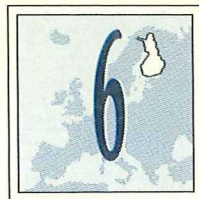


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THE BALTIC REPUBLICS

A Strategic Survey

Erkki Nordberg

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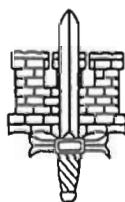
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THE BALTIC REPUBLICS

A Strategic Survey

Erkki Nordberg



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Preface

Until the end of the First World War, the Baltic region was understood as a geographical area comprising the coastal strip of the Baltic Sea from the Gulf of Danzig to the Gulf of Finland. In the years between the two World Wars the concept became more political in nature: after Estonia, Latvia and Lithuania obtained their independence in 1918 the region gradually became understood as the geographical entity made up of these three republics.

Although the Baltic region is geographically fairly homogeneous, each of the newly restored republics possesses unique geographical and strategic features. Even their military significance is different when measured against that of their neighbours. In order that these difference should be better understood, this study looks not only at the Baltic region as a whole but at the three states separately - their strategic factors, their potential for arranging their national defence and their strategic concepts, although these have not yet been approved by the respective parliaments.

The northern part of what was once East Prussia, and now is the Königsberg/Kaliningrad administrative region, is geographically a part of the Baltic region. Housing as it does a large Russian military base, it is also of great strategic significance, not only to Lithuania but to Latvia and Estonia. For this reason it, too, is included in the survey.

The materials for the research were collected during the years 1991-1994. Besides the many published sources, the study also relies on oral and unpublished material gathered in numerous fact-finding trips to Estonia, Latvia and Lithuania.

Helsinki, 30 June 1994.

Erkki Nordberg

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1 STRATEGIC COLONIES

In Pursuit of Economic Gain

Between 1198 and 1945, wars were waged in the Baltic region for a total of 173 years. Overall, the ratio of years of war to years of peace was 1:4.4. Of the eight most important wars, the Germans and Swedes initiated six and the Russians and the French one each. (STRODS 1991, 3)

In these wars, the Slavs [Russia and Poland] were four times victorious and the Teutons [Germans and Swedes] three times. As a consequence of the wars, others came to dominate the northern parts of the Baltic region militarily: German feudal lords for 351 years, Poles for 61, Swedes for 121 and Russians for 217. German economic and cultural influence nevertheless prevailed in the region for 700 years. (STRODS 1991, 3)

Until about 1800 the chief driving force behind the advance into the northern parts of the Baltic region was the pursuit of economic gain. In the times of the Mediaeval Hanseatic League, the major towns of the Baltic region were members of equal status within the League and the region formed an important stepping stone for the Hanse to eastern markets. With the weakening of the League in the early 16th century, the region found a prosperity of its own. (ALAJOKI et al. 1991, 31, 33)

During the first peaceful half of the 16th century that followed, the Baltic region became the kind of military political vacuum (ALAJOKI et al. 1991, 33) that attracts conquerors. The motive of the Livonian war waged in 1558-1583, and of the wars that followed, was Russia's need to acquire a stronghold in the Baltic Sea and along its coasts (STRODS 1991, 3; VARDYS & MISIUNAS 1978b, 4). But also the other countries of the Baltic Basin were desirous of gaining advantage in the relatively prosperous Baltic region.

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Russian Troop Concentrations

The first Russian regiment was garrisoned in Narva during the Great Northern War in 1711, and Tallinn and Riga had obtained their first Russian regiments by 1740. Divisional Headquarters were established in Estonia and Livonia in 1763, and five years later an Army Central Depot was set up in Riga (STEIN 1885, 46, 63, 113, 141, 158). A Russian Governor-General who was responsible for the civil administration of the entire Baltic region was appointed in Riga in 1801. (THADEN 1984, 97)

MAP 1: Baltic States 1920-1930

The opening of the present century saw the northern and eastern parts of Estonia attached to the St. Petersburg Military District. An Army Corps was headquartered at Tartu with its divisions stationed in Tallinn and Pskov. Frontier Guard Brigades were based west of Tallinn and in the northern parts of Saaremaa. Troops were also garrisoned in the Tallinn fortress. (FROBENIUS 1901, 746, map Russland)

Latvia, Lithuania and the southwestern parts of Estonia were part of the Vilnius Military District. The most important centre was Riga, where an Army Corps Headquarters and two divisions were garrisoned. A further division was quartered in the Daugavpils fortress. Another fortress town where large numbers of troops were garrisoned was Liepaja. (FROBENIUS 1901, 746, map Russland)

Lithuania had its share of garrisons as well. An Army Corps Headquarters and two divisions were located in and near Vilnius. One infantry, one cavalry and one artillery division were stationed at Kaunas, and one cavalry and one artillery division were quartered in Suwalki. (FROBENIUS 1901, 746, map Russland)

Liepaja, Ventspils and Kronstadt were Russia's main naval bases on the Baltic Sea, while Riga and Tallinn, along with Viipuri and Suomenlinna, formed the basis of the northwest coastal defence. Kaunas was regarded as protecting the flank of the Russian northern front, while Daugavpils was expected eventually to form a maintenance and depot area for Russia

(FROBENIUS 1901, 734). The positioning of Russian troops in the Baltic states continued, more or less as described, during the first decade of the 20th century. (GOTHA 1910, 1081-1083)

The fact that the Baltic states were attached to two different military districts underscored, already then, the special military status of Estonia's northern and eastern parts relative to the other parts of the Baltic region. Estonia, Ingermanland and Petseri were bound up with the defence arrangements for St. Petersburg, whereas Latvia and Lithuania were more closely linked to the strategic entity consisting of East Prussia, Poland and Belarus. One cannot fail to notice, either, the huge number of troops stationed in Riga at that time, or the importance of Daugavpils as a maintenance centre.

The Sea Fortress of Peter the Great

The strategic importance of Estonia's north coast for the defence of St. Petersburg was made particularly clear when the Sea Fortress of Peter the Great was constructed in 1912-1917. The inner circle of the defence zone was formed by the Kronstadt fortress and by forts on opposite sides of the Gulf, in Finland and Ingermanland. The next line was fixed through the islands Someri, Lavansaari and Seiskari in the Gulf of Finland. (LEHONKOSKI 1938, 98)

MAP 5: Sea Fortress of Peter the Great in October 1917.

The main defence line of the fortress, however, lay on the line Porkkala-Tallinn, and this sea terrain was regarded as the primary area of manoeuvre for the Russian navy. Construction work was accordingly begun in Tallinn on what was to be the main Russian naval base. A third line was formed on the level Öro-Tahkuna, to protect the navy when moving from the Turku-Åland archipelago to the main line of defence, and when moving from one archipelago to another. (LEHONKOSKI 1938, 98)

Flanking positions were fortified in the Turku-Åland and Estonian archipelagos, with the purpose of securing those areas as safe havens for the navy and to protect its possible offensive operations. A number of detached forts were built between the

fortification lines to protect key communities along the coast of the Gulf of Finland. (LEHONKOSKI 1938, 99-101)

The function of the forts built on the larger Estonian islands was to block the access to the Gulf of Riga and especially to Vainameri where the Russian navy had its forward base. The southern passage to the Gulf of Riga is through the Straits of Irben, which is just 27 km wide, and could effectively be blocked by the batteries at Cape Sääre at the southern tip of Saaremaa. (LEHONKOSKI 1938, 101-103)

National Garrisons

The strategic importance of a state and its various regions can be estimated in some degree by scrutinizing the locations of its garrisons. In the case of the Baltic states, which gained their independence in 1918, the situation is complicated by their need, due to weak economies, initially to rely on former Russian garrisons despite their inappropriate location.

MAP 6: Estonia.

On the eve of the Second World War, the Divisional Headquarters of Estonia were located in Rakvere, Tartu and Tallinn. The troops of the 1st [Rakvere] Division were located in Narva, Tapa and Jõhvi. The 2nd [Tartu] Division had its contingencies in Valga, Võru and Petseri, and the 3rd [Tallinn] Division garrisoned its troops in Tallinn, Viljandi and Pärnu (LIMBERG 1980, 195-207). Ground forces had permanent manoeuvring areas in Värskä at the southwestern corner of Peipsi järv and in Kutna.

Estonia's anti-aircraft artillery was concentrated in Tallinn (LIMBERG 1980, 208), and the three squadrons of Estonia's Airforce operated from Tallinn, Tartu and Rakvere air bases (JANE'S 1935, 32b). The main naval base was in Tallinn, while the staff of the Lake Peipus Fleet-Group were working in Tartu. The command posts of the coastal artillery were on the island of Aegna, at Cape Viimsi, on Naissaar and at Cape Suurupi. (LIMBERG 1980, 209-213)

Estonian ground forces seem to have been located on the principle of maintaining fast deployment forces in the vicinity of

the eastern border. Some detached infantry battalions had also been established near conscript domiciles to provide the conscripts with initial military training. A considerable portion of the defence forces, the entire anti-aircraft artillery and all the supplies and depots were located in or near Tallinn, to serve as common reserves and to maintain public order.

