second Fyn Cavalry Regiment, Danneskjold-Laurvig and the ”Sjaelländska nationala dragonregimentet”, Spengel, would be added, and the Royal Horse Guards would return to Denmark.<sup>1328</sup>

Since the Swedish field forces were too weak to interfere with the Danish landing, that proceeded unhindered. Danish forces then aimed for Helsingborg.<sup>1329</sup> Formerly, Helsingborg was a fortified city, where defenses now had been largely razed.<sup>1330</sup> At the beginning of the war in Skåne, the Swedish force in Helsingborg counted thirty-six men from Sinclair’s regiment under the command of the regimental quartermaster at Västgöta ”femmänningsregemente”, Peter Bäfverfelt.

The Swedish artillery was concentrated to Kärnan, a tower remaining from the old fortifications, and consisted of four 6-pounders, two 4-pounders and

<sup>1328</sup> Stille, p. 8 and Tuxen, Del II, p. 282.

<sup>1329</sup> Wikander, p. 153 and Tuxen, Del II, p. 254.

<sup>1330</sup> M. af R., L. W:son M. och A. S., ”Landskrona” in *Nordisk familjebok*, Part 15, (Stockholm 1911), columns 1032–1033 and Tuxen II, pp. 402–403 and 406.



two 3-pounders.<sup>1331</sup> Having received news of the Danish approach, the Swedish troops plugged the cannons and left. At midnight on the 4<sup>th</sup>/14<sup>th</sup>, the Fyn Infantry Regiment left the landing area and marched on Helsingborg. The city would be occupied without any Swedish resistance.<sup>1332</sup>

When a Danish invasion seemed likely, an intense effort to improve Landskrona fortifications began. In a letter to the Defense Commission, Stenbock underscored the effort he had put into repairing the fortresses<sup>1333</sup>. In September of 1709, the entire garrison was worn out from the hard work, so a few hundred farmers had to be called in to assist. One of the more important tasks was to erect palisades around the walls. Sinclair also wanted to tear down the tower of the local church, since it could be used as an observation post by the Danes. The burghers resisted that move and, as a compromise, the openings in the tower were to be walled up with bricks. When the first Danish troops arrived, Landskrona was well prepared for defense.<sup>1334</sup>

### *The siege*

It is not obvious how to determine the beginning of the siege of Landskrona. On November 8/18, Reventlow carried out his first reconnoitering of the fortress. During November and December, the Danish forces left the landing place and spread out in winter quarters north of Landskrona. Colonel Lorentz Blücher and his regiment were detached to blockade the fortress of Landskrona. He was later reinforced by a small cavalry unit.<sup>1335</sup> As the exact date of the beginning of the siege is difficult to establish, it is estimated here to be November 17/27, 1709, the day the Danish army changed camps.<sup>1336</sup>

The blockade was militarily uneventful, with the garrison seldom undressing and suffering severely from the cold. Disease was its worst enemy. After the siege, the garrison commander commented that his regiment was heavily decimated by severe disease which ravaged in the fortress.<sup>1337</sup> The fortress guns were only fired

<sup>1331</sup> Stille, p. 17.

<sup>1332</sup> Tuxen, Del II, pp. 254, 257–258 and 403.

<sup>1333</sup> For example: Stenbock, *Kort relation om hwad i Skåne sedan den 20 oktober in till dato passerat*, Malmö November 6, 1709, Volym 13 Vederbörande auctoritetens skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 92 and Stenbock to the Defense Commission, November 17, 1709, Volym 13, Avskriftssamlingen, Krigsarkivet, p. 97.

<sup>1334</sup> Jönsson, p. 194.

<sup>1335</sup> Tuxen, Del II, p. 259 and Stille, p. 104.

<sup>1336</sup> Tuxen, Del II, p. 265.

<sup>1337</sup> Sinclair to the Defense Commission, March 30, 1710, Volume 205 Skrivelser från militära befälhavare, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer, Riksarkivet, p. 1178,

once, and that was to shoot a salute on December 12, 1709. The salute was the result of a false rumor that Stenbock had inflicted a major defeat on the Danes. It should be noted that the Danes made no effort to blockade the fortress by sea. The sea lanes were open and there was sailing on nearby Malmö during the blockade.<sup>1338</sup>

Stenbock's assessment of the situation was that the King of Denmark would leave the Swedish fortresses blockaded but untouched until the spring, and then attack them around Easter. By then the garrisons would have consumed a large part of their provisions, and they would have been reduced by hard work and disease.<sup>1339</sup>

During the blockade, Stenbock was particularly worried about Landskrona. In his opinion, the commander was a brave man, but conditions being lived under in that fortress were more difficult than in a besieged city. Brewing and baking was hard for the garrison, and the soldiers had nowhere to go to improve their health and have recreation.<sup>1340</sup> As it turned out, Stenbock's worries were unfounded. When a Swedish relief army marched into Skåne in February, the siege was lifted (see Chapter 4.20 Karlshamn).

The exact date of the lifting of the blockade is not obvious either. It is clear that Blücher's troops were still by the fortress on February 5/15. Since one battalion of his regiment arrived too late to participate in the following Battle of Helsingborg on February 28/March 10, they should have marched off quite late – perhaps even as late as February 27/March 9, 1710.<sup>1341</sup> It is assumed that the blockade lasted until the later date.

### *After the siege*

See Chapter 4.20 Karlshamn's Redoubt 1710.

### *Landskrona – conclusions*

The following could be concluded about Landskrona:

- It had a small garrison, under 1,000 men.
- The works were strong.
- Lack of drinking water is not mentioned in connection with the siege.

---

<sup>1338</sup> Tuxen, Del II, p. 372.

<sup>1339</sup> Stenbock to the Defense Commission, December 9, 1709, Volym 13 Vederbörande auctoriteters skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 103.

<sup>1340</sup> Stenbock to the Defense Commission, December 9, 1709, Volym 13 Vederbörande auctoriteters skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 107.

<sup>1341</sup> Tuxen, Del II, pp. 372 and 423 and Stille, p. 239.

Matters of accessibility can be summarized as below.

**Table 4.33** Landskrona accessibility

	General accessibility	Local accessibility
Danish (attacker)	High	High
Swedish (defender)	Low/High	Low

Source: See above.

The attacker's general accessibility was high, primarily by sea from Copenhagen. The Danish sea lane was across waters where the Swedish main fleet hesitated to operate. The defender's accessibility by sea was low, due to the presence of the Danish Navy. The defender's general accessibility on land was initially reduced to low by the Danish invasion army, remaining so until the Swedish relief army made it high again.

The attacker's local accessibility was high, since no terrain features decisively enhanced the defensive properties of the fortification. The defender's local accessibility was low, since there was no sail-in function, and any discharge place would be sensitive to siege army artillery fire.

The attackers used the tactic of blockade, which did not yield any results. According to the logics presented by Stenbock above, it seems, in the long run, like they could have been successful with that approach. Without a relief army, Landskrona was probably doomed to fall. Now that a Swedish relief army was organized and, since it was successful, Landskrona was never put to the final test as a fortress.

The matter of process errors on behalf of the commander is not relevant, since the fortification held.

#### 4.19 MALMÖ 1709–1710 – Skåne, Sweden

**Under siege from December 31, 1709/January 10, 1710 to February 19/March 1, 1710. (51 days.) Held.**

##### *Introduction*

After the Danes declared war on Sweden in 1709, and their subsequent invasion of Skåne, Danish troops first reached the fortress of Landskrona (see Chapter 4.18 Landskrona) and then the major city of Skåne, Malmö.

Malmö was first mentioned in preserved sources in 1116. It grew rapidly mostly because of rich catches of herring in the waters before it. In the fifteenth century, Malmö was the second city in Denmark, after Copenhagen. The city declined during the sixteenth century, mostly because of a decrease in herring catches, and became Swedish with the Peace of Roskilde in 1658. During the Swedish-Danish war of 1674–1679, Malmö was successfully defended against a Danish siege.<sup>1342</sup>



**Picture 4.36** The image above shows Malmö in 1580 and provides a clear picture of its location. The castle is seen on the extreme left. The water in the background is the Sound, with Copenhagen (not seen here) across it. (Source: Leif Törnquist, (main writer), *Svenska borgar och fästningar: En militärhistorisk reseguide* (Stockholm 2007), p. 49.) (Detail.)

Malmö is situated directly on the Sound, with Copenhagen opposite it. The city, thus, has direct access to open sea, and had no army blockable entrance. As can be seen in the picture below from 1697, there was no sail-in function, but there were shores where ships could discharge without direct interference from a besieger's artillery.

Malmö is located where the Swedish Navy, during the relevant period, could hope for at least temporary control of the sea. Swedish sea transports to Malmö could thus be carried out with confidence. From a Danish point of view, ships

<sup>1342</sup> A. U. I. and L. W:son M., "Malmö", in *Nordisk familjebok*, Del 17, (Stockholm 1912), columns 675–677.

could move with ease from Copenhagen to Malmö. However, for all practical purposes, that possibility was seriously reduced by the risk of the Swedish Navy interfering with the transports. The Danes would then have to access Malmö via landing places farther up the Sound.

During the latter part of the Danish era, the fortifications were improved with the intent mainly to control the city, since the burghers of Malmö had rebelled against the Danish king in the 1530s.<sup>1343</sup> In early Swedish times, Malmö fortifications were vastly improved, with construction of a modern bastion system around the city, which can be seen in the picture below. In 1662–1671, the old castle was turned into a modern citadel fortress with four bastions.<sup>1344</sup>

Malmö was a highly prioritized fortress in the Swedish Empire, which can be seen in the armament plan of 1698, where Malmö has 142 cannons of 18 pounds and heavier. Only Narva and the major cities in the German possessions were planned for more. Within the Sweden of today, Malmö was closely followed by Gothenburg, where the plan called for 124 heavy cannons.<sup>1345</sup> The relative importance of Malmö can also be seen in a plan for garrisons from 1670. There, Malmö should have a garrison of 1,200, surpassed only by Riga with 2,400 men. Narva followed with 1,012.<sup>1346</sup>

---

<sup>1343</sup> Törnquist, p. 51.

<sup>1344</sup> A. U. I. and L. W:son M., "Malmö", in *Nordisk familjebok*, Del 17, (Stockholm 1912), column 676.

<sup>1345</sup> Ulfhielm, "Karl XII:s tid", pp. 80–81.

<sup>1346</sup> *Förslag på garnisonerne huru starke dhe effter 1670 åhrs stat böhre wara och huru starke dhe befinner efter sist inkom. förslagh*, Volym 1 Generalförslag öfver svenska hären 1636–1724, b. Registratur och concept, I. Kansliet. B. Förslag, Förteckning 5 Krigskollegium Intendentsdepartementet, Krigsarkivet, s. p.





*The garrison, artillery and supplies*

Stenbock left Malmö on December 1/10, to organize the defense of Skåne as a whole. On December 7/17, Major General Carl Gustaf Skytte arrived to assume command of the garrison.<sup>1352</sup>

On December 1/10, 1709, the Malmö garrison counted 3,585 men. An infantry of 1,155 from Hamilton's and Sinclair's regiments ["Smålands och Östgöta femmänningsregemente till fot" and "Västgöta och Närke-Värmlands fyr- och femmänningsregemente till fot"<sup>1353</sup>] and 200 men from the artillery made up the core of the garrison. Almost 1,500 were new soldiers for the Northern and Southern Skåne Cavalry Regiments ["Norra och Södra skånska kavalleriregementena"]. Since these men were inclined to desert, it was decided to take the horses out of Malmö to make any escape more difficult. There were also about 100 cavalry from the Noble Banner, 120 from the Estate Dragoons, 460 saltpeter workers ["saltpetersjudare"] (having been previously relieved of military service but now called), around fifty fortifiers and others. The saltpeter workers were considered of little value for military service.<sup>1354</sup>

According to the Artillery plan drawn up in 1695, Malmö city and castle should have ninety-six pieces of heavy cannons, 24-pounders and 18-pounders.<sup>1355</sup> As seen above, that figure was increased in 1698.

The supply situation was fairly adequate. In the middle of December, 1709, there were enough supplies to last for eight to nine months<sup>1356</sup>.

*Prior to the siege*

In the beginning of November, a Danish army landed in Skåne (see Chapter 4.18 Landskrona). On December 24/January 3, the first Danish cavalrymen began to reconnoiter the surroundings of Malmö.<sup>1357</sup>

Stenbock was most of all concerned about the defense of Malmö, claiming that the future of Sweden depended on this fortification. He was optimistic about the possibilities of defending the city, but saw a risk in fires. If bombs and red-hot shots turned the houses to ashes, the city would fall. He also feared ar-

<sup>1352</sup> Stille, p. 83 and Lewenhaupt, Del 2, "Skytte, Carl Gustaf", p. 636.

<sup>1353</sup> Sallnäs, p. 130.

<sup>1354</sup> Stille, p. 77 and Tuxen, Del II, pp. 373–373.

<sup>1355</sup> Bestyckningsplan 1695, pp. 16–20 and 8–10.

<sup>1356</sup> Stenbock to the Defense Commission, November 30, 1709, Volym 13 Vederbörande auctoriteters skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 113.

<sup>1357</sup> Tuxen, Del II, p. 281.



son, where a deceptive enemy of Sweden could start a devastating fire. Against arson, he saw no defense.<sup>1358</sup> Stenbock remarked that the risk of fires was increased by the fact that houses and magazines were filled with flour, hay and other flammable material. To minimize losses in a fire, he had ordered powder and food to be distributed across the city.<sup>1359</sup>

### *The siege*

The task to blockade Malmö fell to Major General Brocksdorff with his regiment, the Queen's Lifeguards. He was reinforced with two companies of the Lifeguard Dragoons and two companies of Sprengel's dragoons. The total force did not come to more than 2,000 men. On December 31, 1709/January 10, 1710, the date used for the beginning of the siege, Brocksdorff had completed the investment.<sup>1360</sup> The Danish forces created a half circle around Malmö, with infantry in ten adjacent villages and cavalry in seven. Brocksdorff set up his headquarters in Lund.<sup>1361</sup>

The blockade was uneventful. On January 30/February 9, Brocksdorff was ordered to detach his two companies of the Lifeguard Dragoons to another unit. The calm frustrated Reventlow. He was convinced he could capture Malmö in two to three weeks, if he was given thirty 24-pounder and thirty 18-pounder cannons, and if Malmö was simultaneously attacked from land and sea. Danish King Frederick IV, however, did not initially want to prioritize a full-scale attack on Malmö.<sup>1362</sup>

Calm was broken at 4 o'clock in the morning of February 15/25 when a small Swedish unit sallied from Malmö, but had to retreat with losses.<sup>1363</sup> The siege was then lifted, as a Swedish relief army was approaching from the north (see Chapter 4.20 Karlshamn's Redoubt 1710). It is difficult to state the exact date for the raising of the siege. Danish historian Huitfeldt claimed that Brocksdorff's forces joined the Danish main army in the morning of February 20/March 2 by the village of Harrie. Harrie is situated less than twenty kilometers

<sup>1358</sup> Stenbock, *Kort relation om hwad i Skåne sedan den 20 oktober in till dato passerat*, Malmö November 6, 1709, Volym 13 Vederbörande auctoritetens skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, pp. 92 and 93.

<sup>1359</sup> Stenbock to the Defense Commission, November 17, 1709, Volym 13 Vederbörande auctoritetens skrivelser till defensionskommissionen 1707–1709, Avskriftssamlingen, Krigsarkivet, p. 98.

<sup>1360</sup> Tuxen, Del II, pp. 140, 281 and 374.

<sup>1361</sup> Stille, pp. 226–227.

<sup>1362</sup> Stille, pp. 102–103.

<sup>1363</sup> Stille, p. 231 and Tuxen, Del II, p. 377.

north of Malmö. It can thus be assumed that the siege was lifted on February 19/March 1, 1710.<sup>1364</sup> This assumption is supported by the fact that Stenbock entered Malmö on February 21/March 3, 1710, to recover the Swedish field artillery placed in the city.<sup>1365</sup>

#### *After the siege*

See Chapter 4.20 Karlshamn's Redoubt 1710.

#### *Malmö – conclusions*

The following could be concluded about Malmö:

- It had a medium garrison, over 1,000 but under 6,000 men.
- The works were strong.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.34** Malmö accessibility

	General accessibility	Local accessibility
Danish (attacker)	High/Low	High
Swedish (defender)	High	High

Source: See above.

The attacker's general accessibility was high, as long as the Danish invasion army controlled the roads. The sea aspect is a borderline matter. Malmö was on the edge of the water where the Swedish main fleet would operate, so the water lanes would be hazardous for the Danes, and thus the general accessibility by water is deemed as low. As the Swedish relief army approached, land transport also became hazardous for the Danes, making the total general accessibility low. The defender's general accessibility was high, assuming the Swedes would be able to sail food and reinforcements to Malmö.

The attacker's local accessibility was high, since no terrain features decisively enhanced the defensive properties of the fortification. The defender's local accessibility was high, since there was a protected discharge place by the city. Thus, Malmö becomes the Swedish fortification, of those studied, to mostly resemble Gibraltar.

<sup>1364</sup> Tuxen, Del II, p. 396, note 3.

<sup>1365</sup> Ulfhielm, "Karl XII: s tid", p. 464.

The attackers used the tactic of blockade, which did not yield any results. Had the blockade continued, Malmö could have been an example where the Swedish forces offered a prolonged resistance to a siege force. The matter of process errors on behalf of the commander is not relevant here, since the fortification held.

#### 4.20 KARLSHAMN'S REDOUBT 1710 – Blekinge, Sweden

**Under siege from January 19/29 to January 25/February 4, 1710. (7 days.)  
Held.**

##### *Introduction*

In the beginning of 1710, the Danish invasion army in Skåne (see Chapter 4.18 Landskrona) started to move east. Thus, the small fortification at Karlshamn, some fifty kilometers from the Swedish main naval base of Karlskrona, would soon find itself under siege.

Blekinge became a part of Sweden in 1658. Swedish King Karl X Gustav wanted a naval base and a wharf in the south. Fortifications officer Erik Dahlbergh was sent to reconnoiter the bay, where the small river Mieån had its outlet into the Baltic Sea. He found the place suitable, and a city called Karlshamn eventually grew up. The harbor became Sweden's most important naval base on the southern coast. In 1675, during the Swedish-Danish war of 1674–1679, Dahlbergh began construction of a strong redoubt on the island of Frisholmen off Karlshamn, to replace an older and derelict redoubt. The new work was called Karlshamn's Redoubt ["Karlshamns skans"]. It was destroyed by the Danes before it could be completed, but was repaired after the war. With the construction of Karlskrona as a new naval base, beginning in 1679, Karlshamn lost most of its military importance. The redoubt was renamed "Karlshamns kastell" in the middle of the eighteenth century.<sup>1366</sup>

---

<sup>1366</sup> F. S-gh, "Karlshamn" in *Nordisk familjebok*, Del 13, (Stockholm 1910), columns 1073–1077, L. W:son M., "Karlshamns kastell", in *Nordisk familjebok*, Del 13, (Stockholm 1910), columns 1077–1078, Törnquist, pp. 64–68 and Stille. p. 134. The Swedish word "kastell" is difficult to translate, the word citadel is often used in translations.