MAP 7: Latvia.

Latvia's four divisions were placed in her four provinces, with headquarters in Liepaja, Riga, Rezekne and Daugavpils (PASSOW 1939, 230). The regiments were garrisoned in Liepaja, Jelgava, Riga, Plavinas, Aluksene, Jaunaluks, Cesis, Valmiera, Rezekne, Krutspils and Daugavpils (SArk 1402/3). Airforce squadrons operated from Riga, Spilven, Daugavpils and Kreslava and a sea-squadron from Liepaja (JANE'S 1935, 47b; SArk 1402/3). Coastal artillery was concentrated in Daugavgriva at the mouth of the Daugava River (SArk 1402/3). As in Estonia, the peacetime grouping of Latvia's ground forces was heavily concentrated in and around the capital. Kurzeme (Courland) had been left to depend on the Liepaja garrison, as was also the case in western Zemgale where the one and only contingent was stationed in Jelgava. The other garrisons, placed in and around strategic points and crossroads, were clearly located with the intention of repulsing invasions from the east and northeast.

The reason for grouping the fixed coastal artillery so that it could only protect the capital may have been scarce resources. However, another reason could have been that Estonia's coastal and naval defence capabilities to the north were regarded as inadequate. It is worth noting that at Cape Irben there was no fixed coastal artillery at all, capable of blocking the access to the Gulf of Riga from the open sea.

MAP 8: Lithuania.

Lithuania's divisional headquarters were located at Panevezys, Kaunas and Siauliai (PASSOW 1939, 180). The 1st Division was garrisoned in Panevezys, Ukmerge and Kupiskis;

the 2nd in Kaunas and its surroundings, Prienai, Marijampole, Vilkaviskis, Seredzius, Kediniai and Raseiniai; and the 3rd in Siauliai, Radvisiskis, Taurage, Zemaiciu, Varniai, Plunge and Klaipeda. The Cavalry Regiment was trained in Alytus. (SArk 1402/6)

The airforce had bases in Kaunas, Siauliai, Klaipeda, Palanga and Schwali (JANE'S 1935, 47b). Lithuania's only port was Klaipeda.

The grouping of Lithuania's ground forces was primarily aimed at protecting Kaunas, the capital. Otherwise, the peacetime deployment was rather different from that of Estonia and Latvia. In Lithuania, more troops had been concentrated and infrastructure built with a view to blocking an invasion from East Prussia. Lithuanians calculated that such an invasion would be directed mainly towards Kaunas but possibly also towards Siauliai. There was practically no military presence at all along Lithuania's eastern border with Poland.

As a general conclusion it could be said that all the independent Baltic states had deployed their main garrisons in big cities and near by strategic crossroads. The groupings could be regarded as tailored according to the respective threat scenarios. In Estonia, the troops were concentrated in the east, in the directions of Narva and Pskov. Latvia and Lithuania had to take into account the threat of invasion not only from the Soviet Union but from East Prussia and their ground forces were accordingly grouped more symmetrically than those of Estonia.

Bases of Occupation

Germany and the Soviet Union attacked Poland and divided her in autumn 1939. Shortly thereafter, the Soviet Union put pressure on Estonia, Latvia and Lithuania, finally forcing them to conclude treaties of mutual assistance with her. The Baltic states were forced to cede bases to the Soviet Union and to accept some 20 000-25 000 Soviet troops on each country's soil. From the locations of those bases one can draw some far reaching conclusions about the wartime interests of the Soviet Union, or Russia, in the Baltic republics.

MAP 9: The Soviet Bases in 1940.

In Estonia, Soviet bases were established in Paldiski, Haapsalu, Lihula, Hanila, Hiiumaa, Kuressaar in Saaremaa, Kihlekanna, and in Kuusiku and Kehtna some 50 kilometres south of Tallinn. In the course of the negotiations the Soviets had also demanded Paide and Valga as their garrisons (WARMA 1973, 83-85; MYLLYNIEMI 1977, 69; KRONLUND 1991, Map 10, 170). Air bases were set up at Klooga and Laoküla near Paldiski, at Sinilepa near Haapsalu, at Kuressaar in Saaremaa, and at Kehtna and Kuusiku. (LAASI 1993, 51)

The reasons for establishing bases in just the places seem to have been firstly the intention to occupy and secondly the concern with naval and coastal defence, which would require blocking the mouths of the Gulf of Finland and the Gulf of Riga. Later on, during the Finnish Winter War in 1940, the airbases were used in bombing raids against Finnish cities. (WARMA 1973, 83)

In Latvia, Soviet naval bases were established in Ventspils and Liepāja, with Liepāja later to become the main base of the submarine fleet. Coastal artillery bases were set up in Mīkeltorns and Pītrags at Cape Irben. A third concentration of Soviet troops was placed near by the Lithuanian border, with garrisons in Priekule, Ezere, Auce and Basi. The headquarters of the occupying force was located in Liepāja. It is also possible that aeroplanes and tanks were stored in Latvia. (MYLLYNIEMI 1977, 71-72; SUVOROV 1990, 132; KRONLUND 1991, Map 10, 170)

In Latvia as in Estonia, Soviet military interests seem to have focused on naval and coastal defences. Concentrations in Latvia's southwestern parts indicate that the Soviets were preparing either to repulse an attack directed from East Prussia towards Riga or to carry out their own attack from Latvia to East Prussia. An interesting point is that Riga was not mentioned in the negotiations for bases, even though it was an old Russian garrison and administrative centre. Not requesting it may have been a ploy to create the impression that the bases were intended to serve a purely military purpose only.

In Lithuania the headquarters of the occupation force was set up in Nauja-Vielka, some 40 kilometres east of Vilnius, while only an airbase was established at the erstwhile capital itself. Other garrisons with infantry, cavalry and field artillery

contingencies were located in Alytus and Prienai, south of Kaunas. The main part of the tank troops, and an airbase, were grouped in Gaiziunai, northeast of Kaunas. (MYLLYNIEMI 1977, 75; KRONLUND 1991, Map 10, 170)

In Lithuania the bases were deployed mainly around the capital, a different practice than was observed in Estonia and Latvia. From the strategic point of view, the bases give the impression that they were intended as the foundation of a military infrastructure aimed either at blocking an invasion from East Prussia in the direction of White Russia or facilitating a Soviet attack on East Prussia.

At the start of the negotiations for bases the Soviets had also demanded that troops and garrisons should be placed inside Kaunas as well as in Siauliai and Panevezys (MYLLYNIEMI 1977, 75). These demands could also be considered reasonable on military grounds.

2 DEFENCE LINES AND ATTACK ARROWS

The Baltic region was turned into a battlefield in both World Wars and, from those wartime operations, certain conclusions can be drawn on the geostrategic position of the Baltic region and the possibilities to exploit it. In this respect the defence plans outlined by the Baltic states in the 1920's and 1930's are also of some interest. However, one must bear in mind that, although the terrain has not changed much, war machines and their technology, especially helicopters and missiles, have since then altered the nature of war-fighting dramatically.

Fighting Trenches

In World War I, the Baltic region did not become a battlefield until spring 1915, when the Germans launched a surprise flanking operation to Kurzeme by advancing around the Zemaiciu upland from the east. Russian defence lines were consolidated on the level Dubysa River-Siauliai-Mazeikiai-Aizpute, and from there to the coast of the Baltic Sea. (VOLKMANN 1932, 68, Map 2, Sketch a)

MAP 10: German Attack in 1915.

The Germans resumed their operation in the summer, first along the central Lithuanian lowland and later on in the autumn to Vilnius and across the Baltic upland to the Norocz lakes. That forced the Russians to straighten out their lines along the Daugava River and south of Riga up to the head of the Gulf of Riga. Russian defence was consolidated at this level until autumn 1917. (VOLKMANN 1932, Map 2, Sketch a; GENERALSTABEN 1915, Rapport 124, 8.10.1915; GENERALSTABEN 1918, Rapport 355a)

The German attack gathered momentum again in September 1917 as the Germans crossed the Daugava River at

Jekabpils. Riga was captured in an attack from the east (VOLKMANN 1932, 139). Saaremaa and Hiiumaa were seized by a division-size amphibious operation that was launched from Liepaja in the middle of October 1917 (VOLKMANN 1932, 140). Until the end of 1917, frontlines ran on the north side of the Daugava River and along the Gauja [Aa] River and in the straits separating the large Estonian islands from the mainland. (GENERALSTABEN 1918, Rapport 355a).

In February 1918 the Germans continued their attack once more. The frontline was finally consolidated, in March, along the waterway running from the Narva River to lakes Peipus and Pskov (GENERALSTABEN 1918, Rapport 355a, 359, 361, 381). This borderline, separating two religions and cultures, was later to become the main defence line of independent Estonia.

The lack of troops forced the Germans to use only the two natural axes of advance leading from northern East Prussia to the Baltic region. The operations were clearly directed towards the east, with the invasion of Kurzeme only a side operation. Within the Baltic region, the main target was Riga with its great strategic significance.

As to the defending Russians, the repulsing of German attacks was concentrated on the banks of the major rivers. The broad Daugava played an especially key role in the Russian defence. One interesting point in this connection is that the Daugava was crossed at Jekabpils, at the same spot it was crossed in World War II.

Defence Positions

Between the two World Wars, Estonia, Latvia and Lithuania expected the most lethal threat to come from the east. This threat was considered so overwhelming in Estonia that military personnel declined to take part with the Latvians in the operational planning needed to prepare for a possible German onslaught from East Prussia. On the other hand, even Latvia viewed the East Prussia option as only a remote possibility. For her part, Lithuania was the neighbour of East Prussia and surrounded by Poland in the east, a state of affairs that forced

her to take seriously both the western and eastern threats. (ANDERSON 1978, 133; PETERSONS 1991b, 2)

MAP 11: Baltic Defence Lines in the 1930's.

Estonia's main defence line ran through the forest and swamp areas east of the Narva River, along the river itself and through lakes Peipus and Pskov. In the southeastern corner of the country the line ran on the level of the Piusa River and the town Petseri. Another, rear defence line was established around Tallinn and on Estonia's larger islands. Closest to the border, the defence line was fortified with some 50 bunkers made of reinforced concrete. (ANDERSON 1978, 133-134)

The plan for the Gulf of Finland was to lay minefields around Suursaari, Tytärsaari and Lavansaari as well as on the Aegna Porkkala line (ANDERSON 1978, 133-134). In the 1930's, Finnish and Estonian military personnel had also made plans for common barrage fire and submarine attacks that would lock the Soviet Baltic Navy into the shallow end of the Gulf of Finland. (LESKINEN 1994 16-19)

Latvia had three defence plans. The A-plan was to go into effect in the event of a Soviet invasion, the D-plan in the event of a German invasion, and the K-plan in the event of an invasion from both sides. The A-plan presupposed cooperation with Estonia and the D-plan cooperation with Lithuania. The K-plan was not seriously prepared at all. (ANDERSON 1978, 134; PETERSONS 1991b, 2)

The A-plan was Latvia's main defence concept. Fast deployment forces would delay the attacker in the advantageous wooded uplands of eastern Latvia to secure mobilization. The main defence line was to be based on the Pedeze River, Lake Lubans and the Aiviekste River. If forced by a superior attacker, withdrawal was to continue to the Daugava River. (ANDERSON 1978, 134; PETERSONS 1991a, 17; PETERSONS 1991b, 2)

The Daugava was also the main line of resistance in the D-plan prepared to block a German attack. In this scenario battles were to begin in the Kurzeme upland and along the Venta River running through the upland (PETERSONS 1991a, 17). The fairways to Riga, Liepāja and Ventspils would be blocked and

some army units deployed in coastal defence. Neither the eastern nor the Daugava line were fortified. (ANDERSON 1978, 134)

Lithuania had two defence plans. The first was prepared in the event of a Polish or Soviet invasion from the east. In this plan the fast deployment forces would retreat fighting, from the frontiers to Kaunas and the Nevešis River. If necessary, withdrawal would have been continued to the Dubysa River, which had been fortified with reinforced concrete bunkers. (ANDERSON 1978, 134; PETERSONS 1991a, 17)

Another plan was prepared to stop an attack by Germany from East Prussia. Here the aim was to retreat from the frontier to the Dubysa River, which in this alternative formed the main line of resistance. (ANDERSON 1978, 134; PETERSONS 1991a, 17)

The Estonian and Latvian, and to a certain extent also the Lithuanian forward defences, formed more or less contiguous defence arrangements in the east. A separate and too early retreat by one of the countries would have caused a gap in the defence of the others. In spite of this, the Baltic states had neither coordinated defence plans nor coordinated defence arrangements. Western and Soviet analysts thus placed no value at all on the defence cooperation of the Baltic states. (ANDERSON 1978, 134-135)

The republics had nevertheless to some degree cooperated in security matters in the 1920's and 1930's. Estonia and Latvia had concluded a military-political alliance as early as 7 July, 1921, and in 1931 their defence forces had organized an integrated field manoeuvre. On 12 September 1934, Estonia, Latvia and Lithuania signed a Treaty of Friendship and Cooperation for ten years. The military cooperation between Estonia and Latvia was terminated in summer 1937, after which the Estonian General Headquarters prepared a new mobilization plan. (ANDERSON 1978, 133)

In all, properly working together, the Baltic states could have mounted a considerable territorial defence. Defence spendings were about one quarter of each government's annual budget. (ANDERSON 1978, 129). In practice, the republics would have been able to mobilize some 360 000 troops in 72 hours. Estonia could equip four divisions, Latvia eight and Lithuania six. (PETERSONS 1991b, 1; ANDERSON 1978, 129-130)

The naval forces of the republics consisted of four submarines, one torpedo boat, eight gun boats, six mine layers and one parent ship for submarines. The Estonian Air Force had virtually no fighters, but Latvia had 29 and Lithuania as many as 90. (PETERSONS 1991b, 1-2; ANDERSON 1978, 129)

Attack Arrows

The Soviet plan to conquer the Baltic states, prepared in 1940, provides a good insight into how the republics might be invaded from the east. It was intended that the operation would be executed by the troops of Leningrad and the White Russia Military Districts (PETERSONS 1991a, 16). As it turned out, there was no need to implement the plan at all, because on 15-17 June, 1940, strong and fresh Soviet troops were allowed to march into the republics by mutual agreement, without a single shot being fired. (KÜNG 1975, 51)

MAP 12: Soviet Invasion Plan in 1940.

Estonia was to have been invaded by two divisions attacking along the northeast coast heading for Narva and Kohtla-Järve. Two divisions were to make a flanking operation through the swampy terrain at the northern end of Lake Peipus, and to head south of Rakvere and via Tapa to Kehra. Two more divisions, in the south, were to attack from the area of Pskov-Ostrov towards Võru, Tartu and Valga. (PETERSONS 1991a, 17)

The agreement notwithstanding, a Soviet amphibious operation was peacefully executed on the Estonian coast on 12-17 July 1940, as called for in the plan. Forces were equivalent to one division. In the course of this operation a reinforced brigade was sea-lifted to Paldiski and one brigade-size formation to Tallinn from Koivisto, a town on the coast of the Karelian Isthmus. Reserves, ready to be sea-lifted to the Bay of Kunda, were massed on Suursaari and at the Bay of Suurkylä. (MANNINEN 1992, 902)

The plan called for Latvia to be invaded by two columns. Only one division was to be used, attacking the main Latvian defence line from the east and heading for Karsava and Rezekne. The main attack was intended to capitalize on the lack of defence cooperation between Latvia and Lithuania and would have been directed towards Riga from the southeast, from Lithuanian territory. Riga was also to be attacked from Liepaja on the west coast by a force of two divisions. (PETERSONS 1991a, 17)

The main attack against the Baltic states was to be directed against Lithuania with Riga the ultimate target. The invasion of two armies, 13 divisions in all, was to be made straight from the east, from the soil of Belarus, across the Baltic Uplands and along the Lithuanian Central Plains to the bottom of the Gulf of Riga. Vilnius and Kaunas were to be captured in a separate operation from the southeast, which would have been continued towards East Prussia. (PETERSONS 1991a, 17)

The conquest of the Baltic states was intended to be supported by a special forces' operation carried out in Tallinn, Riga and Liepaja and elsewhere. The Straits of Irben between Saaremaa and Kurzeme were to be blocked. The main task of the airforce would be to bomb Bauska, Jelgava and Riga as a support to the main attack. (PETERSONS 1991a, 17)

Tank Columns

The German Operation Barbarossa in 1941 provides instruction in the reverse procedure: how to use ground forces in a west-to-east offensive in the Baltic region. Unlike the Soviet attack from east to west in 1944, Operation Barbarossa depended on sudden advance to the depth of enemy deployment and a disintegrating resistance. The later Soviet invasion was targeted at destroying the retreating German troops.

MAP 13: German Attack in 1941.

In June 1941, the German North Army Group attacked from East Prussia to the Soviet Union in three columns. A southern column

pushed forward via Kaunas and Vilnius to the Daugava, which was crossed between Daugavpils and Polotsk. A central column attacked from Tilsit towards Daugavpils and Jekabpils, from where it proceeded northeast towards Ostrov and Pskov. (TIPPELSKIRCH 1959, 320-321; BAUER 1973a, 545; BOOG et.al. 1983,5)

A northern column crossed Lithuania's southwestern border and proceeded northeast across the central Lithuanian lowland towards the Siauliai and Riga road, and north through the Pajurian lowland. After capturing Riga, this operation proceeded to Estonia using two axes of advance. The eastern axis ran northeast via Valga to Tartu, while the western one was directed along the coastal road running to Pärnu. A mop-up operation was then directed in several columns up to Estonia's north coast. Saaremaa was invaded from Estonia's west coast and Hiiumaa by an attack launched from Saaremaa. (BAUER 1973a, 545; BOOG et. al. 1983, 9; MADEJA 1988, 12-13)

The German invasion was a breakthrough offensive that utilized Lithuanian and Latvian soil as a means to its ultimate objectives of Leningrad and Ingermanland. The northern operation was a side operation, aimed at protecting the flanks of the main attack.