**Picture 4.38** Karlshamn's Redoubt was situated on the larger of the two islands in the lower part of the picture. The city is seen in the upper left. Conditions for reaching the fortification by sea were thus favorable. (Source: *Geometrich affritningh öfwer stadhen Carlshamn*, (s. a.), [1935 copy of seventeenth century map] nr 1033, 4 Kartor från 1900-talets akter, #Kartor, 1311 Nedre Justitierevisionen, Högsta domstolen 1600t–1981, Riksarkivet.) (Detail.)

The fortification on Frisholmen was a zigzag type of work [“tenaljmur”], meaning a wall which was broken into angles. Construction had not been completed by 1700, but from 1700 to 1709 provisional works made the fortification wrap around the island.<sup>1367</sup> The lack of good illustration material makes the exact nature of the Karlshamn works in 1710 somewhat obscure.

With contested waters in the Baltic Sea, Danish ability to reach Karlshamn by sea was low. Swedish ships could reach Karlshamn with relative ease, be-

<sup>1367</sup> Törnquist, p. 66.

cause the redoubt was located in a bay with open water leading to it. Its location on an island about 250 meters from the closest shore gave Karlshamn's Redoubt increased defensive qualities. There was no sail-in function, but it would have been possible, using the southern part of the island, to discharge Swedish vessels without direct interference from siege force artillery.

### *Earlier research and sources*

The siege of Karlshamn is covered in two works published in 1903, August Peter Tuxen's Danish *Bidrag til det store nordiske krigs historie* [Contributions to the history of the Great Northern War], Part 2<sup>1368</sup> and Arthur Stille's Swedish *Kriget i Skåne 1709–1710* [The War in Skåne 1709–1710].<sup>1369</sup> Ludvig W:son Munthe touched on the events around Karlshamn in only half a sentence.<sup>1370</sup> Leif Törnquist, as the main writer, has presented Karlshamn in his work on the major fortifications of today's Sweden, *Svenska borgar och fästningar*.<sup>1371</sup>

An important Swedish primary source is a report written by a Swedish alderman [“rådman”] in Karlshamn, Jonas Tingelman. His report was dated the day after the Danes departed, January 26, 1710, and was sent to the provincial governor in Blekinge, Göran Adlersten, who sat in Karlskrona. Adlersten then attached the report to a letter to the Defense Commission, dated January 29, 1710.<sup>1372</sup>

### *The garrison, artillery and supplies*

When the Danes arrived in January of 1710, the fortification was defended by seventy regular soldiers under the command of Captain Gustaf Undéen. The garrison had been reinforced by 145 train hands [“trossdrängar”] who had come from Riga.<sup>1373</sup> Information on artillery at the fortification is difficult to obtain. It is claimed in *Theatrum Europaeum* that there were two cannons in Karlshamn's Redoubt.<sup>1374</sup> The existence of an artillery crew in 1703 is confirmed

<sup>1368</sup> August Peter Tuxen, *Bidrag til det store nordiske krigs historie, II*, (Köpenhamn 1903). (Further on, “Tuxen, Del II”)

<sup>1369</sup> Arthur Stille, *Kriget i Skåne 1709–1710* (Stockholm 1903). (Further on, “Stille”)

<sup>1370</sup> Ludvig W:son Munthe, Del III:2, p. 516.

<sup>1371</sup> Leif Törnquist (main writer), *Svenska borgar och fästningar: En militärhistorisk reseguide*, (Stockholm 2007), pp. 44–46. (Further on, “Törnquist”)

<sup>1372</sup> Jonas Tingelman, [No title], attachment to Adlersten to the Defense Commission, January 29, 1710, Volume 208, *Skrivelser från Amiralitetskollegium och Landshövdingar, II. Skrivelser från myndigheter och enskilda, E. Inkomna handlingar, 243 Defensionskommissionen 1700–1714, 31 Äldre kommittéer, Riksarkivet*, pp. 1170–1174. (Further on, “Tingelman”)

<sup>1373</sup> Stille, p. 134.

<sup>1374</sup> *Theatri Europae [Theatrum Europaeum]*, XIX, (Frankfurt am Main 1723), p. 296.

by a letter from Bengt Rasswill, obviously in charge of the Karlshamn artillery at the time, to the War College. Rasswill enclosed a list of the artillery crew, and pointed out that they needed further training in the handling of guns.<sup>1375</sup> It can be assumed that the redoubt was well stocked with supplies.

#### *Prior to the siege*

On January 3/13, the cold winter had made previously muddy roads firm and the Danes began their campaign. Reventlow, with 6,000 men and eight pieces of light artillery, marched east in the direction of Karlskrona.<sup>1376</sup> On his way, Reventlow occupied the undefended city of Kristianstad. Earlier, Karl XI had decided to cross Kristianstad off the list of Swedish fortifications. Some of the works were razed, and the remaining parts were left to decay. The Danes entered the city without a fight.<sup>1377</sup>

#### *The siege*

On January 19/29, the attackers reached Karlshamn. Two Danish battalions of infantry and 100 artillerymen were lodged in the city. The Danes then levied a tax on the burghers, which could be paid for them not to burn the city [“brandskatt”]. The tax was first set at 30,000 rixdollars. That sum was quickly reduced to 20,000 rixdollars, then to 12,000 and later to 9,000. Finally, 6,000 was paid, and the burghers issued a promissory note for the last 3,000.<sup>1378</sup> Reventlow made no attempt to attack the redoubt on Frisholmen. Lacking heavy artillery, Reventlow could not hope for a conquest of Karlskrona, especially since there would be no element of surprise. At the same time, there was news of a Swedish relief army forming in the north. That factor made it urgent for Reventlow to get out of his isolated position in southeastern Sweden.<sup>1379</sup> The Danish force left Karlshamn on January 25/February 4, when they set out on a march that would end at Helsingborg about a month later.<sup>1380</sup>

Regarding earlier research, it should be noted that Ludvig W:son Munthe made a mistake in his article about Karlshamn in the Swedish encyclopedia *Nordisk familjebok*, where he claimed that the Danes oc-

---

<sup>1375</sup> Kreüger, p. 7.

<sup>1376</sup> Stille, pp. 106–107 and Tuxen, Del II, 281.

<sup>1377</sup> Törnquist, p. 41–42.

<sup>1378</sup> Tingelman, pp. 1170 and 1172b–1173 and Tuxen, Del II, pp. 336–337.

<sup>1379</sup> Tuxen, Del II, p. 335.

<sup>1380</sup> Tingelman, p. 1173, Stille, p. 135 and Tuxen, Del II, p. 337.



cupied the redoubt, without meeting any resistance, on January 19, and evacuated it on the 24th.<sup>1381</sup>

The events put the definition of a siege suggested in Chapter 3 to a test. Since there was an enemy force outside the fortress, which must have severed normal communication with the outer world, these events should be classified as a siege.

#### *After the siege*

Development on a strategic level would settle the sieges in Skåne and Blekinge. Stenbock was gathering an army in Småland, north of Skåne. On February 12/22, Stenbock had concentrated his forces to Osby in northern Skåne. He marched southwest with about 16,000 men to fight the Danish invasion army. Stenbock's first aim was the relief of Malmö, where the Swedish field artillery was kept.<sup>1382</sup>

During the Danish retreat toward Helsingborg, Reventlow became ill and was replaced by Lieutenant General Jörgen Rantzau. On February 28/March 10, the forces met off Helsingborg, and the day resulted in a clear Swedish victory. After their defeat, the Danes started to evacuate Skåne through Helsingborg, a task made more complicated by the fact that there was only one wooden bridge where vessels could berth.<sup>1383</sup> The last Danish soldier had soon left Swedish soil. On March 6/16, Swedish forces entered Helsingborg.<sup>1384</sup>

Several of the Swedish fortifications in these rather recently conquered provinces had not been tested. The Danes did not reach Karlskrona in Blekinge, where General Admiral Hans Wachtmeister led the defense. Neither were the fortresses in Halland attacked. There, Halmstad was defended by 300 men from Sinclair's regiment, and Varberg by eighty-seven men out of Sparfelt's regiment, initially under the command of the senile Colonel Arvid Gyldenär. Gyldenär died in November of 1709 and was replaced by Major Carl Hartvig Fleetwood.<sup>1385</sup>

<sup>1381</sup> L. W:son M., "Karlskronas kastell", in *Nordisk familjebok*, Del 13, (Stockholm 1910), column 1077.

<sup>1382</sup> Wikander, p. 156.

<sup>1383</sup> Tuxen, Del II, p. [459] and Gustaf Jonasson, "Magnus Stenbocks fälttåg", in *Den svenska historien*, Del 5, p. 292.

<sup>1384</sup> Gustaf Jonasson, "Magnus Stenbocks fälttåg", *Den svenska historien*, Del 5, p. 292 and Ludvig W:son Munthe, Del III:2, pp. 519–520.

<sup>1385</sup> Tuxen, Del II, p. 222.



*Karlshamn – conclusions*

The following could be concluded about Karlshamn:

- It had a small garrison, under 1,000 men.
- The works were weak.
- Lack of drinking water is not mentioned in connection with the siege.

Matters of accessibility can be summarized as below.

**Table 4.35** Karlshamn accessibility

	General accessibility	Local accessibility
Danish (attacker)	High/Low	Low
Swedish (defender)	High	High

Source: See above.

The attacker's general accessibility was high, as long as the Danish invasion army controlled the roads. Regarding the sea, Karlshamn was located in waters where the Swedish main fleet would operate, thus those waters would be hazardous for the Danes. As the Swedish relief army approached, land transport also became hazardous for the Danes, making the total general accessibility low. The defender's general accessibility was high, assuming the Swedes would be able to sail food stuff and reinforcements to Karlshamn.

The attacker's local accessibility is a borderline case. Location on an island meant a challenge for the attacker, but whether or not it would be decisive is a different matter. The attacker's local accessibility here is considered low. The defender's local accessibility was high, since there was a protected discharge place by the redoubt.

Since Karlshamn's Redoubt was a small fortification, it would have been difficult to defend it against a superior and determined attacker in the long run. It was, however, a good example of how even a small fortification could be difficult to capture. The main problem for the attacker would have been to haul siege artillery, ammunition for the siege artillery and other materiel needed for a siege overland, to the site.

The attacker's tactic is difficult to comment upon. It could be claimed that they applied no tactic.

## 4.21 CONCLUSION

Swedish defensive siege battles in 1702–1710 are presented above, from small and largely unnoticed ones, such as Menzen and Koporie, to large and well-known ones like Riga and Viborg. The outcomes were generally disappointing from a Swedish point of view, with fortress warfare in Skåne in 1709–1710 as an exception. In the following chapter, the fortresses and the fortress warfare of the period will be analyzed, to test the hypothesis of the Swedish fortification system being flawed at the beginning of the war. Prior to that analysis, it is noted here that fortress artillery seems to have played a minor role in their defense. In not one case could fortress artillery stop the attacker from shooting breaches in fortress walls, bastions and towers, as soon as he had brought up his siege artillery, although the fortresses, as a rule, had strong artillery themselves. This apparent weakness in fortress artillery, in the period studied, will not be further analyzed, but only noted here.

## 5. CONCLUSIONS

### 5.1 INTRODUCTION

In this final part of this study, the hypotheses set out in Chapter 1 will be tested, and discussions listed therein will be carried out. In Chapter 5.2, the hypothesis regarding serious inherent flaws in the Swedish fortification system will be tested. If this hypothesis is not rejected, a second hypothesis regarding these inherent flaws, leading to the loss of men, materiel and land, will be tested in Chapter 5.3. Reasons for the existence of such flaws will be discussed in Chapter 5.4.

A number of discussions follow in Chapter 5.5: Swedish defensive fortress warfare, and its consequences on the outcome of the Great Northern War; possible alternatives to the fortification strategies actually chosen; the effect of Swedish defensive fortress warfare on the war in general; and the possibility of the Swedish Empire surviving the attacks of 1700–1721. Finally, a few concluding words are added.

The analyses are based on sieges dealt with in Chapter 4, so, for example, Cobron's Redoubt off Riga is not found in them. Outposts, minor redoubts, minor castles and obsolete city fortifications are also excluded.

It should be noted that material in Chapter 4 could be analyzed in a number of ways. In this study, however, only a few parameters, which would be sufficient for an evaluation of the suggested hypothesis, are observed.

### 5.2 THE SWEDISH FORTIFICATION SYSTEM

#### *Introduction*

In this section, the first of the hypotheses in this study will be tested:

*“At the beginning of the Great Northern War, the Swedish fortification system suffered from serious inherent flaws.”*

The analysis begins with the defender's and attacker's accessibility and then discusses size, strength and drinking water. Generally, the idea is that these tests of the fortification system will reveal possible inherent flaws in its fortresses, which, short term, could not be remedied by the garrison commander or any other decision maker.

*Defender's accessibility*

The ability to reach a fortification with supplies and reinforcements – defender's accessibility – would have been critical to analyzing a fortification system. Geographic factors, which could be exploited by an attacker, to reduce the defender's accessibility, would cast serious doubts on the ability of a fortress to survive a siege without the assistance of a relief army. For further reference to "defender's accessibility", see Chapter 3.2.5 A structure for fortress location.

It should be noted that in evaluating general access to a fortress, a perspective should be chosen. In practice, a fortress could be reached from several places. For example, Dorpat could be reached from Narva, Reval or Riga, from the former by river-lake-river transport and from Reval and Riga by land. However, to limit the level of complexity, and because Stockholm would be an important center for resources, the perspective of access from Stockholm has been chosen here.

**Table 5.1** General access to Swedish fortresses defended 1702–1710 – Stockholm perspective

	Fortification	Access to navigable water	First water	Second water	Third water	Fourth water
1	Menzen	No	n. a	n. a	n. a	n. a
2	Marienburg	No	n. a.	n. a	n. a	n. a
3	Nöteborg	Yes	Baltic Sea	Neva River	-	-
4	Nyenskans	Yes	Baltic Sea	Neva River	-	-
5	Jama	No	n. a.	n. a	n. a	n. a
6	Koporie	No	n. a.	n. a	n. a	n. a
7	Narva	Yes	Baltic Sea	Narva River	-	-
8	Ivangorod	Yes	Baltic Sea	Narva River	-	-
9	Dorpat	Yes	Baltic Sea	Narva River	Lake Peipus	Embach River
10	Viborg	Yes	Baltic Sea	Bay of Viborg	-	-
11	Riga	Yes	Baltic Sea	Düna River	-	-
12	Neumünde	Yes	Baltic Sea	-	-	-
13	Pernau	Yes	Baltic Sea	Pernau River	-	-
14	Arensburg	Yes	Baltic Sea	-	-	-
15	Reval	Yes	Baltic Sea	-	-	-
16	Kexholm	Yes	Baltic Sea	Neva River	Lake Ladoga	-
17	Landskrona	Yes	Baltic Sea	The Sound	-	-
18	Malmö	Yes	Baltic Sea	-	-	-
19	Karlshamn	Yes	Baltic Sea	-	-	-

Source: See Chapter 4 for each fortification.

From the table above, it can be concluded that out of nineteen Swedish fortifications, four lacked access to navigable water and eight depended on rivers. Viborg depended on the army blockable Bay of Viborg; Landskrona depended on the Sound, where the Danish Navy made any transport unsafe. Thus, it would be most difficult to resupply or reinforce fourteen out of nineteen fortifications under the eye of an enemy siege force, leaving five that are further analyzed in Table 5.2 below. Theoretically, Kexholm could also be reached from Stockholm via the Baltic Sea and then through Viborg and the Vouxen River. That route, however, will not be discussed here, as it would have been problematic to transport supplies that way in any event.

**Table 5.2** Defender's local access to generally accessible Swedish fortresses defended in 1702–1710

Fortification	Access to navigable water	First water	Sail-in function	Protected discharge place
12 Neumünde	Yes	Baltic Sea	No	No
14 Arensburg	Yes	Baltic Sea	No	No
15 Reval	Yes	Baltic Sea	No	No
18 Malmö	Yes	Baltic Sea	No	Yes
19 Karlshamn	Yes	Baltic Sea	No	Yes

Source: See Chapter 4 for each fortification.

Of the five remaining fortifications, three did not have a sail-in function or a protected discharge place. Thus, any resupply operation was doomed to fail. According to an accessibility analysis, only Malmö and Karlshamn could have withstood a siege longer than original supplies would have allowed them to. The other seventeen were destined to become *sturmfrei* once provisions had run out. In practice, the fortress commander would have surrendered before that happened, to allow better conditions for the surrender, or to avoid the consequences of a storm. From this perspective, and with the exception of two, the Swedish fortifications studied were unsuitable for controlling land in the long run. It can be concluded that lack of defender's accessibility would be considered another flaw in the Swedish fortification system studied, and one built in before the war.

*Attacker's general accessibility*

The attacker's general accessibility would also be important in defending a fortress. In the table below, the attacker's perspective, in relation to Swedish fortifications defended in 1702–1710, is described. The attacker's perspective varied according to progress during the war. Russia, for example, did not have access to the Baltic Sea prior to the capture of Nyenskans, and the Danes had no access to roads on Swedish soil before their landing in Skåne. The table below follows Russian progress and describes the situation prior to the Danish invasion of Skåne.

**Table 5.3** General access to Swedish fortresses defended 1702–1710 – attacker's perspective

	Fortification	Roads for troops	Roads for heavy loads	First water	Second water	Third water
<b>RUSSIA</b>						
1	Menzen	Yes	Yes	n. a	n. a	n. a
2	Marienburg	Yes	Yes	n. a	n. a	n. a
3	Nöteborg	Yes	Yes	Lake Ladoga	-	-
4	Nyenskans	Yes	Yes	Lake Ladoga	Neva River	-
5	Jama	Yes	Yes	The Baltic Sea	Luga River	-
6	Koporie	Yes	Yes	The Baltic Sea	Koporka River	-
7	Narva	Yes	Yes	Lake Peipus	Narva River	-
8	Ivangorod	Yes	Yes	Lake Peipus	Narva River	-
9	Dorpat	Yes	Yes	Lake Peipus	Embach River	-
10	Viborg	Yes	No	The Baltic Sea	Bay of Viborg	-
11	Riga	Yes	Yes	Düna River	-	-
12	Neumünde	Yes	Yes	Düna River	-	-
13	Pernau	Yes	Yes	The Baltic Sea	-	-
14	Arensburg	No	No	The Baltic Sea	-	-
15	Reval	Yes	Yes	The Baltic Sea	-	-
16	Kexholm	Yes	No	Lake Ladoga	-	-
<b>DENMARK</b>						
18	Landskrona	No	No	The Sound	-	-
19	Malmö	No	No	The Sound	The Baltic Sea	-
20	Karlshamn	No	No	The Sound	The Baltic Sea	-

Source: See Chapter 4 for each fortification.