MAP 14: Conquest of the Baltic Region in 1944.

Soviet forces began their push-back of the Germans in Estonia, where in summer 1944 they established a bridgehead on the western bank of the Narva at the northern end of Lake Peipus (NÖMM 1992, 231). The Germans surrendered their positions at the Sinimägi line west of Narva in late summer. By seizing this opportunity, the northern flank of the Soviet forces was able to proceed rapidly westward along the coastal road and capture Tallinn and Paldiski. (TIPPELSKIRCH 1960, 129-131; BAUER 1973b'110, 343)

In the northeast, another column then began advancing over the swampy terrain at the northern end of Lake Peipus towards the southwest to Paide where the column was divided into two parts. While the northern part proceeded to Haapsalu

and captured Muhu and Saaremaa, the southern part was directed from Paide, through the Kõrvemaa Woodlands, to Pärnu. (TIPPELSKIRCH 1960, 129-131; BAUER 1973b, 110, 343)

In the southeast, the northern flank of the Soviet troops advanced from the Pskov-Petseri region along the railway towards Võru where the force was divided into two columns. The northern column captured Tartu and proceeded north and northwest, while the southern one attacked along the Pskov-Riga road to Valga, continued on to Latvian soil, captured Valmiera and rushed to the coast. The southern parts of the Soviet troops attacked from Ostrov to Gulbene and proceeded on to Riga following the southern side of the Valga-Riga railway line. (TIPPELSKIRCH 1960, 130-131; BAUER 1973b 110, 343)

In southern Latvia, Soviet forces advanced towards Riga along both sides of the Daugava. The northern column launched its attack from the area of Ostrov to Rezekne and followed the northern bank of the Daugava on to the capital. The southern column attacked from Dzisna to Dugavpils and advanced on Riga from the Zemgale lowland. (TIPPELSKIRCH 1960, 130-131; BAUER 1973b 110, 343)

In Lithuania, the Soviet forces used three axes of advance. The northern column utilized wooded lands and advanced from Utena to Panevėžys heading from there partly along the Lithuanian Central Lowlands and partly towards the west in the direction of Šiauliai. Kaunas and Vilnius were captured by attacks directed from the south and southeast. The attack was then continued towards the southwest. (TIPPELSKIRCH 1960, 130; BAUER 1973b, 110)

The northern parts of Zemgale were taken in offensives made in the direction of Šiauliai-Telsiai. Klaipėda was captured in an assault straight from the east, and the Nemunas River was taken in an attack from the northeast and around the northern flanks of Raseiniai. (TIPPELSKIRCH 1960, 131)

The aim of the Soviet operation in 1944 was to defeat the German forces and seize the region. The operation depended on marked troop superiority, which allowed heavy forces to be deployed in all necessary directions. The operation was no surprise to the Germans as fronts were in motion everywhere. Although the situation differed from that prevailing in the region

in 1940, the operation nevertheless began according to the plan that had been drawn up in that year.

Axes of Advance and Intrinsic Value

Estonia's geographical location as a coastal state on the Gulf of Finland was particularly irritating to the Soviet Union. The unique strategic value of Estonia and her islands had already been recognized at the beginning of the century when the Sea Fortress of Peter the Great was built. Estonia possessed obvious military value as the outer rim of the Leningrad defence zone.

Conversely, forces deployed in Estonia represented a threat to the flank of any invader desiring to use the Baltic states as an axis of advance towards Leningrad. The invader would have to take that threat into account and eliminate it in a separate operation.

Latvia's strategic importance lay in her southern and northeastern parts, and in 1944 also the Pskov-Riga highway, which could be used as an axis of advance between East Prussia and Leningrad or vice versa. Riga, on the other hand, as the central capital of the Baltic states, has always been of value as such, while Rezekne and Daugavpils were important crossroads and thus locally valuable in the military sense. Kurzeme represents to the attacker a threat from the flank that must be eliminated. The Daugava possessed defensive value, particularly in the First but also in the Second World War.

Lithuania's strategic importance rests on the attractiveness of her soil for offensive actions from Belarus to East Prussia, or vice versa. The southeastern parts of Lithuania are a transit area and the western parts of the country make a useful axis of advance to Kurzeme and Riga. Not surprisingly, Lithuania is the country whose soil, more than any other, has been used for invasions from one country to another. A look at the Soviet invasion plan prepared in 1940 only serves to underscore this.

Looking at the Baltic region as a whole, it is useful to remember that Otto von Bismarck had long ago regarded the Nemunas River as the border between Germany and Russia (SLAVENAS 1978a, 121). From the Russian perspective, the Baltic

region has been a peacetime security zone. Nevertheless, Russia was prepared to use it as a concentration and rear depot area before the First World War. It is also possible that the Soviet Union planned to use the Baltic region as the assembly area for an invasion it was planning to launch on East Prussia and Germany in 1940-1941.

As the Germans saw it, the Baltic region was an area dominated by Germans for centuries. After Swedish and, later on, Russian occupation, it still remained under German cultural and economic sway. Militarily, the significance of the Baltic region has not been defensive, however. In both World Wars Germany used the territories of Estonia, Latvia and Lithuania in offensive operations directed at the capture of St. Petersburg.

3 SOVIET OCCUPATION

The Forest Brethren

Not all citizens of the Baltic states submitted quietly to the Soviet command that was reestablished in the republics; many entered into armed resistance. During the peak periods of resistance probably 0.5-1.0 per cent of citizens fought in its ranks: some 10 000 Estonians, 10 000-15 000 Latvians and about 30 000 Lithuanians. It is estimated that in 1945-1952 perhaps 100 000 people took part in the activities of the Forest Brethren. (MISIUNAS & TAAGEPERA 1983, 81, 84)

The resistance fighters initially armed themselves with abandoned German weapons. Later on weapons were captured from Soviet soldiers in skirmishes and ambushes. The arms caches of the movement were evidently sufficient, but ammunition was badly lacking. The Brethren remained in hiding on their farms or lived in dug-outs concealed in the vast forests. Clothing and food were adequately provided from privately owned farms until those were collectivized. (MISIUNAS & TAAGEPERA 1983, 84)

The resistance movement was best organized in Lithuania where a central organization, The United Democratic Resistant Movement, existed. In summer 1947, even a 17-day officers course was arranged, in which some 72 men were trained. The Lithuanian resistance movement was well organized because the leadership was in the hands of former professional officers. (MISIUNAS & TAAGEPERA 1983, 84-85)

The Estonian and Latvian Forest Brethren, in contrast, were unable to organize any nation-wide leadership. Although only under local command, operational groups nevertheless existed in all Estonian and Latvian provinces. The Estonian, Latvian and Lithuanian movements worked virtually independently of one another and of foreign countries. (MISIUNAS & TAAGEPERA 1983, 85-87)

Armed operations were mostly skirmishes and ambushes aimed at keeping the forces of the Soviet Ministry of the Interior

on the defensive. Some major attacks were launched, in Tartu in 1945, Kilingi-Nõmme in 1946 and Okte in Kurzeme in 1950. Additionally, Lithuanians fought six major battles during a 13-month period in 1945-1946. Other resistance activities of those times were the boycotting of elections, paralysing of the work of local Soviets, warning of deportations and acting against Communist collaborators. (MISIUNAS & TAAGEPERA 1983, 86-87, 90)

The Forest Brethren lost much of their operational strength in 1948-1949 when deportations intensified and the collectivization of farmland dried up food and clothing supplies. Activities had largely ceased by about 1950. In Latvia scattered battles continued until 1950 and in Estonia until 1953. Lithuanians changed their resistance from active to passive in 1952. However, some individuals remained in hiding for as long as two decades. The last Estonian fighter drowned himself in 1978 while trying to evade capture. (MISIUNAS & TAAGEPERA 1983, 90-91; LINDSTEDT 1992a, 23)

The successfulness and long duration of armed activities demonstrate that the terrain and self-sufficiency in food production make it possible to carry on guerilla type operations in all the Baltic countries. Another conclusion is that centralized command and coordination enhanced the efficiency of activities in Lithuania. Thirdly, one can conjecture that cooperation between the Estonian, Latvian and Lithuanian Forest Brethren would at least have strengthened intelligence and thereby all activities.

National Divisions

After the take-over in 1945, the Soviet Army organized national divisions in the Baltic republics, providing young male citizens the opportunity to do their national service at home. The higher command of the Estonian division was first composed of 'Russian Estonians', among whom there were Communists and even persons who had no command of the Estonian language. Later on, both the Estonian and Latvian divisions recruited some true national officers. (ARJAKAS 1992, 243; VIDRIUSKAS 1991)

MAP 6: Estonia

The headquarters, 1st Infantry Regiment [IR] and branch units of the Estonian National Division were situated in Tallinn, the 2nd IR was in Järgala, the 3rd IR in Jõhvi, a Tank Regiment in Keila and an Engineer Battalion in Narva (SINIMÄGI 1992). The Division was expected to establish an Army Corps in wartime which would be responsible for coastal defence.