In the east, the Russians had good general accessibility to the fortresses of Marienburg, Menzen, Jama and Koporie, situated inland and not far from the Russian border. There, general accessibility was based on land transport. For Marienburg and Menzen, there were no alternatives. Jama and Koporie could,

in theory, be reached via the Gulf of Finland and rivers. However, Swedish naval superiority in the Gulf of Finland, during the period, prohibited that alternative.

Nöteborg and Kexholm were located on Lake Ladoga. With Swedish control of the lake, Russian general accessibility to these fortifications was lowered, and vice versa. The task of hauling siege materiel overland to these places was an arduous one. Russian ability to reach Nyenskans also depended on Lake Ladoga, although that alone was not sufficient. To reach Nyenskans by water, the Russians also needed to control the Neva River. The option to march on land was demanding, and utilizing the Gulf of Finland was not an option as long as the Russians held no shores there.

Lake Peipus was central to general accessibility to Dorpat and Narva/Ivanogorod, although access to these fortifications also called for access to the Embach and Narva Rivers, respectively. Located not far from the Russian border, Russian land access to these fortresses was good, but transporting heavy equipment was difficult and time-consuming.

The fortresses of Riga, Viborg, Neumünde, Pernau, Arensburg and Reval were located almost on the Baltic Sea, lowering Russian general access as long as the Swedish navy held superiority in the Baltic Sea. However, the Düna River gave the Russians a high general accessibility to Riga and Neumünde on an inland waterway. Hence, only Viborg, Pernau, Arensburg and Reval constituted a problem for the Russian planners with regard to general access. Once the Russians became masters of most of the Baltic Provinces, they would have good general access to Pernau and Reval on land, although heavy transport would be arduous. Only two fortifications, Viborg and Arensburg, presented grave problems for the Russian planners in regard to general access.

Thus, also from the perspective of an attacker's general accessibility, the Swedish fortification system in the east suffered from serious flaws, especially when weak links, the command of Lakes Ladoga and Peipus, had broken.

In Skåne, Landskrona had the worst exposure to attack. A Danish fleet could cross the Sound, where the Swedish Navy hesitated to operate. Attacks on Malmö or Karlshamn would call for a landing north of Malmö, followed by land transport. Although attacker's accessibility to Malmö and Karlshamn could be discussed at length, it can be concluded that their accessibility was lower than that of Landskrona. In this study, general accessibility is seen as high as long as there was an unopposed Danish army in Skåne. Hence, one out of



three fortifications in the south of today's Sweden suffered from a high attacker's general accessibility without a Danish army on Swedish soil.

In total, only a few of the Swedish fortifications defended in 1702–1710 would constitute a problem for enemy planners with regard to general accessibility, mainly Viborg, Arensburg, Malmö and Karlshamn. This would be considered another flaw in the Swedish fortification system studied, and one built in before the war.

### *Size, strength and water*

In Table 5.4 below, the properties of the Swedish fortresses under siege in 1702, to and including 1710, are presented.

**Table 5.4** General characteristics of Swedish fortresses defended in 1702–1710

	Fortification	Size	Strong construction	Access to water (to drink)	Attacker's local accessibility
1	Menzen	Small	No	Yes	High
2	Marienburg	Small	No	Yes	High
3	Nöteborg	Small	No	Yes	High
4	Nyenskans	Small	No	Yes	High
5	Jama	Small	No	Yes	High
6	Koporie	Small	No	Yes	High
7	Narva	Medium/Large	Yes	Yes	High
8	Ivangorod	Small	No	No	Low
9	Dorpat	Medium/Large	No	Yes	High
10	Viborg	Medium/Large	No	Yes	High
11	Riga	Medium/Large	Yes	Yes	High
12	Neumünde	Medium/Large	Yes	Yes	High
13	Pernau	Medium/Large	Yes	Yes	High
14	Arensburg	Small	Yes	Yes	High
15	Reval	Medium/Large	No	Yes	High
16	Kexholm	Small	No	Yes	High
17	Landskrona	Medium/Large	Yes	Yes	High
18	Malmö	Medium/Large	Yes	Yes	High
19	Karlshamn	Small	No	Yes	Low

Source: See Chapter 4 for each fortification.

In this study, garrison strength is the measure of size (see Chapter 3.2.3). In Table 5.4, constructions which would have been impractical for a garrison of over 1,000 men are classified as “Small”. The remaining fortifications are classified as “Medium/Large”. In the following discussion, the actual strength of a garrison

at the beginning of a siege will determine whether or not a fortress was “Medium” or “Large”. This question could have been made more complicated by measuring the length of the defensive line for each fortification, and then classifying each fortress as under-garrisoned or not. However, such an expansion of the question is not carried out here. Artillery could be the closest competing factor to include in a table. An undergunned fortress would be weak. However, no number of guns could compensate other shortcomings.

It can be seen above that of the nineteen Swedish fortifications, ten were small and nine were medium/large. As an *a priori* assumption, small fortresses could not be expected to hold out long. Thus, a first inherent flaw can be identified in the existence of several small fortifications.

Of the constructions, nine out of nineteen could be considered strong. As mentioned above, some places deemed “not strong”, such as Dorpat and Viborg, had strong fortification parts, although considering the weakest link, other parts made them fundamentally weak. The existence of “not strong” fortifications could be analyzed in two ways. One instance is that ten places, with weak construction, had to be defended – a flaw in itself. Another indicates that resources had been spent on building strong constructions in places which held other disadvantages, making the investment doomed to be wasted for other reasons – another flaw in the fortification system studied.

Only one place, Ivangorod, suffered from a lack of drinking water, a basic prerequisite for fortress defense. This constitutes another flaw in the fortification system studied, in that resources were squandered in a place where lack of water would be detrimental to long-term defense. There was a water issue also in Reval, but that fortress is not classified as lacking drinking water, because there were a few city wells.

Looking at “attacker’s local accessibility”, only two out of nineteen fortifications, Ivangorod and Karlshamn, drew a distinct advantage from the terrain. The remaining seventeen fortifications were more or less advantageously sited, but not to the extent of creating an almost insurmountable problem for the attacker. Thus, the vast majority of the Swedish fortifications were susceptible to classical breach shooting and storming. This created a serious flaw in the Swedish fortification system studied – the possibility of creating a real advantage, in a time of peace, was not utilized.

### *Conclusion*

Thus, of nineteen Swedish fortifications coming under siege in 1702 to 1710 and, with critical factors taken into account, none could be considered suitable for prolonged defense. The fortification closest to achieve “Gibraltar-status” was Malmö, which did, however, suffer from high local attacker’s accessibility, and therefore was susceptible to the breach-and-storm tactic. The only way to maintain Malmö would have been to continuously provide enough troops and supplies to repair damaged walls and beat off storms.

The general conclusion: At the beginning of the Great Northern War, the Swedish fortification system studied suffered from serious inherent flaws. The conclusion is especially true for the fortresses in the eastern part of the Empire, where not one fortification had potential for defense, beyond the expenditure of supplies at the beginning of the siege. Thus, an enemy blockade tactic would always succeed in making the fortresses *sturmfrei*.

## 5.3 FLAWS AND THE LOSS OF MEN, MATERIEL AND LAND

### *Introduction*

The hypothesis that the Swedish fortification system at the beginning of the Great Northern War suffered from serious inherent flaws cannot be rejected. Thus, the second hypothesis is tested below by analyzing the actual siege battles. The hypothesis reads:

*“The flaws in the Swedish fortification system contributed to a serious loss of men, materiel and land.”*

Below, the besieger’s tactics are summarized in the tables. Which tactic the besieger used is not always a clear-cut matter. In more difficult cases, tactics the besieger seemingly aimed to use are indicated.

### *The small fortifications*

It has been noted above that out of nineteen Swedish fortifications coming under siege in the period, ten were small. Small fortifications would not be expected to hold out long, unless they had low local accessibility, i.e. they were located in terrain which made them difficult to attack. Of the small Swedish

fortifications, only two – Karlshamn and Ivangorod – had low attacker’s local accessibility (were difficult to reach).

The table below summarizes the siege battles around small Swedish fortifications in 1702–1710. The exactness of the figures shown for garrisons is somewhat of a chimera; several of them are estimates. Any figure would vary somewhat with definition. In the table below, the first siege of Arensburg is included, but not the distant blockade of Kexholm carried out in the early months of 1710.

**Table 5.5** Results of siege battles 1702–1710 regarding Swedish small fortifications

	Fortification	Garrison	Duration of siege (days)	End result	Besieger’s tactic
1	Menzen	160	1	Fell	Storm of unbreached walls
2	Marienburg	350	8	Fell	Storm of unbreached walls
3	Nöteborg	450	16	Fell	Breach-and-storm
4	Nyenskans	700	7	Fell	Morale break, bombs
5	Jama	40	7	Fell	Breach-and-storm
6	Koporie	80	4	Fell	Breach-and-storm
7	Ivangorod	200	113	Fell	Blockade
8	Karlshamn	(215)	7	Held	No tactic
9	Kexholm	562	49	Fell	Morale break, bombs
10	Arensburg 1	(400)	7	Held	Break morale
11	Arensburg 2	0	<1	Fell	No tactic
12	Landskrona	(600)	93	Held	Blockade
	<b>TOTAL</b>	<b>2,542</b>			Excluding fortresses that held up.

Source: Table 5.4 above and fortress in Chapter 4.

The table above shows that small Swedish fortifications generally did not hold out long. A small fortress was clearly susceptible to a breach-and-storm tactic, as a garrison of only a few could hardly expect to win the final battle in a storm. The limited amount of space would also make it susceptible to bombardment to break morale.

Kexholm, Landskrona and Ivangorod stand out as exceptions, with forty-nine, ninety-three and 113 days of siege, respectively. Kexholm was besieged by a detachment of the Russian army, and the time span was too short for Swedish authorities to organize a relief army. Ivangorod was a part of the Narva/Ivangorod complex, and it is uncertain how long the fortress could withstand siege, without the support of Narva. It could have been possible, however, that Ivangorod, given its favorable location, held out for a considerable period of time, if it was properly

supplied. A small Swedish force could then have been contained by a slightly larger Russian force, and the Swedish possession of Ivangorod would subsequently not have affected the war significantly. Landskrona was blockaded by a Danish force, which made no effort to rapidly capture the fortress.

Karlshamn, Arensburg 1 and Landskrona are exceptions in the respect that they held up. At Karlshamn, the attacking Danish army could not capture the fortification. Here, the Danish army did not bring siege artillery and was pressured by an approaching Swedish relief army. Arensburg 1 is an example of how a low attacker's general accessibility, created by location on an island where the Swedish Navy was strong in the waters, made a significant difference. The Russian forces were compelled to withdraw, as their ice support was threatened by warm weather.

In general, it can be concluded that the small fortifications were not – and could not be – defended for any extended period of time. The flaw in the Swedish fortification system studied, of having several small fortifications, thus contributed to the loss of men, materiel and land.

*The medium size fortifications*

As seen in Table 5.6 below, out of nineteen Swedish fortifications coming under siege during the period, seven were garrisoned to medium size. For a medium-sized or a small-sized fortress, the same is true: that they cannot be expected to hold out long, unless they are very well located.

The table below summarizes the siege battles around medium-sized Swedish fortifications in 1702–1710. Here it can be noted that there are two entries for Viborg, since the fortress was under siege twice in the period studied, thus creating a total of eight sieges listed.

**Table 5.6** Results of siege battles 1702–1710 regarding Swedish medium size fortifications

	Fortification	Garrison	Duration of siege (days)	End result	Besieger's tactics
1	Dorpat	2,900	40	Fell	Breach-and-storm
2	Narva	5,100	106	Fell	Breach-and-storm
3	Viborg 1706	(3,000)	17	Held	Breach-and-storm
4	Viborg 1710	3,400	83	Fell	Breach-and-storm
5	Neumünde	1,500	33	Fell	Blockade
6	Malmö	(3,600)	51	Held	Blockade
7	Pernau	1,700	25	Fell	Blockade
8	Reval	4,500	49	Fell	Blockade
	<b>TOTAL</b>	<b>19,100</b>			Excluding fortresses that held up.

Source: Table 5.4 above and fortress in Chapter 4.

The general impression is clear: fortresses of this size could hold out for some time, but could then be captured by a breach-and-storm tactic, including breaching and threatening a storm, or blockade. This would be especially true if the garrisons were not resupplied, which reduced their ability to work on repairs during the siege, and to fight the final battle.

In three of the eight sieges, the fortifications fell to storming or breaching, and the threat of storming. Three of the sieges ended with the fortresses falling after a blockade. Malmö created a case where there was a Swedish relief army coming up, causing the Danish blockade force to withdraw. Neumünde, Pernau and Reval created special cases because of the plague raging in the fortresses. There, the besiegers only had to wait until the garrison commander surrendered with a reduced garrison.

At Viborg in 1706, the defender's tactics included blocking the besieger's communication, which thwarted the use of the breach-and-storm tactic, since the Russian siege artillery could not be sent by sea and became bogged down on the muddy roads of Ingria. In addition, the Swedish blockade of Russian communication lines made the matter of supplies difficult for the Russian army in the barren Ingrian land. Thus, Viborg 1706 created an example of how low general accessibility for the attacker was decisive.

In general, however, the outcomes of the siege battles around Swedish medium-sized fortresses confirm an assumption of a flawed system. There were too many fortifications which were not strong enough for an extended defense. The three fortresses that held up did so because of a relief army, in two cases, and because of the Swedish Navy in the third.

### *The large fortifications*

Only one of the nineteen Swedish fortifications coming under siege in the period had a large garrison. Large fortresses would be expected to hold out for a long time. Having a large garrison created the possibilities of having the walls manned while at the same time making repairs on damaged parts of the defenses, thus keeping the odds for the defender intact. A large garrison would also dramatically increase the attacker's risk in a storm, since the possibility of wearing down or overwhelming the defender would be reduced. Storming a large garrison would mean fighting at a distinct disadvantage for the attacker. A large garrison, however, also meant a substantial demand for supplies, so a blockade became a serious threat to large fortresses.

**Table 5.7** Results of siege battles 1702–1710 regarding Swedish large fortifications

	Fortification	Garrison	Duration of siege (days)	End result	Besieger's tactic
1	Riga	10,400	249	Fell	Blockade
	<b>TOTAL</b>	<b>10,400</b>			

Source: Table 5.4 above and fortress in Chapter 4.

Riga held out for the unusually long period of 249 days. Attempts to resupply Riga foundered on army blockable access to the fortification. The Riga case is quite clear, the fortress had to surrender, because resupply operations failed and food ran out, even though its originally large garrison allowed for long resistance. It must then be concluded that flaws in the Swedish fortification system, as studied, cost the Swedish Empire its largest and most significant fortress in the east, Riga.

### *Loss of land*

The loss of a fortress meant that the control of a certain area of land turned from the defender to the attacker. In the table below, the major consequences for the Swedish Empire of each loss of a fortress is outlined.

**Table 5.8** Major consequences of a Swedish fortress lost

	Fortification	Major consequence
1	Menzen	Southeastern Livonia was open to Russian ravaging.
2	Marienburg	Southeastern Livonia was open to Russian ravaging.
3	Nöteborg	Swedish hold on Ingria was reduced.
4	Nyenskans	Russia gained access to the Baltic Sea.
5	Jama	Russia was provided with a forward base in Ingria.
6	Koporie	Russia was provided with a forward base in Ingria.
7	Narva	Sweden lost control of Ingria and eastern Estonia.
8	Ivangorod	Sweden lost control of Ingria and eastern Estonia.
9	Dorpat	Sweden lost control of eastern Livonia.
10	Viborg	The road into Finland lay open to the Russians.
11	Riga	Sweden lost control of Livonia.
12	Neumünde	Sweden lost a bridgehead in Livonia.
13	Pernau	Sweden lost the last bridgehead in Livonia.
14	Arensburg	Sweden lost control of Ösel.
15	Reval	Sweden lost control of western Estonia.
16	Kexholm	Russia gained a strong point in Kexholm.

Source: See Chapter 4 for each fortification.



The table above shows that the Swedish Empire, through the loss of fortresses in the east, lost control of Finland, Ösel, Estonia and Livonia. The matter of control of land would also depend on field armies, but in losing the fortresses, the Russian field armies were given freedom of operation plus strongholds to fall back on. Additionally, there were no bridgeheads for Swedish field armies. As such, the loss of fortresses could be said to have generated the loss of land.

### *Conclusion*

The general conclusion is that the serious flaws in the Swedish fortification system contributed to the loss of men, materiel and land. Thus, neither can the second hypothesis be rejected.

Around 30,000 soldiers garrisoned the falling fortresses. Most of these men were a loss to the Swedish war effort. The total losses in the fortress warfare then exceeded the Swedish losses at Poltava and the subsequent surrender at Perevolochna in 1709, estimated at 24,100 men, and approached the total Swedish losses in the main army campaign from the summer of 1708 to the surrender after the Battle of Poltava, estimated to be 49,500 men<sup>1386</sup>. The material losses would have been thousands of guns of various calibers, tens of thousands of various handheld firearms and vast amounts of gunpowder, cannonballs and other materiel. The financial losses, resulting from losing control of land, are difficult to estimate. After the Reduction in the 1680s, revenues from Ingria and Kexholm in one year were 188,000 rixdollars, from Estonia 155,000 rixdollars, and 543,000 rixdollars from Livonia<sup>1387</sup>.

## 5.4 WHY WERE THE FLAWS BUILT INTO THE FORTIFICATION SYSTEM?

Since the hypothesis that there were serious flaws in the Swedish fortification system studied cannot be rejected, an attempt will be made below to answer the question of why the flaws were there at all.

The 1698 Dahlbergh document (see Chapter 3) is central to explaining the ideas behind Swedish fortifications. Thus, it gives important leads as to why the flaws were built into the system. In the first place, Dahlbergh wanted to strongly fortify all population centers. This ambition was obviously a root cause to the problem. Population centers were located for purposes other than military and,

---

<sup>1386</sup> Wikander, p. 133.