The Soviet forces in Estonia consisted of one motorized infantry division in Tallin, another in Klooga, two field artillery regiments in Viljandi and one engineer regiment in Pärnu. (SINIMÄGI 1991)

After the 20th Party Congress of the Communist Party of the Soviet Union, some kind of mutiny took place in the Georgian national division. Therefore, all the national divisions were suppressed in March 1956 and the troops were organized on universal basis. (SINIMÄGI 1991)

Air Defence Zone

By 1990, the Soviet infantry stationed in Estonia had diminished to only one motorized division, with its garrisons located in Tallinn, Klooga and Keila. Other Soviet army units were a BC-warfare regiment in Pärnu and an engineer regiment in Tapa. (ÖVERBEFÄLHAVAREN [ÖB] 1992, 2, Appendix 1) According to some sources, also a small unit of marines may have been stationed in Tallinn. (HUITFELDT 1991, 33; RISLAKKI 1992b)

Interceptor regiments of the Leningrad Air Defence Army operated in Estonia from Haapsalu, Pärnu and Tapa airbases. At one time Tapa was also a base for a helicopter unit (ÖB 1992, 8). The Tartu airbase was used by one of the Smolensk Air Army's strategic bomb regiments and a transport regiment (ÖB 1992, 8; SEPPÄLÄ 1991). Some ten kilometres outside the base was a nuclear bomb storage.

Surface-to-air missile [SAM] brigades were deployed in Kuressaar, Keilajõe, Rakvere and Valga. Six air-warning radar stations controlling the northern airspace were installed along

the coast of the Gulf of Finland. The area of responsibility of the Estonian Air Defence Division extended to the Suursaari-Kiviõli-Rannapungerja line in the east, while the Leningrad Air Defence Division covered the airspace east of that line. (LINDSTEDT 1992c, 18)

The Tallinn minesweeper base was the main naval base of the Soviet Baltic Fleet in Estonia. The Paldiski missile boat base was protected by an anti-aircraft missile battery, and it also concealed an immense training complex for Soviet submarine crews (ÖB 1992,6). Inside the centre there were two training simulators with their nuclear reactors, one for Delta I-III and the other for Typhoon-type submarines (LAANEOTS 1992). Navy Air Force wings used the Ämari-Vasalemma air base. (ÖB 1992, 6)

The Soviet military units and their deployment in Estonia give the impression that, in the Soviet view, Estonia was an extension of the Leningrad air defence zone and critical to securing the mouth of the Gulf of Finland. The relatively weak ground forces were most probably intended to defend the Estonian coast and her larger islands.

The construction of air warning radar stations along Estonia's northern coast indicates that the Soviet Union did not trust Finland's capabilities to prevent the use of her airspace for air raids against the Tartu air base. The air defence division deployed in Ingermanland to defend Estonia's northeastern airspace may in reality have been intended to defend the Soviet arms factories located in the area. Another explanation would be that the Soviets regarded northeastern Estonia as part of Russian Ingermanland rather than Estonia.

The immense downgrading of the Soviet Baltic Fleet in the early 1990's diminished the importance of Paldiski naval base. The older nuclear submarine reactor was de-activated in the early 1980's and the newer one in 1989 (VAINIO 1992; BORISOV 1991). The dismantling of both reactors was begun in early 1994 (ROTKO 1994a), and evidently most Russian military and technical personnel will leave Paldiski after the reactors have been transported to Russia.

Strategic Infrastructure

In Latvia, the Headquarters and HQ-units of the Baltic Military District were stationed in Riga. One tank division was garrisoned in Dobeles, while one regiment of the motorized infantry division stationed in Estonia was deployed in Aluksene. (HUITFELDT 1991, 33; ÖB 1992, Appendix 1; KOSKELA & BERGSTRÖM 1992, 39)

MAP 16: Soviet Armed Forces in Latvia in 1992.

Soviet Air Defence Airforces had their bases in Riga and Vainode. Fighter and bomb regiments were operating from Tukums, Lielvarde, Jekabpils and Daugavpils air bases. One transport regiment was based at Riga and one reconnaissance flight regiment at Krutspils (ÖB 1992, 7-8). Additionally, one Military Academy of the Air Defence Air Forces, as well as a radio and electronics school, were located at Daugavpils. (GEIBA 1991)

The immense Soviet Garkalne Depot area was situated at Adaz, on both sides of the Riga-Pskov highway some 30 kilometres northeast of Riga. It evidently contained at least a technical depot and a large depot filled with field artillery ammunition. Another ammunition depot was situated in Cekule. North and northwest of the Garkalne depot area there was a vast army training area. (HS 13.7.1992, A3, A22; HS 14.7.1992, B1)

Latvia's major ports of Riga, Ventspils and Liepaja, provided important naval bases for the Soviet Baltic Fleet (CLEMMESSEN 1990). Liepaja served as the main Soviet submarine base in 1939-1941 and again from 1945 onwards (SUVOROV 1990, 132; SCHULTE 1992), while Bolderaja naval base near Riga was a major shipyard. (AL 28.6.1992, 27)

Latvian strategic objects in the Russian view are the Liepaja naval base, the satellite monitoring centre in Ventspils and the anti ballistic missile [ABM] Henhouse radar installation in Skrunda (RISLAKKI 1992a; HS 10.2.1994, C2). In March 1994, a preliminary agreement between Russia and Latvia was reached, which permits the radar installation in Skrunda to operate for

four years, after which it will be dismantled during one year and a half. (VALKONEN 1994a; LINSIÖ 1994a)

The deployment of Soviet forces in Latvia confirms the interpretation that especially Riga but also Daugavpils held strategic significance for the Soviets, and does now for the Russians. A tank division was very probably deployed in Dobeles, and a motorized infantry regiment in Aluksene, in order to secure vital traffic connections. This and the fact that there were major ammunition stores in Latvia, suggests that Latvia was regarded as the rear area of the Baltic Military District.

Offensive Deployment

Soviet troops in Lithuania were deployed at about 15 localities (TS 15.6.1992, 14). The largest garrisons were in Klaipeda and Vilnius, both hosting one motorized infantry division, and at Kaunas and Jonava where there were barracks for one parachute division. (ÖB 1992, 4-5)

MAP 7: Lithuania.

One divisional mobilization depot was situated in Paprade, one engineer regiment in Kaunas, a surface-to-surface missile brigade in Telsiai, a signal regiment in Taurage, and a support regiment in Kibartai maintaining the gas pipeline to Kaliningrad (ÖB 1992, 4-5). Additionally, a large tank and helicopter depot was located at Jonava (BANKS 1992b) and a satellite monitoring centre at Linksmakalnis. (BANKS 1992)

Siauliai provided the base for a fighter regiment and an electronic warfare regiment. Kedainiai and Panevezys had bases for air transport regiments and Kaunas a base for a helicopter regiment (ÖB 1992, 7-8). Mickunai and Alytus had bases for air defence forces and Marijampole and Karmelava for air force units. (BANKS 1992b)

A marine regiment garrison was located in Telsiai and a large fuel depot in Pagegiai (BANKS 1992b). In addition there were Soviet garrisons at Plunge, Ukmerge, Grodkovo, Kalvarija,

Prisani and Probrade. Klaipeda was an important garrison with one strong division which was renamed as a coastal defence division in 1990. (STARR 1990)

The Soviet forces in Lithuania appear to have been closely associated with the army size force based in the Königsberg/Kaliningrad area. That formation was most probably intended to form the second column of the former Warsaw Pact forces with the mission of attacking to the coasts of the Atlantic Ocean or launching an amphibious operation in southern Sweden (THE MILITARY BALANCE IN NORTHERN EUROPE [TMBINE] 1990-1991, 18). The two parachute divisions deployed in Lithuania add further support to the view that these forces were meant for offensive use.

Russian Strategic Interests

In the Russian view, former Soviet strategic objects in the now independent Baltic republics continue to be important for the defence of St. Petersburg, though according to Russia's Minister of Defence Pavel GRATSHEV, not irreplaceable after a certain transition period (BEAVER 1992). Similar submarine nuclear reactors as those at Paldiski exist at the Sosnovyi Bor nuclear power plant installation (VAINIO 1992) and in Nizni Novgorod [Gorki].

The loss of the Liepaja submarine base hampers the activities of the Russian Baltic Fleet, even though the fleet is to be diminished in size still more (WOFF 1992, C-13). Clearly some new base capacity must be built elsewhere, either in the Königsberg/Kaliningrad region or at the bottom of the Gulf of Finland. (DUDNIK 1992)

The question of Russia's land connections to and from Kaliningrad has been solved. As early as July 1991, Lithuania and Russia concluded at least a preliminary agreement on the use of land transportation routes and energy supply lines to and from the Königsberg/Kaliningrad region. (FT 30.7.1991, 2)

The one strategic question that remains unresolved is the entrance to the Gulf of Finland. As long as the strategic and military situation in the Baltic Basin and the Baltic Sea remains

quiet there is little reason for concern. If tension were to rise in the northern Baltic Sea, however, the question of who controls the large Estonian islands and the Åland islands could be of considerable importance.