<sup>1387</sup> Franklin D. Scott, *Sweden: The Nations History* (Minneapolis, Minnesota 1977), p. 219.

hence, were rarely suitable for fortification. The fortification budget was thus spent in the wrong places.

Secondly, Dahlbergh to some extent estimated the total military situation in a future war, but those estimates were random and incomplete. One example was when he wanted to fortify Stockholm for a last-ditch defense against any coalition of enemies. How such a battle could be resolved favorably for Sweden was never explained. Here Dahlbergh cannot be entirely blamed. As general quartermaster he was not totally responsible for Swedish defense planning, only for the fortification. The flaws then seem to emerge from the lack of such a defense plan and the theoretical testing of such a plan. The closest document to a Swedish war plan is Rehnschiöld's document (see Chapter 3). That war plan was incomplete, in important respects, but still points out matters which should have been worked into the fortification plan. One example is the German possessions. Rehnschiöld noted the problems in their offensive and defensive use. Still, considerable amounts of money were spent on fortifications in the German possessions<sup>1388</sup>. A lower ambition there would have left funds for other important projects.

Dahlbergh's eagerness to fortify every city and every important terrain feature conflicted with the idea suggested by his contemporary military theorists (see Chapter 3), that it is better to have a few strong fortresses than several weak ones. Those theorists' opinions are more than well supported by the tables above in this chapter. Also in other important respects, Dahlbergh seems to have been unaware of, or ignored, contemporary military theory. Having followed Fritach (see Chapter 3.2), for example, Dahlbergh should have been seriously concerned about the connection between location and the possibility of resupplying a fortress. One important factor here could be that Dahlbergh had never served at a besieged fortress. He had planned and participated in the capture of fortresses, such as the dramatic capture of Frederiksodde, by storming unbreached walls in 1657, but he had never fought in defensive siege battles prior to the Great Northern War<sup>1389</sup>. Dahlbergh should then have been well aware of how a storm worked, and would then have been focused on how to repel a such an attack. However, he had never confronted the problem of having supplies brought from ships into a starving fortress. Oddly enough,

---

<sup>1388</sup> Compare Ludvig W:son Munthe, Del III:2, pp. 223 and 278

<sup>1389</sup> Ernst Ericsson and Erik Vennberg, *Erik Dahlbergh: Hans levnad och Verksamhet* (Uppsala 1925), pp. 183–200.

in the documents from the 1685 fortification commission, a higher degree of awareness of the resupply problem can be found, than what is shown in the 1698 document (see Chapter 3.2). Here, a shift from a total military picture in the 1685 document, to more construction-oriented thinking in the 1695 document, can be perceived.

Another obvious flaw in Dahlbergh's thinking was that he fundamentally began with existing fortresses, quite often arriving at the conclusion that one particular such was important and in need of modernization. Dahlbergh rarely questioned the reasons for the fortification of a certain place, nor whether such reasons were still valid, nor did he draw the proper conclusions from his own observations. A typical example of the last statement is that Dahlbergh, without taking the thought to its next step, warned of the new threat from heavy mortars; the defender's morale could now rapidly be bombed to breakdown, which would emphasize the need of fortifications with bombproof shelters that should have been built at the expense of smaller and weaker fortifications.

Sweden, thus, came to spend substantial amounts of money on fortifications which were dysfunctional in one way or another. The responsibility for their development rests heavily with Dahlbergh, who did not think one step forward from actual construction, and with Karl XI, who could make decisions above Dahlbergh's level.

## 5.5 CONCLUSION

### *Introduction*

In Chapter 1.2 Purpose, it was stated that this study would be concluded with a short synthesis regarding Swedish defensive fortress warfare and how it affected the outcome of the war, plus a discussion regarding the ability of the Swedish Empire to survive the onslaught of 1700–1721. These matters will be addressed below.

### *Swedish defensive fortress warfare – summary and alternatives*

In summarizing the Swedish defensive fortress warfare in the east, from 1702 to 1710, it must be concluded that it was a disappointment from the Swedish perspective. The Swedish fortresses could not ensure a Swedish foothold in Finland, Ingria, Estonia or Livonia. There were rare instances where fortification warfare was successfully carried out, gaining time for the Swedish Empire. One was the defense of Viborg in 1706, where the Swedish Navy managed to sever

Russian transport lanes. Another instance was the prolonged defense of Riga in 1709–1710.

As has been shown above, the problem, to a large extent, was founded in the locations of fortresses. At times, process errors by a fortress commander resulted in the fall of a fortification. However, in the cases studied, there are no grave errors on any fortress commander's side. Errors that were made mostly related to decisions on a political level, where lack of agility resulted in missed opportunities to relieve fortresses otherwise lost.

Could an alternative fortress strategy, within the framework of existing resources, have been effectively implemented? The answer is yes. Spending large amounts of money to fortify poorly located population centers was the bane of the fortification system. Certainly, a population center needed protection; the question is how much. Two types of attacks should be considered here. The first is one by marauding light troops with no heavy artillery. The second is by a siege army, equipped with breach shooting artillery. The optimum population center fortification should protect against the first but not the latter. The basic logic behind that claim is that a simple and inexpensive wall would protect the riches of a city from a weak enemy. This would deny the enemy large gain at low cost. The principle of light defense of population centers would have other advantages. Those inexpensive fortifications could be stretched to also cover the suburbs, thereby not acting as a constraint on city growth. This would also reduce the need for the torching of suburbs, upon the approach of an enemy, thereby saving large economic interests. Funds saved by a light defense of population centers could have been used to build real strongholds, with access to open sea which could not be blocked by army forces, and with sail-in functions. The strongholds could also have been situated high above ground with access to drinking water. Finding such a Gibraltar-type of terrain feature might not have been an easy task, but if there was no site for a real stronghold, defense strategy for a certain area needed to be changed. If a certain area could not be held by strong fortification, it would be more important always to meet an enemy concentration of power, in that area, with a field army.

The Neva River problem, no doubt, was a critical matter. Ingria, in all respects, was the weakest link in the Swedish Empire, with Bremen-Verden as its closest competitor. Here the lion's share of the Empire could be divided in half and Russia could reach the Baltic Sea. As a strategic matter, the question had several alternative solutions. The one chosen – to defend the Neva River with

two weak fortresses – was probably among the worst. Building a Gibraltar-type fortress at each end of the river would have been expensive, and costly to garrison. Even if such super-fortresses had been built, there would still have been risks. The commander of one or both of the fortresses could have been bribed or defeated mentally, with all the investment suddenly turning to the enemy's advantage.

There was, however, one obvious solution, pointed out by Tsar Peter. The Swedish fortification budget could have been revised. The money spent on Narva could have been spent on the island of Retusaari. An alternative would have been the western side of the mouth of the Narva River. Any Swedish fortification with a sail-infunction in the far east, and in the southern part of the Gulf of Finland, would have served as a base for forces threatening to cut off a Russian army advancing west.

Another solution to the Neva River problem would have been to turn the land by the river into international territory. The river was of importance to Russian trade, in which Great Britain and the Netherlands took an interest. Thus, Neva River land could have been a no man's land, with Sweden, Russia, England, France, the Netherlands and the Holy Roman Emperor granting it neutrality. The land could have flourished to the advantage of Sweden and others. The block of any Russian plans of conquest by this approach is obvious. The idea touches on the concept of the free cities within the Holy Roman Empire. It could also be noted, that hope of the St. Petersburg area becoming a free trade zone in the event of a Swedish victory in the Great Northern War was already expressed in 1706 by Charles Whitworth, the English emissary to Tsar Peter<sup>1390</sup>. However, such a move would have called for a mentality under which the Swedish Empire did not depend on the defense of every inch of land, at any cost.

Besides the defense of population centers and the Neva River problem, the Swedish strategy of having several small and medium-sized fortresses in the east was not successful. On the contrary, the strategy seems to have been counterproductive, as these fortifications served as traps for large numbers of soldiers. The most obvious solution would have been fewer and stronger fortresses.

---

<sup>1390</sup> Karl-Gustaf Hildebrand, "Ekonomiska syften i svensk expansionspolitik 1700–1709", in Gustaf Jonasson (red.), *Historia kring Karl XII* (Stockholm 1964), p. 62.

Regarding the campaign in the south of Sweden in 1709 to 1710, the picture from a Swedish perspective looks brighter. It seems like the defense concept was working. Landskrona, Malmö and Karlshamn held out until a relief army was organized and drove the Danes out of Skåne. The naval base at Karlskrona was never attacked. The investment in the southern fortresses then appears to have been worthwhile. That picture could be accepted or challenged. In a challenge, Karlskrona should be left out. It was probably wise to protect such a valuable asset as the fleet through strong fortification, not leaving it open to any unopposed army unit that could appear. Then Malmö and Landskrona could be looked into. First, the value of Landskrona could be questioned. The fortress had a small garrison and then constituted more of a risk than an asset. If the Danes had captured the fortress, they would have gained a permanent foothold on Swedish land. Expenditure on the Landskrona fortifications, thus, can be questioned. Secondly, one could ask whether or not the vast expenditure was worthwhile on the Malmö fortifications. The affirmative case is that it was crucial for the Swedish Empire to maintain control of the largest population center in Skåne. Then, it could be asked whether strong defense of the entire population center was needed. There were two real military values in Swedish fortification in Skåne, one was to have a place for a defeated Swedish army to retreat to, and the other was to deny the Danes a landing place. It seems like a strongly fortified Malmö was not the ideal solution. A wiser use of fortification money in Skåne could have been to build inexpensive harbor defenses at landing places in Malmö and north of the city, for example at Helsingborg and Råå, where the Swedish Navy should not be effective, and thus keeping the Malmö city defenses relatively weak.

Finally, it could be asked if changes in the Swedish fortification system could have been made in the years before the Great Northern War. The window of opportunity was from the 1680s, when Swedish government revenues increased, to 1700, thus, twenty years. It can be assumed that it would have been possible to alter the balance of the Swedish fortification system in this time. For example, extensive work on Narva was carried out in this period.

#### *The effect of Swedish defensive fortress warfare on the war in general*

Failures in Swedish defensive fortress warfare had several implications for the war in general. The more important ones are observed below.

One of the striking properties of the fortress warfare on the eastern front is how Swedish forces were defeated piecemeal, locked up in fortresses. Tens of thousands of soldiers and vast quantities of military materiel were lost. A Swedish fortification system based on fewer, but properly located fortresses, could then have contributed to maintaining army resources in the east. It should also have freed up troops for mobile warfare.

The next effect was that the fortress warfare generated a defensive Swedish strategy in the east, which failed. When looking at Swedish warfare in general in the east, the Russians were mostly left free to prepare their next step in the timetable. They could build boats and ships to take control of Lakes Ladoga and Peipus; they could organize their armies; and they could prepare storage to ship supplies to the Viborg siege army, etc. Small-scale raiding, and Lybecker's ineffective campaign in 1708, were the only exceptions to the rule. It could be claimed that the Swedish war in the east was lost due to almost purely defensive strategy, and the perceived need to garrison several fortifications strongly contributed to the adoption of that strategy.

A third effect of the failures in the fortress warfare was that the losses in the east limited Karl XII's freedom of action. When the Baltic Provinces were lost, the German possessions were the only alternatives that remained, if Karl XII wanted to influence events on the continent. With a foothold on the Livonian coast, Karl XII would still have an alternative bridgehead at which he could land armies to operate outside Sweden. One crucial example is Stenbock's 1712 army, landing in a cul-de-sac in Pomerania to ultimately succumb in Holstein-Gottorp (see Epilogue). With a more successful fortress warfare, carried out by the Swedes, the Stenbock army could have been routed to more open Livonia and, thus, set history on a different track.

Within this context, it can also be noted that the Swedish fortresses, once they had fallen, became counterproductive to maintaining the Empire. The Russians were now provided with strongholds, which would have called for substantial Swedish resources to recover.

With bridgeheads kept by Sweden also in Estonia and Finland, Russia could also be kept more off balance, since a Swedish army could always (when without ice problems) land there and march on any target. Thus, it can be concluded, with a high degree of certainty, that the loss of the fortresses in the east affected Swedish strategic options.



Fourth, failures in fortification warfare led to a downward spiral, in which Swedish financial resources dwindled. The development could be described in the model below.

Troops concentrated in fortresses => Fall of a fortress => Increase in areas ravaged => Reduction of resources => Fall of a fortress => and so on.

The claim noted in Chapter 2, that a lack of resources was the bane of the Swedish Empire, thus became truer and truer with time.

Fifth, Swedish failures in defensive fortress warfare allowed Tsar Peter to establish a pattern according to which, sooner or later, he would win the war. If the fortresses in the east had been successfully defended up to 1709, Tsar Peter would not have been able to focus on Viborg and Riga. He would have been behind his actual schedule. Swedish resources could also have been more abundant. Having prevented Russian ravaging of a large part of Estonia and Livonia, the Council and the Defense Commission might not have found themselves in the same predicament as that of 1709.

It could be claimed that failures in Swedish fortification warfare, often overshadowed by the disaster at Poltava, were at least as detrimental to the Swedish war effort as the Poltava battle. Considering that the losses in fortification warfare substantially reduced the overall resource base for the Swedish Empire, those losses can even be seen as worse losses than those at Poltava.

#### *A Discussion on the possibility of the Swedish Empire surviving the attacks of 1700–1721*

The question, whether or not more efficient Swedish defensive fortress warfare could have resulted in the survival of the Swedish Empire in the Great Northern War, has no definitive answer. However, avoiding several or all of the disadvantages outlined above would probably have improved Swedish capacity to withstand the onslaught of 1700–1721. A few other factors, which could have contributed to the survival of the Swedish Empire, were connected to the Swedish fortification system.

A striking feature in Chapter 4 is how the Russians often built up their strength gradually when attacking Swedish fortifications. Older Swedish history writing tends to explain the disaster in the east with the king being in Poland, Saxony and Russia with his main army. It should be noted though, that Karl XII was now using less than half of the overall Swedish army. Very

little has been said about the use of the remaining parts of the Swedish Army, although the lack of unified command in the east has been pointed out, for example by Swedish military writer Wikander<sup>1391</sup>. Finnish historian Antti Kujala remarked that there were enough Swedish troops in the Baltic Provinces to wage a successful war, but the lack of joint command made it possible for the Russians to defeat them piecemeal.<sup>1392</sup> That would be correct, but the argument could be taken one step further. Swedish regional commanders, such as von Schlippenbach, also dissipated their forces. A large part of remaining Swedish Army forces in reality was lost in fortifications which could not be defended in the long run. A change of logic, where a Swedish field army in the east defeated the advancing Russian armies advancing piecemeal, could have contributed to a different outcome of the Great Northern War. The crucial point would have been the peace negotiations. With less land under Russian control, the cost of the peace could have been reduced.

Two fortification matters stand out as critical for the development of the war. The first is Tsar Peter's resupply operation to Viborg in the spring of 1710. Tsar Peter here took a considerable risk. If the Russian resupply fleet would have been intercepted by the Swedish flotilla, Russia would not only have lost vast resources but even Tsar Peter himself could have become a Swedish prisoner. Thus, a Russian Poltava in the Gulf of Finland was not impossible. The second is the failure of the Swedish Council to resupply Riga before the arrival of the Russian main force in 1710. No one can know what would have happened if a resupply and reinforcement operation had been carried out in time. We only know that the cornerstone of Swedish defenses in the Baltic Provinces fell, without such an operation.

Whether or not more efficient fortress warfare, including a different balance between fortress garrisons and field armies, could have compensated for the undeniable lack of balance between, for example, populations in the Swedish Empire and its enemies, will forever remain uncertain. However, the longer Sweden could have maintained control of Finland and the Baltic Provinces, the more efficient a Swedish war effort could have been. More efficient fortress warfare could then have contributed to more of the original territories of the Swedish Empire being preserved until a time of peace negotiations. As a con-

---

<sup>1391</sup> See for example Wikander, p. 152.

<sup>1392</sup> Antti Kujala, *Miekka ei laske: Suomi suuressa pohjan soadssa 1700–1714*, Hisoriallisissa tutkimuksissa Nr 211 (Helsinki 2001), p. 358.

sequence, the Swedish Empire could have been saved from ceding some of the territory which in reality was already lost.

### *Reasons for the fall of the Swedish Empire*

Noting the Swedish waste of men, materiel and money in the fortification system studied, it appears as though the “lack-of-resources” theory cannot be taken for granted. It should at least be supplemented with an “ineffective-use-of-resources” theory. Accordingly, Oredsson’s list of twelve theories for the fall of the Swedish Empire should be augmented by a thirteenth point: “The existence of an extensive and expensive but ineffective fortification system.” Further, the decisive date of the fall of the Swedish Empire, now often asserted to be June 28, 1709, at the Battle of Poltava, should be changed to the summer and fall of 1710, a time when Sweden lost her foothold in the Baltic Provinces and her key to Finland.

### *A final word*

Apart from observations on the Swedish defensive fortress warfare, this study reveals something else about Sweden in the Great Northern War: The war was not well managed from the Swedish side, rather the opposite. Anyone considering that statement will probably recall several instances in the text above to make the statement likely. This is in strong contrast to prior history writings, where the Swedish army tends to look highly successful. Most history writing to date has focused on the initial successes of the Swedish field army, and then on the defeat at Poltava, creating a picture of a highly efficient war machine being finally defeated, but not seeing the strategic and tactical failures that dominated the overall Swedish war effort. The way history has been written has thus created a false picture of the war, keeping several Swedish shortcomings obscure.

A short synthesis regarding Dahlbergh is that he, in his day, probably was one of the world’s leading designers of fortresses. He was also skilled in offensive fortress warfare and, in the opening phase of the Great Northern War, proved himself proficient in handling defensive fortress warfare. However, he did not consider the broader scope of fortress warfare, such as the significance of fortress location and any possibilities of resupplying fortresses at war.

A short synthesis regarding fortress warfare is that fortifiers are able to lose a war long before it gets started, by building fortification in the wrong places. When a war begins, the field operators have no choice but to defend those places. If fortifiers act on their own, they are likely to focus on construction without

taking the full strategic and tactical picture into account. Thus, fortifiers not acting in close cooperation with strategic and local commanders constitute a risk. This has far-reaching implications as to how a nation should organize its fortification resources on its highest executive level. The statement would hold true even today.

A short synthesis regarding our studies of the Great Northern War is that the tip of the iceberg is well surveyed. Certain aspects are studied in depth, but most surfaces are just scratched upon, while the majority of source material waits for someone to study it. The material available is ample. As pointed out above, just the meeting minutes of the Swedish Admiralty for one year alone, cover several thousand pages. Two other examples: the financial accounts of the Finnish Army in 1709–1710 consist of more than 4,000 pages, and just one volume of outgoing letters from a Swedish diplomat in *Diplomatica Germanica* at the Swedish National Archives [“Riksarkivet”] has hundreds of pages. Apart from an almost endless number of potential detailed studies, the real challenge remains to establish the full picture of the abilities of the opposing nations at all stages during the conflict. There could be several keys to learning more about the Great Northern War. One important key would be to publish the minutes of the Swedish Council and the Defense Commission for the period *in extenso*.

## EPILOGUE

By October of 1710, Sweden had lost her main army at Poltava and virtually all fortresses in the east, including a last foothold in Poland. Still, more than ten years of war remained. Already in November of 1710, it looked like the fortunes of war had changed. The Ottoman Empire declared war on Russia. In July of 1711, by the Prut River, Tsar Peter and the Russian army were surrounded by superior Ottoman forces. The Russians, however, managed to conclude peace with the Ottomans. Karl XII, however, had not given up hope of a new Ottoman war on the Russians, as he remained in the Ottoman Empire.

In connection with a renewed war against Russia, the landing of a new Swedish Army was an important factor in Karl XII's negotiations with the Ottomans. In late summer of 1712, Lieutenant General Magnus Stenbock and a Swedish army landed in Swedish Pomerania. Leading an army of about 14,000 men, Stenbock defeated a Danish army in the Battle of Gadebusch on December 9, but was soon forced by superior enemy armies to seek cover in the fortress of Tönningen in Holstein-Gottorp. At the same time, Danish troops attacked Stade, the main Swedish fortress in Bremen-Verden. The Swedish garrison surrendered in August, so all fighting in Bremen-Verden ceased. In 1713, the Swedish armies suffered further setbacks. Stenbock had to surrender, and another Swedish army was lost. In Finland, the Russians launched an offensive which the Swedish forces could not withstand. On February 19, 1714, the Swedish army in Finland was defeated in the Battle of Storkyro. Finland, for all practical purposes, was then in Russian hands. During 1714, Karl XII left the Ottoman Empire and arrived in Stralsund in November.

In 1715, Brandenburg/Prussia declared war on Sweden and their forces joined a Danish-Saxon attack on Stralsund. Later in the year, Hanover also declared war on Sweden. In December, Stralsund could no longer be defended, and Karl XII left the city for Sweden; Stralsund surrendered the day after Karl XII's departure. In the following year, Karl XII launched an attack on Norway. The Swedish force was unable to conquer the fortress of Akershus in Oslo, and when a Danish flotilla captured the ships supplying the Swedish army, Karl XII ordered a retreat. During 1716, two Swedish fortresses fell, Wismar in Germany and Kajaneborg in northern Finland. Now, the Swedish Empire had no overseas possessions left. In 1717, battlefield activity was low. A Danish flotilla

launched attacks on Gothenburg and the small Swedish harbor of Strömstad; both were beaten back.

In 1718, Karl XII launched a new attack on Norway. On November 30, he was killed by a bullet outside the Norwegian fortress of Fredrikshald. The Swedish army then retreated from Norway and the war entered a new phase.

In 1719, the Russians launched galley-born attacks on the Swedish mainland. At the same time, a new Swedish government began to conclude the war. In October, a truce of six months was agreed with Denmark, and in November peace was concluded with Hannover with Sweden ceding Bremen-Verden. In February of 1720, Sweden made peace with Brandenburg/Prussia. Large parts of Swedish Pomerania were ceded. In June, Sweden and Denmark signed a peace treaty with no territorial losses for Sweden. In August of 1721, Sweden finally signed peace with Russia, ceding Ingria, Estonia, Ösel, Livonia and the southeastern part of Finland, including Viborg. At the time, the wars with Saxony and Poland ended without formalities. In 1729 and 1732, documents declaring that peace was restored were signed.<sup>1393</sup> Besides losses in land, the war had cost Sweden and Finland 200,000 soldiers.<sup>1394</sup> Swedish historian Jan Lindegren estimated that ten percent of the losses, suffered by the Swedish army in 1620–1719, were incurred on the battlefield, five percent in sieges and ten percent in perishing as prisoners of war. The remaining seventy-five percent died because of hardships.<sup>1395</sup>

Sweden was now faced with an entirely new strategic situation. Work to create a new fortification system had already begun in December of 1721 and planning was complete, in its first step, in August of 1733.<sup>1396</sup> Having lost Viborg, Sweden needed a new main fortress in Finland. In 1747, it was decided to build it on the Gulf of Finland, outside of Helsingfors. Its name was to be Sveaborg. The location chosen had access to drinking water, there was plenty of space, its entrance was not army blockable – and there was a sail-in function.<sup>1397</sup>

---

<sup>1393</sup> Wikander, pp. 161–200 and Ulf Sundberg, *Sveriges krig 1630–1814*, Del 3, (Stockholm 2010), pp. 246–263.

<sup>1394</sup> Jan Lindegren, "Karl XII", in Anders Florén (red.), *Kungar och krigare: tre essäer om Karl X Gustav, Karl XI och Karl XII* (Stockholm 1992), p. 180.

<sup>1395</sup> Jan Lindegren, "Men, Money and Means", in Philippe Contamine (ed.), *War and competition between states: The Origins of the Modern State in Europe: 13<sup>th</sup>–18<sup>th</sup> Centuries* (Oxford 2003), p. 141.

<sup>1396</sup> Kenneth von Kartaschew, *Frihetstidens Fästningskommissioner* (s. l. s. a.), pp. 11 and 12.

<sup>1397</sup> Oscar Nikula, *Svenska skärgårdsflottan 1756–1791* (Helsingfors 1933), pp. 33 and 166 and Stig Jägerskiöld, *Svensksund: Gustaf III:s krig och skärgårdsflottan 1788–1790* (s. l. 1990), p. 16.

## SWEDISH SUMMARY – SAMMANFATTNING

Föreliggande avhandling undersöker de svenska befästningar som belägrades under 1702–1710 i stora nordiska kriget. Den centrala frågeställningen är om det svenska befästningssystemet var behäftat med strukturella fel, som inte kunde åtgärdas under pågående krig. I avhandlingen undersöks om strukturella fel förelåg och om dessa strukturella fel ledde till fästningars fall. Om strukturella fel ledde till fästningsförluster blir nästa fråga om dessa förluster fick allvarliga konsekvenser för den svenska förmågan att avslå angreppen under stora nordiska kriget.

Stora nordiska kriget inleddes i början av år 1700. Danmark gick till anfall mot Sveriges allierade hertigdömet Holstein-Gottorp, beläget söder om Danmark. Genom svenska och internationella insatser kunde angreppet avslås och fred mellan Danmark och Holstein-Gottorp slöts samma år i Traventhal. I början av år 1700 gick sachsiska styrkor, från polskt territorium, till angrepp mot svenska Livland. Den befästa staden Riga kunde försvaras mot de första angreppen. En del mindre svenska befästningar i Livland föll dock i sachsarnas händer, men kunde snabbt återerövas. Innan året var över hade ryska trupper gått in på svenskt territorium och belägrade den befästa staden Narva. Den svenske kungen Karl XII beslöt sig för att prioritera undsättningen av Narva. Trots den sena årstiden kunde en svensk armé föras över till Livland, via staden Pernau, och gå till anfall mot den ryska belägringsarmén. Den 19/20/30 november 1700 besegrade den svenska armén de ryska trupper som belägrade Narva. Dateringen av slaget visar på kalenderförhållandena i början av 1700-talet. Ryssarna använde den julianska kalendern, som låg en dag efter den kalender som användes i Sverige. Till exempel danskarna hade gått över till gregorianska kalendern, som låg tio dagar före den svenska.

Den 8/9/19 juli 1701 gick den svenska huvudarmén över floden Düna, dagens Daugava, och in i Polen. Därmed inleddes en period i stora nordiska kriget där den svenska stormaktens gränser försvarades av andra resurser än huvudarmén, företrädesvis ett antal mindre arméer med regionala ansvar. I Polen uppehölls Karl XII av sachsiska och polska arméer, varför den ryska armén fick utrymme att kraftsamla mot den svenska stormaktens östra delar.

I augusti 1702 gick stora nordiska kriget in i en ny fas. Ryska trupper började erövra svenska fästningar i öster, som inte återerövrades. De svenska förlus-



terna av land permanentades alltså och den svenska stormakten fick en krympande resursbas. Det första fästet som föll var den befästa adelsgården Menzen, belägen i dagens Lettland. Under året föll också den mindre fästningen Marienburg, också i dagens Lettland, samt den viktiga fästningen Nöteborg. Den senare fästningen var belägen vid den punkt där floden Neva började sitt flöde från Ladogasjön ned till Finska viken. Ryssarna hade alltså inlett sin marsch mot Östersjöns kuster.

Den ryska erövringen av svenska fästningar fortsatte i långsam takt under åren 1703–1708, där ryssarna även misslyckades i ett försök att inta den befästa staden Viborg i Finland år 1706. Efter det svenska nederlaget vid Poltava sommaren år 1709 accelererade den ryska belägringskrigföringen på svenskt territorium. Innan år 1710 hade löpt till ända hade så gott som samtliga svenska befästningar öster om Östersjön fallit i ryska händer. De som återstod låg avlägset och saknade betydelse för krigets utveckling i stort. Efter slaget vid Poltava gick Danmark åter in i kriget mot Sverige. Det omedelbara resultatet blev en dansk invasion av Skåne åren 1709–1710, som fortsatte in i Blekinge. Under detta fälttåg belägrades ett antal försvarade svenska befästningar, men ingen föll. Under åren 1702–1710 sattes med andra ord ett stort antal svenska befästningar på prov. Proven kan sägas ha avslöjat mycket om de eventuella strukturella felen i det svenska befästningssystemet vid krigets början.

Stora nordiska kriget har länge varit ett omfattande forskningsområde. Forskningen har dock fokuserat på den politiska ledningen på respektive sida, främst Karl XII på den svenska sidan och tsar Peter I på den ryska. Även August, kung av Polen och kurfurste av Sachsen, har uppmärksammats. Utöver den politiska ledningen har de stora fältslagen, med Poltava i centrum, ägnats huvuddelen av uppmärksamheten. Några få verk har tillägnats det sjökrig som fördes, och mycket lite har skrivits om befästningskriget. Ett stort verk om den svenska fortifikationens historia, där de delar som avhandlade perioden före och under stora nordiska kriget kom ut under åren 1909–1911, utgör den viktigaste samlade svenska kunskapsbasen kring befästningskriget i konflikten.

Det svenska befästningssystem som sattes på prov under stora nordiska kriget var omfattande och till stora delar väl byggt. Man kan upprätta en lista om över 400 poster med svenska fästningar, befästa städer, slott med försvarskapacitet och skansar år 1700. Huvuddelen av dessa hade ett lågt militärt värde och underhölls inte. Det är inte självklart hur man skall definiera det svenska fortifikationssystemet år 1700. Genom att använda olika källor från slutet av

1600-talet kan man dock definiera närmare 40 huvudbefästningar. Bland dessa var flera mindre och tjänade som satellitbefästningar till större anläggningar. Med utgångspunkt från bestyckning och garnisonernas storlek framträder närmare ett dussin svenska huvudfästningar: Göteborg, Malmö, Karlskrona, Viborg, Narva, Reval (Tallinn), Riga, Stettin, Stralsund och Wismar. Den stora reduktionen hade skapat större intäkter för den svenska statsmakten, och dessa medel lades till stora delar ned på försvarsansträngningar. Förutom investeringar i befästningssystemet lades avsevärda belopp ned på att bygga upp en armé om närmare 100 000 man samt en flotta som skulle vara överlägsen den danska. Den danska flottan var den svenska stormaktens enda realistiska medtävlare i Östersjön under större delen av 1600-talet.

Den svenska stormakten var defensivt inriktad under den sista delen av 1600-talet. Armé, flotta och befästningar bildade ett system med vilket man skulle kunna försvara gränserna. För att kunna avgöra om befästningssystemet var behäftat med strukturella fel måste man alltså höja blicken över den rena befästningskonstruktionen, med dess vallar, torn, bastioner och vallgravar. En första fråga blir dock om befästningsverken var starka eller svaga. Svaga verk kunde snabbt skjutas sönder av en belägringsstyrka och därmed eliminerades försvararnas fördel. En befästnings förmåga att klara en belägring var dock beroende av fler faktorer än de rent byggnadstekniska.

För att kunna uttala sig om dessa övriga faktorer kan man vända sig till den samtida befästningsteoretiska litteraturen. Det fanns ett flertal verk på marknaden. En genomgång av dessa verk ger vid handen att det fanns ett antal kritiska faktorer som skulle avgöra hur länge en befästning kunde klara en belägring. Fästningens storlek var av största vikt, där antalet soldater i garnisonen är en bra måttstock på storlek. En liten garnison skulle inte kunna stå emot en beslutssam stormning på flera punkter. En liten befästning skulle också bli känslig för beskjutning med mörsare eftersom det skulle finnas få platser att ta skydd på. En annan viktig faktor var av uppenbara skäl tillgången till dricksvatten. Under 1700-talet var höjd också en viktig faktor. En befästning som låg högt skulle vara svår att beskjuta och storma.

Det fanns dock en annan, i befästningshistorien ofta förbisedd, aspekt på befästningarna, belägenheten. Det finns många viktiga aspekter på belägenheten, där de ovan redovisade, höjd och tillgång till dricksvatten, är två. En ofta avgörande aspekt var tillgängligheten. En belägrad fästning behövde undsättning, av flera skäl, om inte annat skulle livsmedlen ta slut med tiden och då

blev förmågan att tillföra nya förnödenheter central. Under tidigmodern tid var sjötransporter det enda realistiska alternativet för tunga transporter. Förmågan att nå en egen fästning med sjötransporter blev alltså central för att den skulle kunna försvaras i längden. I avhandlingen uppmärksammas två aspekter på tillgänglighet, den ”allmänna” och den ”lokala”. Under frågan om allmän tillgänglighet bedöms om en fästning kunde nås med sjötransporter över huvud taget. En fästning i inlandet hade en låg allmän tillgänglighet eftersom den inte kunde nås med fartyg. Om fartyg kunde komma fram till en fästnings närområde återstod frågan om lokal tillgänglighet. Lokal tillgänglighet avser frågan om man verkligen kunde få in fartygens laster i den belägrade fästningen. Under en belägring skulle den belägrande styrkan i normalfallet göra allt som stod i deras makt för att hindra införandet av nya livsmedel i fästningen. Här blev fästningens exakta belägenhet i förhållande till farbart vatten av central betydelse. Om en landremsa eller ett mindre vattendrag skiljde fästningen från fartygen skulle belägringsarmén kunna hindra införseln av nya livsmedel, och fästningen skulle med tiden falla.

I avhandling finns några centrala begrepp: ”Marin öppning” (”naval loophole”), vilket innebär att den försvarande sidan kunde nå fästningens närområde med fartyg, ”möjligt att spärra med arméstyrkor” (”army blockable”), vilket innebär att en belägringsarmé med sina ordinarie resurser kunde spärra tillträdet till fästningen, ”inseglingsfunktion” (”sail-in function”), vilket innebär att fartyg skulle kunna segla rakt in i fästningen, utan att arméstyrkor kunde blockera transporten och ”skyddad lossningsplats” (”protected discharge area”), vilket innebär att fästningen hade tillgång till ett område vid kusten där fartyg kunde lossa utan att belägringsarmén kunde hindra lossningen med till exempel artillerield.

Det blir alltså högst sannolikt att en fästning som saknade såväl inseglingsfunktion som skyddad avlastningsplats var dömd att falla. Belägringsarmén kunde i dessa fall hindra alla försök att förnya fästningens livsmedelsförråd.

I avhandlingen utvärderas samtliga svenska befästningar som belägrades under åren 1702–1710 från ovanstående perspektiv. Varje brist rörande storlek, tillgång till dricksvatten, höjdbelägenhet, en marin öppning samt inseglingsfunktion eller skyddad avlastningsplats skulle bidra till bedömningen att det svenska befästningssystemet vid början av stora nordiska kriget var behäftat med strukturella fel.

I avhandlingens empiriska del avhandlas 21 belägringar under 19 rubriker. Fästningarna Arensburg och Kexholm belägrades, enligt de definitioner som används här, två gånger under samma år. Viborg belägrades två gånger, 1706 och 1710. I den empiriska delen behandlas Narva och Ivangorod som en belägring då fästningarna låg mitt emot varandra. Sammantaget behandlas 19 stycken befästningar.

En analys av de 19 fästningarna enligt de principer som redovisats ovan ger vid handen att fyra av dem låg i inlandet och kan sägas ha saknat tillgång till farbart vatten. Åtta var beroende av floder för sin kommunikation med omvärlden, och en flod kan i normalfallet spärras av en belägringsarmé. Ytterligare två befästningar var beroende av vattendrag som kunde spärras. Sammantaget hade alltså 14 av 19 fästningar en låg generell tillgänglighet för försvararen. Av de återstående fem var det två som hade en inseglingsfunktion eller tillgång till en skyddad avlastningsplats, Malmö och Karlshamn. Den absoluta majoriteten av de svenska fästningarna hade alltså strukturella fel i det att deras belägenhet inte medgav undsättningsexpeditioner. Av redogörelserna för till exempel Narva/Ivangorod och Riga framgår vilka stora problem som avsaknaden av en inseglingsfunktion eller en skyddad avlastningsplats skapade för dem som ansvarade för befästningarnas undsättning. Som kontrast presenteras inledningsvis tre av världshistoriens stora belägringar, där det fanns inseglingsfunktioner. Skillnaderna de olika fallen blir slående.

Vidare analyseras storleken på de svenska befästningarna. Tio av 19 kan anses vara små, och hade därmed låg försvarsförmåga. De återstående nio klassificeras som medelstora eller stora, beroende på garnisonens storlek. Här uppstår ett teoretiskt problem då garnisonens storlek vid belägringens början var en processfråga, och inte nödvändigtvis en strukturfråga. Den enda svenska befästning som hade en stor garnison, enligt de definitioner som tillämpas här, var Riga. Ett flertal av de återstående åtta var för små rent byggnadsmässigt för att kunna härbärgera en stor garnison, främst Landskrona och Neumünde. Frågan kan utvecklas långt, men i stort kan man konstatera att den svenska stormakten hade för många små och medelstora befästningar. Detta var ytterligare ett strukturellt fel i det svenska befästningssystemet.

Samtliga belägrade svenska fästningar föll till slut, med undantag för de tre befästningarna i Skåne och Blekinge som räddades av Magnus Stenbocks undsättningsarmé.