Fettered Lands

Close economic ties were forged between Estonia, Latvia, and Lithuania and the other Soviet republics during the Soviet era in 1944-1991. It now looks as though all three republics will be able to break most of these ties. The main issues are energy and ethnic minorities.

Before regaining their independence, the Baltic republics imported all their oil (KOMAROV 1992) and 90 per cent of the energy they consumed from other Soviet republics. Estonia was exceptional in obtaining half of her energy from domestic resources. (KORHONEN 1991)

Electricity production was part of the larger, fully integrated Soviet system (TKL 1991, 13). For instance, the Ignalina nuclear power plant in Lithuania exported electricity to Latvia and Belarus (KORHONEN 1991) and earlier also to Kaliningrad. The price of energy was also kept artificially low. (TKL 1991, 13)

The industrial complexes built in the Baltic republics during the Soviet era were inefficient, old fashioned, impractical and grossly oversized. Enhancing the quality of industrial products and widening the assortment to meet western standards will require very heavy investment. (KORHONEN 1991; KOMAROV 1992)

It is far too early to say anything about the future of agriculture. During the Soviet era the Baltic states were an area of overproduction and exported large amounts of food to the other Soviet republics (TKL 1991, 1-2). The impact of the privatization of farmland, and the effects of agriculture and customs policies in the Baltic republics and of Russian and Western trade policies remain to be seen. From the viewpoint of national defence, self-sufficiency in food production is not at a bad level.

The demographic changes that took place in the Baltic states during the Soviet era are of strategic and long-lasting importance. The influx of ethnic Russians was encouraged by a labour policy which served only the economic and political interests of the Soviet Union (GRÖNHOLM 1992). Russian labour had to be imported to run the mammoth industrial complexes of the Soviet Union. (STRODS 1991b)

On numerous occasions since 1992, Russian conservatives have demanded protection of ethnic Russians living in former Soviet republics, by the use of force if necessary (HS 31.7.1992 C3). Russia has accordingly initiated a scheme to secure the privileges of some 25 million ethnic Russians living outside the Federation. According to the plan, presented by Russia's Foreign Minister Andrei KOZYREV in January 1994, Russia will for instance stop energy deliveries to those former Soviet republics in which the privileges of ethnic Russians are denied. (IS 19.2.1994, A 19)

According to ColGen I. N. RODIONOV, the Commandant of the Russian General Staff Academy (VIGOR & ORR 1992, 4), "Russia has fought to acquire free access to the Baltic Sea and the Black Sea for centuries. Therefore, the Baltic states should guarantee free access for Russia and not allow third parties to deploy their troops on their soil. They should also guarantee that they will not enter military alliances directed against Russia and they should unambiguously guarantee the human rights of ethnic Russians living in their countries."

Russia's foreign policy stance is not easing the situation at all. Russia regards former Soviet republics and the Baltic republics alike as 'close foreign countries' (KARVONEN 1992; LAHTINEN 1992) or 'satellite countries' (BANKS 1992b). Another frequently heard term is 'small foreign countries'. (KARVONEN 1992)

From the military point of view, the continued presence of Russian military personnel, and agreements on the military use of traffic connections in the Baltic republics, cannot be neglected either. The agreement on using Lithuanian roads and railways to and from Königsberg/Kaliningrad has already been mentioned. Paldiski is still a Soviet city with its 7000 Russian inhabitants, and the city council is manned by Russians. It seems clear that

Paldiski will remain a Russian enclave and be a sanctuary for Russian criminals for a long time to come. (ROTKO 1994b)

In Latvia, Russians are maintaining their presence by keeping and operating the Skrunda ABM site at least until the end of the century. Even the new radar installation built at the site in the late 1980's is now being equipped with electronics (TOOM 1994). This state of affairs suggests Russian military wishing to preserve its presence into the future. An operating radar station means that Latvia, too, has to submit to Russian transit traffic to and from the site.

From the strategic point of view, energy supplies, ethnic and military issues and perhaps reactionary politics could tie the Baltic republics to Russia for a considerable time to come. These factors, and a Russian *de facto* presence, also make them vulnerable to blackmail.

4 ESTONIA: VIRGIN MARY'S LAND

Estonia's land and freshwater area of 45 215 square kilometres makes it a little smaller than Latvia and Lithuania but larger than Denmark, Holland and Switzerland. Estonia borders on the Baltic Sea in the west and north, Russia in the east and Latvia in the south. In 1945 her borders were fixed so that the overall length diminished to about 1200 kilometres including some 720 kilometres sea frontier. (EILART 1989, 46; TBS 1991, 13)

MAP 6: Estonia.

Today most of the border with Russia runs along the Narva River and across its artificial lake and Lake Peipus [Peipsi järv]. In the southeast, the border stretches for 150 kilometres along the wooded Haanaja Hills. The 275-kilometre-long southern border with Latvia runs mainly in wooded and swampy terrain.

The Estonian Constitution of 1992 defines the borders as those fixed in the Treaty of Tartu in 1920. These borders run some 15 kilometres east of the Narva and across Lake Pskov. In the Russian interpretation, even Narva and its surroundings are ancient Russian territory which was annexed to Estonia only after the 1917 Revolution (SINILIND 1985, 21; AL 23.7.1992, 13). According to the Law on Russian Borders, only the technical marking of borders may be an issue of future negotiation, not their general location. (HS 24.2.1993, C1)

North of the level Pärnu-Mustvee, the Estonian bedrock is slatestone. The thin soil cover increases southwards but not to more than some 200 metres (TBS 1991, 14). In southern Estonia the bedrock changes to red sandstone, covered in places by as much as 600 metres of till and earth. In the north the terrain is flat and relatively barren, and in the south more rolling. (EILART 1989, 46-47) The average height above sea-level is about 50 metres. The highest point in all of Estonia, Latvia and Lithuania, Mt. Munamägi in southeastern Estonia, is only 318 metres above sea level. (TBS 1991, 14)

Forests cover some 38-40 per cent of the country and mires 20 per cent (TBS 1991, 14-15; LEET 1992, 41). The southwestern parts of the country are flat and swampy although the sandy beaches of Pärnu are also found there. A long, relatively thinly populated region extends from Kuusalu and Palmse near by the north coast down to Pärnu and Kilingi-Nõmme. The northern parts of this area are covered by the vast forest known as Kõrvemaa [The Wilderness]. (EILART 1989, 48-49)

West of lake Võrtsjärv [Lake Vorts] are the Sakala Hills, and inland from the northwestern shore of Lake Peipus stretches the broad and heavily cultivated Pandivere plain. The Otepää Hills rise southeast of Võrtsjärv, and the Haanaja Hills in the southeastern corner of the country. Eastern and northern Estonia are widely covered by sharp sandy ridges and elongated gravel formations, or drumlins. The largest drumlin is some ten kilometres long and rises to an average height of 144 metres above sea-level. Drumlins and lakes are particularly typical north of Tartu. (EILART 1989, 48-49, 51)

Estonia's richest mineral resources are the large oil shale and phosphorite deposits located in the northeast (TBS 1991, 14). The slag from the mining of the oil shale has been amassed into huge hills. These, and the Sinimägi knoll area situated between the coast and vast swamps, could provide some defence possibilities in this part of the country. From Kuremäe westward stretch the vast forests and swamplands that the Forest Brethren once used as hide-outs (LINDSTEDT 1992a, 23). The western bank of the Narva and the northern coast of Lake Peipus are covered with low forest and shrubbery.

The approximately 1400 lakes cover only 4.5 per cent of the total area. Lakes are generally small and shallow, with the notable exception of lakes Peipsi and Võrtsjärv. The number of rivers is 7378. Rivers in the north and west discharge into the Baltic Sea, while those of the eastern uplands empty into lakes Peipus and Pskov (TBS 1991, 15; EILART 1989, 44). Only the largest and swiftest rivers, including the Narva, Emajogi and Pärnu, and some narrow but deep river valleys in the northern part of the country, possess any value as military obstacles.

The prevailing winds blow from the west. Climate is maritime in the west and continental in the east, with mean annual temperatures varying from +6 °C in the west to +4.2 - 4.5

C in the east. Maximum rainfall is some 500 mm on the coast and 700 mm in the uplands. Snow usually covers the hills in the southeast from December to the end of March, and in hard winters the whole country from January to March. During mild winters Estonia has no permanent snow cover. (TBS 1991, 14)

In 1990 Tallinn had a population of 484 400. Other major cities were Tartu [115 400], Narva [82 300], Kohtla-Järve [76 800], Pärnu [54 200], Sillamäe [20 700] and Rakvere [20 100]. The remaining 27 cities were administratively subordinated to the 16 provinces [maakond]. The local administrative unit is the municipality [vald]. (TBS 1991, 13)

Traffic Routes to be Repaired

The total length of Estonia's road network is 14 800 kilometres. Main roads generally run from north to south but a few also from northwest to southeast and from northeast to southwest. The Tallinn-Narva highway M 11 is the only major west-east road. Construction work has been done to improve it to the status of motorway (IS 12.9.1991, A10). The Tallinn-Pärnu-Ikla highway will form the northern section of the Via Baltica, which is planned to run from north to south throughout the Baltic republics. Estonian's main roads are surfaced and comparatively broad. The smaller roads tend to be in poor condition.