Effekterna av fästningsförlusterna på kriget som helhet går inte att fastställa med exakthet. Det är dock uppenbart att förlusten av fästningar ledde till förlust av kontroll över land som från krigets början hade levererat resurser till de svenska krigsansträngningarna. För varje fästning som föll minskade det område som levererade resurser. Under perioden fram till Poltavaslaget år 1709 reducerades den svenska maktbasen i Baltikum, där den östra halvan av landet föll i ryska händer efter erövringarna av Narva/Ivangorod, Dorpat samt Menzen och Marienburg. Under perioden 1709 – 1710 föll övriga svenska fästningar i öst, och reducerade resursflödet därifrån till noll. Dessa omständigheter bör ha haft en starkt negativ inverkan på Sveriges förmåga att föra kriget, även om den exakta omfattningen av denna inverkan inte går att fastställa.

Frågan om varför det svenska befästningssystemet var behäftat med allvarliga strukturella fel hittar delvis sitt svar i dokument som Erik Dahlbergh, chef för den svenska fortifikationen under en period, upprättade. Dahlbergh vinnlade sig om att befästa alla viktiga befolkningscentra, och bortsåg från att dessa centra var belägna på ett sådant sätt att undsättningsexpeditioner skulle försvåras eller i vissa lägen omöjliggöras. Den ende som kunde ha ändrat på Dahlberghs bedömningar var kung Karl XI, men denne gjorde inte några sådana ansatser.

En av de allvarligaste och mest svårförklarliga bristerna i det svenska försvarssystemet var försvaret av Karelska näsets södra del och framför allt den viktiga floden Neva. För det fall ryssarna kunde ta de två svaga fästningarna som försvarade flodens utlopp från Ladogasjön och dess utflöde i Finska viken skulle de ha delat den svenska stormakten i två delar, och nått tillgång till Östersjöns vatten. Varje krigsspel eller annat teoretiskt test av den svenska försvarsplaneringen i slutet av 1600-talet borde ha gett vid handen att ryssarna med relativ lätthet skulle kunna göra sig till herrar över Nevafloden. Frågan understryks av att Erik Dahlbergh i en skrivelse i slutet av 1600-talet varnade för de ryska ambitionerna att ta tillbaka Ingermanland, till vilket pris som helst. Företeelsen indikerar att den svenska försvarsplaneringen innan stora nordiska kriget inte var tillräckligt välgjord. En bättre planering hade klart indikerat viken av att aldrig släppa sjöherraväldet över Ladogasjön, vilket man från svensk sida förlorade innan ryssarna gick till angrepp mot fästningen Nöteborg vid Nevaflodens norra del.

Ett studium av det svenska defensiva försvarskriget under åren 1702–1710 ger alltså vid handen att striden försvårades av beslut som fattats långt innan kriget startade. De fästningar som fanns låg fel för att effektiva undsättningso-

perationer skulle kunna genomföras. Många fästningar var dessutom för små för att kunna försvaras effektivt. Ingen svensk fästning hade den utmärkta belägenhet som till exempel Gibraltar och Cadiz hade. De svenska fästningarnas undergång skulle därmed endast bli en tidsfråga. Misslyckandena i befästningskriget kostade fler soldater än slaget vid Poltava, endast belägringen av Riga kostade omkring 10 000 man i döda och tillfångatagna.

Sammantaget ger ett studium av befästningskriget en bild av att stora nordiska kriget inte alltid bedrevs skickligt från svensk sida. I modern forskning anförs ofta argumentet att stormakten Sverige egentligen inte hade nödvändiga resurser för att försvara sin ställning. Ett studium av befästningskriget ger anledning att åtminstone komplettera detta påstående med att befintliga resurser långt ifrån alltid användes på ett optimalt sätt.

## BIBLIOGRAPHY

The documents in the Swedish National Archives (Riksarkivet, Stockholm) and the Swedish Military Archives (Krigsarkivet, Stockholm) are found via manual systems at the archives or via a database, Nationell Arkivdatabas – NAD. In some cases, the information is not presented identically in these two means. The ambition below is to facilitate access through both systems.

## Unpublished sources

Vol. 206 Skrivelser från myndigheter och enskilda (år 1710)

Vol. 208 Skrivelser från Amiralitetskollegium och Landshövdingar (1710)

Swedish National Archives  
(Riksarkivet, Stockholm)**DET ODELADE KANSLIET. RÅDS-  
PROTOKOLL 1621–1723 (1111)**

A 1 Huvudserie

Vol. 99 1706–1710

Vol. 100 15/3–17/12 1709

Vol. 101 23/12 1709–26/5 1710

Vol. 102a 23/2 1710–16/12 1710

Vol. 102b 1710, 1712

**KANSLIKOLLEGIUM 1584 – 1801  
(1411)**

E. Inkomna handlingar, VIII Skrivelser i krigsärenden 1700–1712

Volym 3½ 1702–1704

**ÄLDRE KOMMITTÉER (31)**

Defensionskommissionen 1700–1714 (243)

A Protokoll, I Huvudserien

Vol. 2 Protokoll 1704

Vol. 6 Protokoll 1709

Vol. 7 Protokoll 1710

E. Inkomna handlingar, II Skrivelser från myndigheter och enskilda

Vol. 106 Militära befälhavare Narva. (1703)

Vol. 122 Militära befälhavare med särskilt kommando (utom Maydell) (1704)

Vol. 205 Skrivelser från militära befälhavare (1710)

**RIKSARKIVETS ÄMNESSAM-  
LINGAR LIVONICA II (2402)**

I Skrivelser till Kungl. Maj:t från myndigheter, korporationer, städer och enskilda 1561–1720  
D Ingermanland

III Skrivelser från vice guvernörer, kommandanter samt andra tjänstemän, officerare och garnisonen i Narva,

Vol. 200 H. R. Horn 1702–1704

**JUSTITIEREVISONEN (101)**

Generalauditörens handlingar 1643–1703

No. 42 Generalauditörshandl.

**RIKSARKIVETS ÄMNESSAM-  
LINGAR MILITARIA (754)**

**Krigshistoriska samlingen 1500t–1800t, (2),  
Karl XII:s krig. Stora Nordiska kriget 1700–  
1720 (XXIII)**

Kriget i Finland 1700–1716 (2)

M 1364 Strödda handlingar och brev 1700–1718 (1)

Kriget i Östersjöprovinserna och Ryssland 1700–1711 (3)

M 1376 Nöteborgs belägring och kapitulation (4)

M 1377 Strödda handlingar och brev 1703–1704 (5)



~ [after 13] Kartor och ritningar (Nationell Arkivdatabas – NAD)

Nöteborgs fästnings belägring  
[...] 0011:00001

See also "Schlippenbachska samlingen" below.

### LANTMÄTERISTYRELSEN 1623–1974 (420571)

Kartor rörande Finland och Sveriges forna provinser 1623–1805 (2)

Lantmäteristyreliens leverans 1850 (1)

Nr 305 General Charta öfver Ing-  
ermanneland

Nr 317 Charta öfver hertigdö-  
met Liflandh, omkring 1700

### BERGSHAMMARSAMLINGEN (720085)

# Kartor och ritningar

Ritningar (Huvudserie) (1)

42:00001 Geografisk karta öfver området Dorpat – Randen-flo den Pedde – Talkhof i Livland. Området väster Dorpat. 1600-talet?

### NEDRE JUSTITIERVERSIONEN. HÖGSTA DOMSTOLEN 1600t–1981 (1311)

# Kartor

Kartor från 1900-talets akter (4)

Nr 1033 Geometrich affritningh  
öfver Stadhen Carlshambn 1666.  
(copy)

(Older id: Just. rev. dom. 1940-02-17, nr 34, Karlshamn stad/Asarums församling. (Kartavd. st. form.).

### ENSKILDA ARKIV

*Schlippenbachska samlingen (72 and see below)*

(In the digital system Nationell Arkivdatabas – NAD, "Schlippenbachska samlingen" is found under 754 Riksarkivets ämnessamlingar. Militaria, 2 Krigshistoriska samlingen 1500t–1800t, XXIII Karl XII:s krig. Stora Nordiska kriget 1700–1720, 4 Kriget i Polen 1700–1717, 1 Schlippenbachska samlingen, consisting of the volumes M 1379–1453. In

the manual system, "Schlippenbachska samlingen" is found as a separate bound volume in Series 72.

Vol. M 1414Bref till W. A. Schlippenbach 1702

### Erik Dahlbergs samling (720269)

D. 1 Handlingar rörande E. Dahlbergs lefnad

Vol. 44 (E3511) Allehanda förteckningar öfver arkivalier, böcker och saker som tillhört Erik Dahlberg.

### Swedish Royal Library (Kungliga biblioteket, Stockholm)

Handschriftssamlingen

### British Library (London)

Cartographic Items Maps

Pernau Roadsted, System number  
004910425, 36242. (21)

Arensburg, System number  
004793473, 1069. (62).

### Swedish Military Archives (Krigsarkivet, Stockholm)

(References in falling order.) (Page numbers refer to the manual system.)

### Krigskollegium Krigskollegii kansli 1631–1865 (Förteckning 1)

E. Inkomna handlingar, c. Krigskollegii brev-  
böcker (p. 106)

Vol. 68 1704 (Volume number in Nationell Arkivdatabas – NAD only.)

### Krigskollegium, Artilleridepartementet 1660–1881 (Förteckning 3)

E. Inkomna handlingar, I. Kansliet, i. Bestyckningsplaner (p. 57)

Vol. 1 1695

G: Räkenskaper, III:a Förslag (p. 138)

Vol. 1 Inventarier och förslag från fästningarna 1697–1699

**Krigskollegium, Intendentsdepartementet 1630–1878 (Förteckning 5)**

B. Förslag, I. Kansliet, b. Registratur och koncept (p. 13)

Vol. 1 Generalförslag över svenska hären 1636–1724

**Försvars- och befästningsplaner 1637–1853 (Förteckning 72) (s. p.)**

Vol. 7 1681–1698 Relationer över fästningarna i Sverige och dess besittningar i slutet av 1600-talet, [...].

Vol. 8 1685–1687 [R 1558] Originalakter tillhörande den av Karl XI förordnade generalkommissionen över rikets fästningar, [...].

Vol. 10 1698 Underdånig relation om rikets fästningar, av Erik Dahlbergh, uppläst och föredragen i Kungliga Majestätets kansli den 23 februari 1698 inför greve Piper och överste Stuart.

**Krigshandlingar Stora nordiska kriget 1699–1734 (Förteckning 388)**

Avdelning 10, Finska armén 1710–1711 (p. 17)

Vol. 14a Finska arméns fältstatshuvudbok april–dec. 1710

Avdelning 16, Avskriftssamlingen, Avskrifter ur riksarkivet (p. 25)

Vol. 4 Defensionskommissionens protokoll 1710

Vol. 12 Vederbörande auctoritetens skrivelser till defensionskommissionen 1700–1706

Vol. 13 D:o 1707–1709

Vol. 14 D:o 1710–1711

**Utländska kartor 1632–1931 (Förteckning 403) (s. p.)**

Vol. 32 Ryssland, detaljkartor

**Utländska stads- och fästningsplaner 1550–1989 (Förteckning 406) (s. p.)**

406 B Finland: A – Svartholm (Manual system)

12 Finland

Vol. 22 Kexholm/Käkisalmi

406 E Spanien (Manual system)

22 Spanien

Vol. 7 Cadiz

406 E Turkiet (Manual system)

24 Turkiet med Balkan, Kreta och Cypern

Vol. 13 Iraklion/Heraklion/Candia

406 G Utländska kartor, Östersjöprovinserna (de baltiska staterna) (Manual system)

28 Östersjöprovinserna (de baltiska staterna)

Vol. 2 Arensburg

Vol. 28 Marienburg

Vol. 39 Pernau

Vol. 40 Reval

**Sverige, stads- och fästningsplaner 1521–1942 (Förteckning 424) (s. p.)**

Vol. 96 Malmö

**Sveriges krig 1521–1864, Stora nordiska kriget 1699–1721 (Förteckning 425) (s. p.)**

Sveriges krig 425:2 (Manual system)

Vol. 9 1700 – nov. (Heading in the manual system only.)

Sveriges krig 425:3 (Manual system)

Vol. 11 1702–1708 (Heading in the manual system only.)

Vol. 12 1708–1711 (Heading in the manual system only.)

Historiska planscher 1520 – 1904 (Förteckning 426)

Vol. 14 Omslag 1701–1704

**Flottans arkiv** (Heading in Nationell Arkivdatabas – NAD only.)

**Amiralitetskollegium, Flottans centrala ledning, (No years.) (Förteckning 500) (s. p.)**

001 Amiralitetskollegium, kansliet 1630–1807,

A I Protokoll, äldre nummerserie (s. p.)

Vol. 58 Protokoll 1710 (Volume number in Nationell Arkivdatabas – NAD only.)

B I Registratur, a/huvudserie (s. p.)

Vol. 84 1710 Äldre vol. 91 (Volume number in Nationell Arkivdatabas – NAD only.)

E II Inkomna handlingar från ämbetsverk m. fl. myndigheter samt enskilda, Ser. c. (s. p.)

Vol. 28 1704 Äldre n:r 82 (Volume number in Nationell Arkivdatabas – NAD only.)

Vol. 30 1706 Äldre n:r 84 (Volume number in Nationell Arkivdatabas – NAD only.)

**Amiralitetskollegium Flottans arkiv, Amiralitetskollegiets med efterföljares kontor, Arméns flotta, loggböcker, rullor m. m., (Förteckning 503a) ("a" in the manual system only.) (s. p.)**

033 Sjöexpeditioner, eskaderchefer 1642–1814

Vol. 1 1704 Amiralen Jacob de Prous expedition. Registratur

Vol. 1 1706 Amiralen Cornelius Thijssen Ankarstiernas expedition Eskaderchefens journal

Vol. 1 1710 Viceamiralen Gustaf Watt-rangs expedition Journal på örlogsskeppet Estland.

## Published sources

Anonymous, "Journal ofver staden Rijgas belägring af Muscowiterne annis 1709 och 1710 från och till datum som följer", in Gustaf Floderus (red.), *Handlingar hörande till konung Carl XII:s historia*, Part III, (Stockholm 1824), pp. 170–211. ("Anonymous, *Diary*")

Antoni, Fr. Rudolf, "Fromholdt Rutenschiölds berättelse om Revals inneslutning och kapitulation 1710", in *Karolinska förbundets årsbok* Stockholm 1913, pp. [201]–222. ("Rutenschiöld, 20 March 1711)

Bring, Samuel E. (red.), *Adam Ludvig Lewenhaupts berättelse*, Facsimile edition Stockholm

1987, originally published in *Historiska handlingar*, Del 34:2, (Stockholm 1952).

Juel, Just, *En rejse til Rusland under tsar Peter: dagbogsoptegnelser af Viceadmiral Just Juel Dansk gesant i Rusland 1707–1711 m. illustrationer och oplysende anmærkninger ved Gerhard L. Grove* (Köpenhamn 1893). ("Juel")

Kongl. samfundet för utgifvande af handskrif-ter rörande Skandinaviens historia, *Historiska handlingar: Utgifna af Kongl.samfundet för utgifvande af handskrif-ter rörande Skandinaviens historia*, Del 1 (Stockholm 1861) Del 2 (Stockholm 1862), Del 3 (Stockholm 1863), Del 4 (Stockholm 1864) and Del 5 (Stockholm 1865).

Kagg, Leonhard, *Leonhard Kaggs dagbok 1698–1722*, Published through Adam Lewenhaupt, *Historiska handlingar*, Del 24 (Stockholm 1912). ("Leonhard Kagg's diary")

Kreüger, S., *Register till Krigskollegii brevböcker. 1700–1722*, Krigsarkivet (s. l. s. a.). ("Kreüger")

Lewenhaupt, Adam Ludvig, *Adam Ludvig Lewenhaupts berättelse*, in Bring, Samuel E. (red.), *Historiska handlingar*, Del 34:2, (Facsimile edition Stockholm 1987, originally published in Stockholm 1952).

Peter I of Russia, *Journal de Pierre le Grand depuis l'année 1698, jusqu'à la conclusion de la paix de Nystadt. Traduit sur l'original russe. Imprimé d'après les manuscrits corrigés de la propre main de Sa Majesté Impériale, déposés dans les archives* (Paris 1773). ("Tsar Peter's diary")

Quennerstedt, August (red.), *Karolinska krigares dagböcker jämte andra samtida skrifter* (Stockholm 1901–1918).

Qwistbergh, N., "Journal uppå det som är passerad weed Kiexholms belägring åhr 1710", in August Quennerstedt (red.), *Karolinska krigares dagböcker jämte andra samtida skrifter*, Del XI, (Lund 1916), pp. [133]–170. ("Qwistbergh" and "Quennerstedt")

Rehnschiöld, Carl Gustaf, "Memoria" (in "Bref och skrivelser från C. G. Rehnsköld till konung Carl XII 1703–1707 (1715)"), in Aug. Quennerstedt (red.), *Karolinska krigares dagböcker jämte andra samtida skrifter*, Del XI, (Lund 1916), pp. 4–122.

- Skytte, Carl Gustaf, "Dorpats belägring år 1704", in August Quennerstedt (red.), in *Karolinska krigares dagböcker jämte andra samtida skrifter*, Del XI, (Lund 1916), pp. 217–326. ("Skytte")
- Yrjö-Koskinen, Georg Zacharias, (red.), *Handlingar till upplysande af Finlands öden under det Stora nordiska kriget* (Helsinki/Helsingfors 1865). ("Yrjö-Koskinen")
- ## Secondary works
- Adlerfelt, Gustaf, *Karl XII:s krigsföretag 1700–1706: Efter författarens originalmanuskript av Samuel E. Bring* (Stockholm 1919).
- Afzelius, Arvid August, *Swenska folkets sago-häfder*, Del 11, (Stockholm 1868).
- Alin, Oskar, *Sveriges Historia från äldsta tid till våra dagar*, Del III, (Stockholm 1878).
- Almquist, Helge, Karl XII: "Högtidstal vid Göteborgs högskolas minnesfest på 200-årsdagen av konung Karl XII:s död den 30 november 1918", in *Karolinska förbundets årsbok* Stockholm 1919, pp. 48–64.
- Anonymus, "Dorpats belägring 1704", in *Meddelanden från Föreningen för Stockholms Fasta Försvar*, (s. l. 1917), pp. [1]–11.
- Anrep, Gabriel, *Svenska adelns ättar-taflor*, Afdelning 4, (Stockholm 1864).
- Arfwidsson, Fredrik, *Försvaret av Östersjöprovinserna 1708–1710*, Del I–II:1, PhD-dissertation, (s. l. 1936). ("Arfwidsson, Försvaret")
- Arfwidsson, Fredrik, "Rigas belägring 1709–1710 i Nordbergs Carl XII:s Historia. – Ett bidrag till frågan om dennas tillförlitlighet", in *Kungliga Krigsvetenskapsakademiens Tidskrift* 1935, pp. 294–303. ("Arfwidsson, Nordbergs")
- Arfwidsson, Fredrik, "Förlusten av Ösel 1710", in *Karolinska förbundets årsbok*, Stockholm 1942, pp. [192]–209. ("Arfwidsson, Ösel")
- Arfwidsson, Fredrik, "Försvaret och förlusten av Pernau åren 1709–1710", in *Karolinska förbundets årsbok* Stockholm 1961, pp. [135]–194. ("Arfwidsson, Pernau")
- Asker, Björn, *I konungens stad och ställe: Länsstyrelser i arbete 1635–1735*, Arkivvetenskapliga studier 7, (Uppsala 2004).
- Asker, Björn *Hur riket styrdes: Förvaltning, politik och arkiv 1520–1920*, Riksarkivet 27, (s. l. 2007).
- Attman, Artur, *Den ryska marknaden i 1500-talets baltiska politik 1558–1595* (Lund 1944).
- Beckman, Margareta, *Befästningar i stormaktstid: Erik Dahlberg och befästningskonsten* (Hallstavik 2009). ("Beckman")
- Bigge, [no first name], *Der Kampf um Candia in den Jahren 1667–1669*, Kriegsgeschichtliche Einzelschriften, Heft 26 (Berlin 1899). ("Bigge")
- Black, Jeremy, *The Cambridge Illustrated Atlas of Warfare: Renaissance to revolution 1492–1792* (Cambridge 1996).
- Black, Jeremy, *European Warfare 1660–1815* (London 1994).
- Blees, Jacob, "Fästningen Nöteborg under svenskt välde", in *Norrlands Försvar: Årsskrift utgiven av Föreningen för Norrlands fasta försvar*, Stockholm 1937, pp. [75]–95. ("Blees, Nöteborg")
- Blees, Jacob, "Fästningen Nyenskans och Nyen", in *Norrlands försvar: Årsskrift utgiven av Föreningen för Norrlands fasta försvar*, Stockholm 1938, pp. [67]–96. ("Blees, Nyenskans")
- Böckl, Georg: And., *Manuale Architecturae Militaris*, Theil I – III, (s.l. 1647).
- Bonsdorff, Carl von, *Nyen and Nyenskans. Historisk skildring* (Helsingfors 1891). ("von Bonsdorff")
- Bourdin, Pierre, *L'architecture militaire ou l'art de fortifier des places regulieres et irregulieres. Expliqué, pratiqué, & démontré d'une façon facile, & agreable. Avec un abregé de la pratique de la geometrie militaire* (Paris 1655).
- Bradbury, Jim, *The Medieval Siege* (Woodbridge 1994). ("Bradbury")
- Bregnsbo, Michael, "The Goals and Ambitions of the Danish Empire during the Great Northern War", in *Great Northern War Compedium*, Volume Two, pp. 44–48.
- Broomé, Bertil, "Arméns centrala förvaltningssorgan", in Östergren, Stefan, Lindblad, Carl Wilhelm & Norberg, Erik (red.), *Arméförvalt-*

- ningens historia*, Armémusei skrifter nr IV, (s. I. 1987), pp. 13–20.
- Bunge, F. G. von and Vaucker, C. J. A., *Archiv für die Geschichte Liv-, Esth- und Curlands*, Band VI, (Reval 1851). ("Archiv für die Geschichte")
- Bäckström, P. O., *Svenska flottans historia* (Stockholm 1884).
- Chandler, David, *The Art of War in the Age of Marlborough* (Staplehurst 1990).
- Chartrand, René, *Gibraltar 1779–83: The Great Siege* (Oxford 2006).
- Coehorn, Minno Baron de, *Nouvelle Fortification* [...] (s. I. 1706).
- Contamine, Philippe, (ed.), *War and competition between states: The Origins of the Modern State in Europe: 13<sup>th</sup>–18<sup>th</sup> Centuries* (Oxford 2003).
- Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 4, Gustav Adolfs och Kristinas tid 1611–1654* (Stockholm 1967). ("Den svenska historien, Del 4")
- Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967). ("Den svenska historien, Del 5")
- Cosmescu, Dragos, *Venetian Renaissance Fortifications in the Mediterranean* (Jefferson, North Carolina 2016).
- Dalin, Olof von, *Svea Rikes Historia ifrån des begynnelse til våra tider* (Stockholm 1761 och 1762).
- Detorakis, Theocharis E., *History of Crete*, English translation by John C. Davis, (Iraklion 1994). ("Detorakis.")
- Dodd, J. S., *The Ancient and Modern History of Gibraltar, and the Sieges and Attacks it hath Sustained, with an accurate journal of the siege of the fortress by the Spaniards, from February 13, to June 23, 1727* (London 1781).
- Duffy, Christopher, "Introduction", in E. Violet-le-Duc, *Annals of a Fortress: Twenty-Two Centuries of Siege Warfare* (s. I. 2000, new edition, original *Histoire d'une Fortresse*, Paris 1874), pp.[vii]–xiii].
- Duffy, Christopher, *Fire & Stone: The Science of Fortress Warfare, 1660–1860* (London 1996, first edition 1975).
- Duffy, Christopher, *Siege Warfare: Volume I, The Fortress in the Early Modern World 1494–1660* (London 1979). ("Duffy, Part I")
- Duffy, Christopher, *Siege Warfare: Volume II, The Fortress in the Age of Vauban and Frederick the Great* (London 1985). ("Duffy, Part II")
- Eggenberger, David, *A Dictionary of Battles* (New York 1967).
- Eichberg, Henning, *Militär und Technik: Schwedenfestungen des 17. Jahrhunderts in den Herzogtümern Bremen und Verden* (Düsseldorf 1976).
- Eichberg, Henning, *Festung, Zentralmacht und Sozialgeometrie: Krigesingenieurwesen des 17. Jahrhunderts in dem Herzogtümern Bremen und Verden* (Köln 1989).
- Ericson [Wolke], Lars, *Svensk militärmakt: Strategi och operationer i svensk militärhistoria under 1500 år* (Stockholm 2003).
- Ericson Wolke, Lars, "Riga 1710: Det svenska Östersjöväldets fall", in Ericson Wolke, Lars and others, *Svenska slagfält* (s. I. 2003), pp. 312–319.
- Ericson Wolke, Lars and others, *Svenska slagfält* (s. I. 2003),
- Ericson Wolke, Lars, *Krigets idéer* (Stockholm 2007).
- Ericson Wolke, Lars, *Sjöslag och rysshärjningar* (Stockholm 2012). ("Ericson Wolke, Rysshärjningar")
- Ericsson, Christoffer H. and Montin, Kim, (red.), *Människan i flottans tjänst: Sjöhistoriskt jubileumssymposium i Åbo 24 november 2000*, Jungfrusund 6, Meddelanden från Jungfrusundsprojektet, (Åbo 2001).
- Ericsson, Ernst and Vennberg, Erik, *Erik Dahlbergh: Hans levnad och verksamhet: Till 300-årsminnet 1625–1925* (Uppsala and Stockholm 1925). ("Ericsson and Vennberg")
- Erpenbeck, Dirk-Gerd und Seeberg-Elverfeldt, Roland, *Narva 1581–1721: Quellen zur Geschichte der Stadt in schwedischer Zeit* (Dortmund 1993).
- Erard de Bar-Le-Duc, I. [Errard, Jean], *Fortificatio* (Franckfurt am Mayn 1604).

- Fields, Nic, *Ancient Greek Fortifications 500-300 BC* (Oxford 2006).
- Floderus, Gustaf (red.), *Handlingar hörande till konung Carl XII:s historia*, Del III, (Stockholm 1824).
- Florén, Anders, (red.), *Kungar och krigare: tre essäer om Karl X Gustav, Karl XI och Karl XII* (Stockholm 1992).
- Frandsen, Karl-Erik, "The Great Northern War's Plague Epidemic", in Kling, Jr., Stephen L. (ed.), *Great Northern War Compendium*, Volume Two, (St. Louis, Missouri 2015), pp. 37–42.
- Fritach, Adam, *Mathematiceien, L'Architecture militaire ou La Fortification Nouvelle, Augmentée et enrichie de forteresses regulieres, Irregulieres, et de hors; le tout a la pratique moderne* (Leide [Leyden] 1635). ("Fritach (1635)")
- Fryxell, Anders, *Berättelser ur svenska historien*, Del 21–29, (Stockholm 1856–1859). ("Fryxell")
- Furtenbach, Joseph, *Architectura Martialis* (Ulm 1630).
- Gardberg, C. J., and Welin, P. O., *Finlands medeltida borgar* (Esbo, 1993).
- Gardberg, Carl Jacob, *Viborg som befäst stad* (s.l. s. a.).
- Gates, David, *The Spanish Ulcer: A History of the Peninsular War* (London 1986).
- Gezelius, Johannes, *Encyclopaedia synopica* [...] (s. l. 1672).
- Girs, Aegidius, *Krijgz Discurs* (Holmiae [Stockholm] 1626). ("Girs (1626)")
- Glete, Jan, *Navies and Nations: Warships, Navies and State Building in Europe and America 1500 - 1860*, Volume One, Acta Universitatis Stockholmiensis, Stockholm Studies in History, 48:1, (Stockholm 1993).
- Glover, Michael, *The Peninsular War 1807–1814: A Concise Military History* (London 1974). ("Glover")
- Granhölm, Arne, and Rydén, Margot (red.), *Statskontoret 1680–1980: en jubileums- och årsskrift* (Stockholm 1980).
- Grauers, Sven, "Henning Rudolf Horn – Narvas försvarare", in *Karolinska förbundets årsbok* Stockholm 1973, pp. [7]– 28.
- Gravett, Christopher, *Medieval Siege Warfare* (London 1990, reprinted 1999).
- Greiffenhagen, W., edited and published by O. Greiffenhagen, *Die Belagerung und Capitulation Revels in Jahre 1710* (Reval 1910). ("Greiffenhagen")
- Grigorjev, Boris Nikolaevic and Bespalov, Aleksandr, *Kampen mot övermakten: Baltikums fall 1700–1710*, Swedish translation Bengt Eriksson (Stockholm 2012). ("Grigorjev and Bespalov")
- Güssefeld, F. L., *Charta von den Herzogthümen Liefland und Esthland oder den Statthaltschaften von Riga und Reval* (Nürnberg 1905).
- Hansen, Heinrich Johann, *Geschichte der Stadt Narva* (Dorpat 1858).
- Hartmann, Stefan, *Reval im Nordischen Krieg* (Bonn-Bad Godesberg 1973). ("Hartmann")
- Hedberg, Jonas, *Kungl. artilleriet: Carl X Gustafs tid* (Stockholm 1982).
- Herson, Jr., James P., "For the Cause": *Cadiz and the Peninsular War: Military and Siege Operations from 1808 to 1812*, Master's thesis, Florida State University 1992). ("Herson")
- Hildebrand, Karl-Gustaf, "Ekonomiska syften i svensk expansionspolitik 1700–1709", in Gustaf Jonasson (red.), *Historia kring Karl XII* (Stockholm 1964), pp. 40–64.
- Hills, George, *Rock of Contention: A History of Gibraltar* (London 1974).
- Holm, T., *Översikt över Sveriges krig under 1600-talets senare hälft* (Stockholm 1927).
- Hornborg, Eirik, *Kampen om Östersjön* (Stockholm 1945).
- Hornborg, Eirik, *Gränsfästet i öster: Viborg från korstågstiden till våra dagar* (Helsingfors 1942). ("Hornborg, Gränsfästet")
- Hughes, Quentin, *Military Architecture: The Art of Defence from Earliest Times to the Atlantic Wall* (Liphook 1991, First Edition London 1974). ("Hughes")



- Höglund, Lars-Eric and Sallnäs, Åke, *Stora Nordiska Kriget 1700–1721: Fanor och uniformer* (Karlstad 2000). ("Sallnäs")
- Ivask, Merike, (Toim.), *Narva Museum. Toimetus* (Narva 2015).
- J:dt, H., "Gibraltar och dess belägring 1779–1782", in *Tidskrift i Sjöväsendet*, Karlskrona 1882, pp. 162–184. ("H. J:dt")
- Jakobsson, Theodor, "Om bestyckningen i Riga under svensktiden", in *Meddelande 10 Armémuseum*, Armémuseum, Stockholm 1949 [1950], pp. [9]–51.
- Jespersen, Leon, "The Constitutional and Administrative Situation", in Jespersen, Leon, (ed.), *A revolution from above? The Power State of 16th and 17th Century Scandinavia* (Odense 2000), pp. 31–182.
- Jespersen, Leon, (ed.), *A revolution from above? The Power State of 16th and 17th Century Scandinavia* (Odense 2000).
- Jobé, Joseph, "De la guerre de Trente Ans à la révolution Française (1789)", in Jobé, J., (ed.), *Historie illustrée de l'artillerie* (Lausanne 1981), pp. 27–67.
- Jobé, J., (ed.), *Historie illustrée de l'artillerie* (Lausanne 1981).
- Jonasson, Gustaf, (red.), *Historia kring Karl XII* (Stockholm 1964).
- Jonasson, Gustaf, "Karl XII i Turkiet", in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 294–295.
- Jonasson, Gustaf, "Magnus Stenbocks fälttåg", in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 292–293.
- Jägerskiöld, Stig, *Svensksund: Gustaf III:s krig och skärgårdsflottan 1788–1790* (s. l. 1990).
- Jönsson, Åke, *Historien om en stad. Del 1 Landskrona 1413–1804* (Landskrona 1993). ("Jönsson")
- Karling, Sten, *Narva: eine baugeschichtliche Untersuchung* (Kungl. Vitterhets- historie- och antikvitets akademien. Archäologische Monografien. 25. Stockholm 1936). ("Karling")
- Kartaschew, Kenneth von, *Frihetstidens Fästningskommissioner* (s. l. s. a.).
- Kavli, Guthom, *Norges festinger: Fra Fredriksten til Vardøhus* (s. l. 1987).
- Kelch, Christian, *Liefländische Historia, Part II, Continuation 1690 bis 1707* (Dorpat 1875). ("Kelch")
- Kern, Paul Bentley, *Ancient Siege Warfare* (Bloomington, Indiana 1999).
- Kleyne en beknopte Atlas, of tooneel des oorlogs un Europa* (Amsterdam 1753).
- Kling, Jr., Stephen L. (ed.), *Great Northern War Compendium, Volume One and Two*, (St. Louis, Missouri 2015). ("Great Northern War Compendium")
- Kling, Steve "The Bulavin Rebellion 1707–1708", in Kling, Jr., Stephen L. (ed.), *Great Northern War Compendium, Volume One*, (St. Louis, Missouri 2015), pp. 225–230.
- Konovaltjuk, Pavel and Lyth, Einar, *Vägen till Poltava: Slaget vid Lesnaja 1708* (s. l. 2009).
- Konstam, Angus, *Historical Atlas of the Napoleonic Era* (London, 2003).
- Kujala, Antti, *Miekka ei laske leikkiä. Suomi suuren pohjan sodassa 1700–1714* (Historiallisia tutkimuksia Nr 211 Helsinki 2001).
- Lagerbring, Sven, *Sammandrag av Swea rikets historia* (Stockholm 1775).
- Lagus, Gabr., *Ur Viborgs historia*, Part I, (Wiborg 1893).
- Laidre, Margus, *Segern vid Narva: Början till en stormakts fall*, Swedish translation Enel Melberg, (Stockholm 2001, copyright 1996). ("Laidre, Narva")
- Laidre, Margus, *The Great Northern War and Estonia: the trials of Dorpat 1700–1708*, translation from Estonian, Piret Ruustal, (Tallinn 2010). ("Laidre, Dorpat")
- Langenskiöld, Eric, *Michele Sanmicheli: The Architect of Verona*, Master's thesis, (Uppsala 1938).
- Le Moing, Guy, *Les 600 plus grandes batailles navales de l'histoire* (Cedex 2011). ("Le Moing")
- Lewenhaupt, Adam, *Karl XII:s officerare: Biografiska anteckningar*, Del 1–2, (Stockholm



- 1922, Facsimile edition, Lund 1977). ("Lewenhaupt")
- Lewenhaupt, Sten, *Svenska högre ämbetsmän från 1634: högre ämbetsmän och chefer för statliga verk inom central och lokal förvaltning m.m.: namn och årtal* (Stockholm 1962).
- Liedgren, Jan, "Arkivförteckning Historik Inledning", in 31 Äldre kommittéer 243 Defensionskommissionen (ring binder), Riksarkivet, s. p.
- Lillipuu, Kaur, *Põhjasõja-aegsete Narva piiramiste (1700 ja 1704 analüüs vaubani piiramisteooria seisukohast*, Academic Paper Tallinna Ülikool, Ajaloo Instituut 2014.
- Lindgren, Jan, "Karl XII", in Florén, Anders, (red.), *Kungar och krigare: tre essäer om Karl X Gustav, Karl XI och Karl XII* (Stockholm 1992), pp. [151]–225.
- Lindgren, Jan, "Men, Money and Means", in Philippe Contamine (ed.), *War and competition between states: The Origins of the Modern State in Europe: 13<sup>th</sup>–18<sup>th</sup> Centuries* (Oxford 2003), pp. 129–162.
- Loit, Aleksander, (red.), *Die Schwedischen Ostsee-provinzen Estland und Livland in 16–18. Jahrhundert*, Acta Universitatis Stockholmiensis Studia Baltica Stockholmiensia 11, (Stockholm 1993).
- Lovén, Christian, *Borgar och befästningar i det medeltida Sverige*, PhD-dissertation, (Stockholm 1996). ("Lovén")
- Mankell, Julius, *Uppgifter rörande svenska krigsmagten styrka, sammansättning och fördelning sedan slutet af femtonhundratalet jemte öfversigt af svenska krigshistoriens viktigaste händelser under samma tid*, Del I–II, (Stockholm 1865).
- Mankell, Julius, *Anteckningar rörande finska arméens och Finlands krigshistoria: särskildt med afseende på krigen emellan Sverige och Ryssland 1788–1790 samt 1808–1809*, Del I, (Stockholm 1870).
- Manesson-Mallet, Allain, *Les travaux de Mars ou Lart de la guerre* (Paris 1685).
- Martinsson, Örjan, "The Swedish Army of the Great Northern War", in Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium*, Volume One, (St. Louis Missouri 2015), pp. 133–148.
- Massie, Robert K., *Peter the Great: His Life and World* (London 2012). ("Massie")
- Mayor, Adrienne, *Greek Fire, Poison Arrows and Scorpion Bombs: Biological and Chemical Warfare in the Ancient World* (London 2003).
- McGuffie, Tom Henderson, *The Siege of Gibraltar, 1779–1783* (London 1965). ("McGuffie")
- Megorsky, Boris, "Siege Operations in the Great Northern War", in Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium*, Volume One, (St. Louis Missouri 2015), pp. 165–172.
- Melin, Jan, Johansson, Alf W and Hedenborg, Susanna, *Sveriges historia: Koncentrerad uppslagsbok: fakta, årtal, kartor, tabeller* (Stockholm 2006).
- Melnov, Alexey, "The Siege of Vyborg and its Swedish Garrison", in Stephen L. Kling, Jr. (ed.), *Great Northern War Compendium*, Volume Two (St. Louis, Missouri 2015), pp. 59–62.
- Meyers Großes Konversations-Lexikon*, Band 17, (Leipzig 1909).
- Munthe, Ludvig W:son, *Kungl. Fortifikationens Historia, I. Svenska fortifikationsväsendet från nyare tidens början till inrättandet af en särskild fortifikationsstat år 1641*, Del I, Book [I:1] (Stockholm 1902), Book I,2 (Stockholm 1901) and Book I,3 (Stockholm 1902). ("Ludvig W:son Munthe")
- Munthe, Ludvig W:son, *Kungl. Fortifikationens Historia, III. Fortifikationsstaten under Dahlberg, Stuart och Palmquist 1674–1719*, Del III:1, Book 3,1 (Stockholm 1907), Book 3,2 (Stockholm 1907) and Book 3.3 (Stockholm 1908). Del III:2, Book III.4 (Stockholm 1909), Book III.5 (Stockholm 1910) and Book III.6 (Stockholm 1911). ("Ludvig W:son Munthe")
- Munthe, Arnold, *Karl XII och den ryska sjömakten*, Del I–III, (Stockholm 1924, 1925 and 1927). ("Arnold Munthe")
- Müllern, Herman, "Kolonialförband i stormaktstidens svenska krigsmakt", in *Aktuellt och historiskt; Meddelanden från Militärhistoriska avdelningen vid Kungl. Militärhögskolan*, Stockholm 1965, pp. 95–156.
- Neumann, Hartwig, *Festungbau-kunst und – Technik: Deutsche Wehrbauarchitektur vom XV. bis XX. Jahrhundert* (Bonn 2004).