MAP 6: Estonia.

The Tallinn-Narva highway, the only highway running into Russia in the northeast, crosses the Narva by the Castle of Narva. The road network from the level of Kohtla-Järve-Rannapungerja eastward is quite sparse. In the southeast, around Petseri, some ten small roads cross the Estonian-Russian border, while in the south the Estonian-Latvian border is crossed by some 30 roads.

Estonia's railway network is 1000 kilometres long. The gauge is 1524 mm, the same as in Russia. Some steps have been taken to double track the Tallinn-Narva-St. Petersburg section (IS 12.9.1991, A10); all other railway lines are single tracked. The Tartu-Petseri railway is connected to the Russian railway network

and the Tartu-Valga railway to the Latvian network. Likewise the Tallin-Pärnu railway joins the Latvian system at Laatre. The condition of the Estonian railways is poor.

In 1939 there were some 26 harbours along the Estonian coast. At present, the main seaports are Tallinn, Paldiski, Haapsalu and Pärnu. Their annual handling capacity is 7 million tonnes of freight, which once used to represent some 2 per cent of the total capacity of the Soviet Union. Tallinn harbour is able to handle 18 000 tonnes of grain per day (HS 27.10. 1991, B6; TETT 1991). Smaller harbours and anchorages, some 15 along the Baltic Sea coast and two on Lake Peipus (EESTI MAANTEED 1990; TEED E JA TURISMIKART 1990), can be used by smaller boats and amphibious vessels.

During the Soviet era, only the Rommansaari port in Saaremaa was able to unload significant amounts of fuel. Estonian Transoil opened a new oil terminal at Muuga near Tallinn in early 1993. Storage capacity was initially 4000 cubic metres but there is room for an increase in capacity up to 100 000 cubic metres. (HS 24.3.1993, B8)

Estonia's main airports are at Tallinn, Tartu and Pärnu. Pärnu was used by both Soviet airforce and civilian traffic, while Tartu airbase, which is one of the largest in Europe, was solely a military base. Various aviation activities have also been carried on from Tapa, Vasalemma, Hapsalu, Vääna-Joesuu, Paldiski, Lihula, Valga, Võru, Mustjõe, Viljandi, Võhma, Koigi-Nurmsi, Adavere, Kunda, Kohtla-Järve and Kuusiku airfields, as well as from two air bases in Saaremaa (SINILIND 1985, 100, 102-103). The condition of the military airports is generally not good.

During the Soviet era there were some 350 000 telephones in Estonia and the state of communications was fairly good, relative to the rest of the Soviet Union (RAUDSEPP 1992). Traffic within the country was based on the star network, with calls between the provinces being routed through the Tallinn telephone exchange. Additionally, some direct lines were provided between adjacent provinces (GEUST 1992). From 1992 onwards, a mobile phone network has been available for internal calls. (TS 2.7.1992, 8)

A Finnish-Swedish-Estonian joint venture, AS Eesti Telefon, has plans to set up 270 000 modern digital telephone connections in the country in the next 10 years. Large cities and enterprises

will be the first priority. Tallinn, where a modern digital city exchange has already been installed, will have more than half of the new telecommunications capacity. (JOKELA 1992a)

In December 1992 a new fibreoptic cable connection was commissioned between Helsinki and Tallinn, making it possible to increase transmission capacity almost without limit. Later on, the same cable will be used to connect Latvia (RAUDSEPP 1992) to the international telecommunications network via Helsinki and Stockholm. The cable will also form an essential part of the wider international network planned to cover the whole Baltic Basin. (JOKELA 1992b)

A Finnish 1800-channel analogue link, a 960-channel digital link and a reserve underwater copper cable provide additional communication lines between Tallinn and Helsinki (RAUDSEPP 1992). Telephone calls can also be made to Helsinki through the NMT-450 mobile phone network operating in Tallinn (TKL 1991, 8). Telecommunications from Estonia to CIS countries continue to go via Moscow. (GEUST 1992)

Widened Territorial Waters

Estonia's coastline is 3789 kilometres long. In the north, at Paldiski, the Gulf of Finland is a mere 50 kilometres wide. The straits between the mainland and the large Estonian islands usually freeze over in mid-January, for three months, but the Gulf of Riga freezes only in the harshest winters. The coast westward from Kunda is broken with capes and bays; and the few islands and rocky islets are increasing in number with the continued rising of the land (TBS 1991, 14). The islands of Kihnu and Ruhnu in the Gulf of Riga belong to Estonia.

MAP 6: Estonia.

Estonia has set its territorial waters at 12 nautical miles [nm], but in the Gulf of Finland the waters do not in practice exceed 9 nm, and narrow down to as little as 3.6 nm by Kerinsaari. Territorial waters and the free passage at the narrowest point of the Gulf of Finland thus remain as in the Soviet era. (ROTKO 1993a)

On the west coast, the widened territorial waters could bring potential oil and gas deposits into the hands of Estonia. They also close the Gulf of Riga to uncontrolled navigation and push this elsewhere, farther from the coast (HS 19.12.1992, A2). It needs to be added that, when it comes to surveillance and control of the territorial waters and arranging sea-rescue operations, the possession of wide territorial waters poses a problem for a country such as Estonia with only limited resources.

In general, the sea-bed drops down to 10 metres about 1 to 2 kilometres from the coast. The mean water depth is also more than ten metres in the middle of the gulfs, with the exception of the Gulf of Paldiski, Kurksisalmi and Vainameri where it is only six metres. The maximum depth of the Gulf of Riga is 46 metres. (LOVIISA 1982; HANKO-LOVIISA 1982; POHJOIS-ITÄMERI 1982)

Waves in the sea normally do not exceed one metre in height, or in storms more than six metres. On the west coast the salinity of the water is 5-7 per mille. Coastal waters are heavily contaminated in places, especially outside Sillamäe and Kohtla-Järve and in the Gulf of Riga. (TBS 1991; TIMONEN 1993)

Along the Gulf of Narva the road network by and large follows the coastline with only a few roads running inland. Between the Bay of Kunda and Tallinn a dense road network stretches to the seashore. To the west and southwest of Tallinn, the main roads run parallel to the coast and the roads inland from the coast begin at the heads of the capes.

South of Haapsalu, the coastal road network becomes quite dense. Along the Bay of Pärnu and along the coast south of Pärnu, the main road runs parallel to the coast. The shore road along the east side of Lake Peipus runs from Vasknarva almost down to Emajogi. From the northern shore of the lake the road network is directed towards Kohtla-Järve and Rakvere, and from Mustvee towards Tartu.

Ethnic Problems

According to the 1989 census, Estonia has a population of 1 565 662, of which 1 126 900 dwell in urban centres. The average density of population is 35 inhabitants per square kilometre. Births in 1988, as in 1977, numbered about 25 100. By 1990, however, the number had dropped below 23 000 and in 1993 to

only 15 000. In the 1980's the rate of abortions was 120-140 per 100 births. (TBS 1991, 13, 16; MANNILA 1994)

Of the total population in 1989, altogether 963 269 individuals [61.5 per cent] were Estonians, while Russians numbered 474 815 [30.3 per cent], Ukrainians 48 273 and Belarussians 27 711. The Russian minority lived mainly in Tallinn and northeastern Estonia. In Tallinn 53.2 per cent of the population were Russians, while in Southeast Estonia they formed an overwhelming majority of more than 90 per cent. (HS 16.11.1991, C3; TBS 1991, 16)

By early 1994 the number of Russians had diminished by some 80 000. However, among the more than 400 000 still living in Estonia there are some 11 000 ex Soviet officers and their 30 000 relatives. Many of the officers possess weapons. (LOUENIVA 1994b)

After the restoration of independence, Estonian citizenship was granted to all those who had lived in the country before the occupation and to their descendants. Citizenship may also be granted to persons who have lived in the country since 1990 for at least two years (HS 26.11.1992, C3). The applicant has, however, to demonstrate a passable command of the Estonian language. (VASARA 1993)

Ethnic Russians are in no way a homogeneous group. For instance, Russians who have received Estonian citizenship, some 30 000 in all, have established a society to attend to their interests, and at the first meeting conservative Russians held a protest demonstration outside the conference hall (HS 31.1.1993, C1). Additionally, in Narva one formation of the Estonian Civil Guard [Kaitseliit] is composed of ethnic Russians. (HELMÉ 1993)

The large Russian minority nevertheless constitutes a security risk to Estonia, in the short run at least. An industrial action in the oil shale pits and power plants of northeastern Estonia would shut down the economy (EELRAND 1992). The workers' guards attached to the ethnic Russian Inter-movement, (GRÖNHOLM 1992; DEMARI 16.1.1991, 15; IS 19.1.1991, A20), are thought to be still active though operating undercover. Armed activists are estimated to number some 30-40 in Narva and some 100 elsewhere in Estonia, while Russian national radical circles claim numbers exceeding 1800. (SARASMO 1992a; IL 27.8.1991, 13)

The one million ethnic Estonians produce some 6000 to 7000 boys in an age cohort. If some 80-90 per cent of these were to be trained in military service the number of reserves would increase by at least 5000 men annually. The size of the Finnish Field Army is some 530 000, ten per cent of the population. With calculations based on the Finnish example, and training over a period of 20 years, Estonia could establish a wartime defence force of 100 000 men. A field army of that size could easily establish an efficient territorial defence covering the whole country.