- Nikula, Oscar, *Svenska skärgårdsflottan 1756–1791* (Helsingfors 1933).
- Nordberg, Jöran Andersson, *Konung Carl den XII:tes historia*, Del I–II, (Stockholm 1740). (“Nordberg”)
- Nosworthy, Brent, *The Anatomy of Victory: Battle Tactics 1689–1763* (New York 1992).
- Nurk, Ragnar, and Treufeldt, Robert, “Uusaeg tõi bastionid”, in *Horisont* no 5, Tallinn 2014, pp. 38–47.
- Nurk, Ragnar, ”Erik Dahlbergi Narva Bastionide projektist ja selle võimalikest eeskujudest”, in Merike Ivask (Toim.), *Narva Museum. Toimeitised* (Narva 2015), pp. 17–62.
- Oman, Charles, *A History of the Peninsular War*, Volume III, *September 1809 to December 1810: Ocana, Cadiz, Bussaco, Torres Vedras* (London 2004) (Originally published in 1908). (“Oman”)
- Oman, Charles, *A History of the Peninsular War*, Volume V, *October 1811 to August 31 1812: Valencia, Ciudad Rodrigo, Badajoz, Salamanca, Madrid* (London 1996) (Originally published in 1914). (“Oman”)
- Oredsson, Sverker, ”Karl XII och det svenska stormaktsväldets fall i historieskrivning och tradition”, in Sverker Oredsson (red.), *Tsar Peter och kung Karl: Två härskare och deras folk* (Stockholm 1998), pp. 275–306.
- Oredsson, Sverker(red.), *Tsar Peter och kung Karl: Två härskare och deras folk* (Stockholm 1998).
- Ostwald, Jamel, *Vauban Under Siege: Engineering Efficiency and Martial Vigor in the War of the Spanish Succession* (Leiden – Boston 2007), Series: History of Warfare, Volume 41, General Editor Kelly Devries. (“Ostwald”)
- Palli, Heldur, “The Population of Estonia in the Last Decades of the Swedish Period”, in Aleksander Loit (red.), *Die Schwedischen Ostseeprovinzen Estland und Livland in 16–18. Jahrhundert*, Acta Universitatis Stockholmiensis Studia Baltica Stockholmiensia 11, (Stockholm 1993), pp. 196–208.
- Parker, Geoffrey, *The Military Revolution* (Cambridge 1988).
- Perlestam, Magnus, ”Belägringen av Jamo fästning”, in *Karolinska förbundets årsbok* Stockholm 2013, pp. [175]–178.
- Perlestam, Magnus, *Lydnad i karolinernas tid* (Lund 2008).
- Petrelli, T. J., ”Stridena kring Finska viken 1706–1710”, in *Historisk Tidskrift* Stockholm 1904, pp. 113–166. (“Petrelli”)
- Purton, Peter Fraser, *A History of the Late Medieval Siege 1200–1500* (Woodbridge 2009/2010).
- Riasanovsky, Nicholas V., *A History of Russia*, Fifth edition, (New York 1993) (“Riasanovsky”)
- Roberts, Michael, *The Swedish Imperial Experience 1560–1718* (London 1979). (“Roberts”)
- Rocolle, Pierre, *2000 ans de fortification française*, Part 1 and 2, (Limoges 1972).
- Rodger, N. A. M., *The Command of the Ocean: A Naval History of Britain, 1649–1815* (London 2005). (“N. A. M. Rodger”)
- Rogers, H. C. B., *Artillery Through the Ages* (London 1971).
- Rorive, Jean-Pierre, *La guerre de siège sous Louis XIV* (Paris 2015).
- Rosén, Jerker, *Stormaktens senare skede*, Part III:2 of Schüeck, Henrik, (red.), *Svenska folkets historia* (Lund 1914–1963).
- Rosén, Jerker, ”Den inre maktkampen och riksdagen 1680”, in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 133–143.
- Rosén, Jerker, ”Westfaliska freden”, in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 4, Gustav Adolfs och Kristinas tid 1611–1654* (Stockholm 1967), pp. 124–129.
- Rosén, Jerker, ”Krig och utrikespolitik 1675–1679”, in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 114–123.
- Rosén, Jerker, ”Reduktionen och indelningsverket”, in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 170–179.

- Rosén, Jerker, "Från fredspolitik till krigsutbrott 1680–1700", in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 216–225.
- Ruuth, J. W., *Viborgs stads historia*, Första bandet, (Helsingfors 1906). ("Ruuth")
- Rålamb, Åke, *Fortification eller Adelig öfnings ottonde tom, medh behörige kopparstycken* (Stockholm 1691). ("Rålamb (1691)")
- Sanger, Victoria, *Military Town Planning under Louis XIV: Vauban's Practice and Method (1668–1707)*, PhD-dissertation, Volume II, (Columbia University 2000).
- Schulman, Hugo, *Striden om Finland 1808–1809*, (Borgå 1909).
- Schück, Henrik, (red.), *Svenska folkets historia* (Lund 1914–1963).
- Scott, Franklin D., *Sweden: The Nations History* (Minneapolis, Minnesota 1977).
- Seitz, Heribert & Rosengren, Erik, *Sveriges freder och fördrag 1524–1905* (s. l. 1944).
- Simpson, Grant G., *The Scottish Soldier Abroad, 1247–1967* (Edinburgh 1992).
- Sjögren, Otto, *Försvarskriget i Lifland 1701 och 1702*, PhD-dissertation, (Stockholm 1883). ("Sjögren, Försvarskriget")
- Sjögren, Otto, "W. A. v. Schlippenbachs lifländska här", in *Historisk Tidskrift* Stockholm 1896, pp. [293]–320.
- Sjögren, Otto, *Karl XII och hans män: Bilder från vår sjunkande storhetstid* (Stockholm 1925). ("Sjögren, Karl XII")
- Sjögren, Otto, *Sveriges historia*, Del I, (Stockholm 1925).
- Smith, Digby, *The Greenhill Napoleonic Wars Data Book* (London 1998).
- Smoll, Barthold Otto, *Architectureae militaris, eller, fortifications konstens korta manuductiones och underwijsnings första deel. Hwad serdeles wijdh regular och irregular fortificationen, jempte attaquen och defensen i acht tagas bör/ medh figur och text på deht tidligste förklarad och demonstrerat* (s.l. 1693).
- Stackell, L., "Kring tvenne Narvasegrar: Några tidsbilder från stora nordiska kriget", in *Norrlands försvar: Årsskrift utgiven av Föreningen för Norrlands fasta försvar* Stockholm 1935, pp. 93–130. ("Stackell, Narva")
- Starbäck, C. Georg och Bäckström, P. O., *Berättelser ur svenska historien*, Del 17, (Stockholm 1877).
- Stavenow, Ludvig, "Karl XII och det svenska stormaktsväldet. Högtidstal vid Uppsala universitetens minnesfest på 200-årsdagen efter konung Karl XII:s död den 30 november 1918", in *Karolinska förbundets årsbok* Stockholm 1919, pp. 2–33.
- Stille, Arthur, "Tvåhundraårsminnet af Karl XII:s död: Högtidstal vid Lunds universitetens minnesfest på 200-årsdagen efter Konung Karl XII:s död den 30 november 1918", in *Karolinska förbundets årsbok* Stockholm 1919, pp. 34–47.
- Stille, Arthur, *Kriget i Skåne 1709–1710* (Stockholm 1903). ("Stille")
- Strindberg, August, *Svenska folket: I helg och söcken, i krig och i fred, hemma och ute: eller: ett tusen år af svenska bildningens och sedernas historia* (Stockholm 1882, reprinted Stockholm 2001).
- Sundberg, Ulf, *Sveriges krig 1630–1814*, Del 3, (Stockholm 2010).
- Sundberg, Ulf, *Sveriges krig 1249–1610: Freder och stillestånd*, Del 4, (Stockholm 2010).
- Sundberg, Ulf, *Sveriges krig 1611–1814: Freder och stillestånd*, Del 5, (Stockholm 2010).
- Sundberg, Ulf, *Kraftsamling i Gustav III:s krig 1788–1790*, Master's thesis, Åbo Akademi University 2014, (Karlskoga 2014).
- Svenskt biografiskt lexikon: Ny följd*, Del 1–10, (Stockholm 1857–1907). Articles according to footnotes in the text.
- Svenskt biografiskt lexikon*, Del 1–, (Stockholm 1917–). Articles according to footnotes in the text.
- Sverige Kungl. Maj:t, *Kongl. May:ts Fortifications Ordning: Hwarefter Fortifications-Arbetet wid Fästningarne böhr drifwas och wederbörande där wid skole hafwas sig at regulera och rätta.*

- Gifwen Stockholm den 3 Julii, 1695* (Stockholm 1695).
- Sverige Kungl. Maj:t, *Berättelse, om det förnämsta, som wijd Nöteborgs belägring af ryssen, sig tilldragit hafwer, in til den 12 octobr. 1702, då fästningen medh accord öfwer gick* (Stockholm, tryckt i kongl. boktr. hos sal. Wankijfs enkia, 1702). ("Swedish Report 1702")
- Theatri Europae [Theatrum Europaeum]*, XIX, (Frankfurt am Main 1723).
- Toy, Sidney, *A History of Fortification: From 3000BC to AD1700* (Barnsley 2005), first published in 1955.
- Tredera, John & Sozaev, Eduard, *Russian Warships in the Age of Sail 1696–1860: Design, Construction, Careers and Fates* (Barnsley 2010). ("Tredera and Sozaev")
- Turnbull, Stephen, *Crusader Castles of the Teutonic Knights (2): The stone castles of Latvia and Estonia 1185–1560* (Oxford 2004).
- Tuulse, Armin, *Borgar i västerlandet* (Stockholm 1952).
- Tuulse, Armin, *Die Burgen in Estland and Lettland* (Tartu 1942).
- Tuxen, A. P. and others (red.), *Bidrag til den store nordiske krigs historie*, 1–10, (Copenhagen 1899–1934). ("Tuxen")
- Törnquist, Leif, (main writer), *Svenska borgar och fästningar: En militärhistorisk reseguide* (Stockholm 2007). ("Törnquist")
- Ullgren, Peter, *Det stora nordiska kriget 1700–1721: En berättelse om stormakten Sveriges fall* (Stockholm 2008).
- Ulfhielm, Hans, "Artilleriet i krigens under Karl XII:s tid", in Ulfhielm, Hans (red.), *Kungl. Artilleriet: Karl XI:s och Karl XII:s tid* (s. l. 1993), pp. 299–554. ("Ulfhielm, Karl XII:s tid")
- Ulfhielm, Hans (red.), *Kungl. Artilleriet: Karl XI:s och Karl XII:s tid* (s. l. 1993).
- Ulfhielm, Hans & Granefelt, Eric (red.), *Kungl. artilleriet: Svenska Artilleriet i Östersjöprovinserna 1561–1721* (s. l. 2005).
- Unger, Gunnar, *Illustrerad svensk sjökrigshistoria: Senare delen omfattande tiden 1680–1814* (Stockholm 1923).
- Wahl, Hannu-Matti, "Kexholms slott. 700-årig historia från karelsk befäst centralort till svensk fästning", in *Meddelande 55 Armémuseum*, Stockholm 1995, pp. 11–52.
- Waller, Sture M., "Den svenska huvudarméns styrka år 1707", in *Karolinska förbundets årsbok* Stockholm 1957, pp. [91]–116.
- Vauban, Sébastien Le Prestre de, *De l'attaque et de la défense des places: Traité pratique des mines: et un autre de la guerre en général, par un Officier de distinction* (Leide [Leyden] 1740). ("Vauban")
- Weiss, Holger, "Viborgtyskarna, i Östra Finland", in *Östra Finland – Det andra Finland*, Palmgren, Richard and others (red.), *Historicus* skriftserie, Volym 11 (Helsingfors 1994), pp. 134–138.
- Wikander, J. G., *Översikt over Sveriges krig under 1700-talet* (Stockholm 1922). ("Wikander")
- Ville, Antoine de, *Les Fortifications* (Paris 1666). ("de Ville (1666)")
- Villstrand, Nils Erik, "Gustav II Adolf, troshjälte eller erövrare?", in *Finsk tidskrift*, Åbo 1982:8, pp. 372–382.
- Villstrand, Nils Erik, "Bondpojkar doppade i vatten". Svensk sjömilitär rekrytering ur ett jämförande perspektiv (1500–1800)", in Ericsson, Christoffer H. and Montin, Kim, (red.), *Människan i flottans tjänst: Sjöhistoriskt jubileumssymposium i Åbo 24 november 2000*, Jungfrusund 6, *Meddelanden från Jungfrusundsprojektet*, (Åbo 2001), pp. 43–58.
- Villstrand, Nils Erik, "Adaptation or Protestation: Local Community Facing the Conscription of Infantry for the Swedish Armed Forces, 1620–1679", in Jespersen, Leon (ed.), *A Revolution from Above?: The Power State of 16th and 17th Century Scandinavia* (Odense 2000), pp. 249–314.
- Villstrand, Nils Erik, *Sveriges historia 1600–1721* (Stockholm 2011).
- Viollet-le-Duc, Eugène., *Annals of a Fortress: Twenty-Two Centuries of Siege Warfare* (s. l. 2000, new edition, original *Histoire d'une Fortresse*, Paris 1874).
- Wärnskiöld, I., *Fragmenter aff fortificationsfundamenterna: Interims-wiis opsatte, Andra dehl*, (s. l. 1673).

Yadin, Yigael, *Masada: Herod's Fortress and the Zealots' Last Stand* (London 1966).

Åberg, Alf, "Den karolinska armén skapas", in Cornell, Jan and Grenholm, Gunvor, (huvudredaktör), *Den Svenska historien, Del 5, Karolinska tiden 1654–1718* (Stockholm 1967), pp. 180–186.

Åberg, Alf, "Erik Dahlbergh och planerna på Landskronas befästade åren 1679–1680", in *Karolinska förbundets årsbok* Stockholm 1947, pp. [68]–91.

Östergren, Stefan, Lindblad, Carl Wilhelm & Norberg, Erik (red.), *Arméförvaltningens historia*, Armémusei skrifter nr IV, (s. 1. 1987), pp. 13–15.

## ELECTRONIC RESOURCES

"The Vauban Siege Model", in Wikimedia web page. [https://commons.wikimedia.org/wiki/File:Tranchées\\_parallèles\\_Vauban.jpg](https://commons.wikimedia.org/wiki/File:Tranchées_parallèles_Vauban.jpg), modified by Cyberprout, read December 30, 2016.

"Siege", in Wiktionary web page. <https://en.wiktionary.org/wiki/siege>, read December 31, 2016.

"Koporye", in Wikipedia web page. <https://en.wikipedia.org/wiki/Koporye>, read May 23, 2017.

"Moniste", in Visitestonia web page. <https://www.visitestonia.com/sv/moniste-herrgardspark#historia-kultur>, read July 31, 2016.

Boris V. Megorsky, "The Sieges of the Great Northern War – Attempt at Typology". [https://www.academia.edu/5843766/The\\_Sieges\\_of\\_the\\_Great\\_Northern\\_War\\_-\\_attempt\\_at\\_typology](https://www.academia.edu/5843766/The_Sieges_of_the_Great_Northern_War_-_attempt_at_typology), read March 7, 2017.

"Svenska örlogsfartyg", in Wikipedia web page. [https://sv.wikipedia.org/wiki/Lista\\_över\\_svenska\\_seglande\\_örlogsfartyg#Fregatter](https://sv.wikipedia.org/wiki/Lista_över_svenska_seglande_örlogsfartyg#Fregatter), read May 20, 2017. [https://sv.wikipedia.org/wiki/Lista\\_över\\_svenska\\_seglande\\_örlogsfartyg#Bombkitsar](https://sv.wikipedia.org/wiki/Lista_över_svenska_seglande_örlogsfartyg#Bombkitsar), read May 20, 2017.



Ulf Sundberg

# Swedish defensive fortress warfare in the Great Northern War 1702-1710

The dissertation studies the role of the Swedish fortifications in the Great Northern War, 1702 – 1710.

The study shows that it was difficult to resupply the Swedish fortifications when there was a siege force in their proximity. The study claims that these difficulties were due to decisions made prior to the war, and that, at the start of the war, the Swedish fortification system suffered from serious inherent flaws.