Problematic Northeastern Corner

From the viewpoint of Estonian defence, the major strategic object of the country is Tallinn with its harbours and airport. These could easily be captured by an air assault raid. The northeastern parts of the country are mostly inhabited by Russians and valuable to Estonia industrially. Rakvere and Tapa are vital crossroads further to the west. Other objects of strategic importance are the cities and airports of Tartu and Pärnu, the airfield of Ämäri, the harbour of Paldiski and the large Estonian islands.

The north coast is vulnerable to landing operations especially between Narvajoesuu and Sillamäe, and between Aseri and Paldiski. Saaremaa, Hiiumaa, Haapsalu and some harbours on the southwest coast have earlier been subjected to landing operations. The northeast coast of the Gulf of Riga as well as the northwest and northern parts of Lake Peipus are also suitable for modern landing craft. An attack directed south of Lake Pskov towards the northwest or southwest most probably would involve the use of the Pskov-Riga highway.

Arranging for the defence of northeastern Estonia requires attention to both the Tallinn-Narva highway and the roads running from the northern shores of Lake Peipus to Kohtla-Järve. The Tallinn-Narva road and the area round about are particularly suitable for the massive use of tanks, and the terrain offers little natural defence. Even the Sinimäe hill area would be easily leapfrogged by helicopters. Defence possibilities are further

weakened by the ease of bypassing defence strongholds through resort to maritime operations across the Gulf of Finland.

Still, the northeast is not impossible to defend; far from that. The swampy, wooded area north of Lake Peipus with its sparse road network provides ample opportunity for utilizing the terrain and guerilla-type operations. The terrain west of Tapa and Rakvere also provides considerable advantages to the defender. Nevertheless, to block movement in the direction of the Tallin-Narva highway and railroad would require large numbers of antitank and anti-aircraft missiles.

The coastal defence of northeastern Estonia requires attention to two areas: the shores of the Gulf of Finland and those of Lake Peipus. That presupposes the establishing of permanent surveillance posts on both shores, and mobile formations ready to operate in both directions and equipped with coastal missiles. It is also easy to mine the north coast and block the passages to major harbours.

The frontier areas of southeastern Estonia are wooded and the terrain is undulating. Farther to the northwest there are large fields suitable for extensive heliborne and airborne operations. Still further northwest and west, to the level of Rāpina-Võru-Valga, the wooded and hilly terrain provides abundant opportunities to the defender. Using the terrain and guerilla-type tactics the defender would easily be able at least to slow down an enemy advance towards Tartu. The defence of the Estonian-Latvian frontier presupposes cooperation between the two countries.

Except for the extensive tracts of cultivated land about Valga, Estonia's frontier areas to the south are mainly wooded and swampy and the road network is not very dense. These frontier areas, too, favour the defender. The main problem is in the direction of the Riga-Pärnu highway, where two parallel roads run northwards along sandy and flat pine heath. Yet, even here a defence could be mounted from the woodlands stretching on the eastern side of the highway from the border up to Pärnu.

The sandy beaches of the Gulf of Riga's northeastern coast lend themselves to landing operations. This, and the fact that the Riga-Pärnu highway runs close by the coast, underscores the need for defence cooperation between Estonia and Latvia and for effective arrangements to block the access to the Gulf of Riga

at the Straits of Irben. The coastal defence of Southwest Estonia has to cover not only Saaremaa and Hiiumaa but also the small harbours along the coast. Even in this direction the defence must be based on mines, permanent surveillance posts and mobile missile units.

Although Estonia's northeastern border and her strategic objectives may not be easy to defend, the terrain and self-sufficiency in food production give support to the defender. The defence may be begun from the sea and the frontiers and the resistance against occupation rely on a territorial defence covering the whole country. An effective defence nevertheless requires full-scale training of the whole male population, an ability to protect strategic objectives, local forces capable of guerilla-type operations, and modern mines and missile weaponry.

Total Territorial Defence Concept

The aim of Estonia's foreign policy is political, economic and military integration into Europe, even membership in Nato or the Western European Union [WEU]. Close ties with NATO are regarded as offering the best security guarantee of the Baltic republics (HS 26.3.1994, B17; HEISKARI 1992; SANTAVUORI 1992; KNUUTI 1993a). In this respect, neutrality seems not to be an option at the moment (KNUUTI 1993a). Estonia is a member of the North Atlantic Cooperation Council [NACC] and has signed the Partnership for Peace agreement with NATO.

National defence is provided for in paragraphs 1-2 and chapter X of the 1992 Constitution (VIRO 1993). A draft for the defence doctrine, "The Basic Principles of National Defence" [Riigikaitse Põhialused] (VIRO 1993) was submitted to the Parliament [Riigikogu] on 11 March, 1993; on the basis of this the Parliament was to prepare a resolution commissioning the government to prepare legislation for the national defence. (HELME 1993)

Note: By July 1994, the Parliament had not finished handling the draft and no final defence decision had been approved (VIRO

1993). Thus, if not otherwise noted, the following synopsis is based on the draft and does not reflect a parliamentary decision.

Geopolitically, Estonia lies between East and West, and stronger, imperialistic neighbours have previously exploited her frequently. For the moment, the prevailing thaw in East-West relations and increased international cooperation have diminished Estonia's military-political significance. However, the continuation of this state of affairs presupposes that reforms aiming at the establishment of democracy and a market economy continue in Russia. (VIRO 1993)

Even after Russian forces have all withdrawn from Estonia, certain internal threats will still prevail. Large numbers of ex-Soviet army officers and reserve officers live in the country and 70 per cent of them possess automatic weapons. Some circles in northeastern Estonia have expressed a desire to transform that part of the country into an autonomous [Russian] district. If political forces become polarized in Russia the old leadership may try once again to seize power in Estonia. (VIRO 1993, 2-3)

The greatest external threat is that Russia is restored as an imperialistic or communist state. The weakening of the Russian central government could mean loss of control of the Russian contingencies deployed near the Estonian border, and Russian armed paramilitary forces might initiate military action against Estonia. Conflicts, hunger and epidemics in the St. Petersburg area could encourage illegal immigration and bring a stream of refugees into Estonia. (VIRO 1993, 3)

A major European war could also spill over into Estonia, and local skirmishes between other states might touch her soil in the form of international terrorism or counter-terrorism. A nuclear accident could take place in the Sosnovy Bor, Ignalina or Loviisa nuclear power plants located near by. Not even the possibility of local or world-wide nuclear war has been excluded in the draft. (VIRO 1993, 3)

Estonian security policy [julgeolekupoliitika] calls for an active foreign policy [välispoliitika] and defence policy [kaitsepoliitika]. The national defence [riigikaitse] is based on a total national defence concept [totaalkaitse riigikaitse printsiibi]. The overall security system thus comprises foreign policy and military policy with all its military, economic, civil defence and psychological dimensions. (VIRO 1993, 4)

Total national defence relies on the total infrastructure and defence forces of the country as well as on human and economic resources. The aim is to preserve peace and demonstrate such strength that the mere existence of the defence capability persuades the potential aggressor to reconsider (VIRO 1993, 4). The primary objective in establishing the defence forces was to create a situation such that Estonia could not simply be swept away without anybody noticing. That stage was achieved by late 1993. (KNUUTI 1993a)

The tasks of the national defence shall be: 1) to defend Estonian integrity and maintain the authority of the government appointed under the Constitution; 2) to control and defend the nation's land and sea territories and airspace; 3) to maintain law and order; 4) to provide education and training for those serving in the Defence Forces; 5) to guarantee the security and defence of citizens; 6) to prevent armed skirmishes and conflicts; and 7) to organize and undertake armed resistance in case of attack. (VIRO 1993, 3-4)

It is a constitutional requirement that all citizens take part in the national defence (VIRO 1993, 9). A law on universal conscription that concerns only males was passed by the Parliament in April 1994 (VÄÄTTÄNEN 1994). Under the law, service in the defence forces is of 12 months duration (VÄÄTTÄNEN 1994; RIUTTALA 1994, 46). The opportunity to undertake substitute service is available to those with alternative religious or moral convictions. (VIRO 1993, 9)

The defence forces [kaitsejõud] would be composed of the Regular Army [kaitsevägi], Civil Guard [Kaitseliit], Frontier Guard [piirivalve], Military Formations for Internal Security [sojaväestatud sisekaitseüksused], Coast Guard [rannavalve] and Rescue Formations [päästeteenistus]. (VIRO 1993, 5)

Citizens' Army

The Commander of the Defence Forces [kaitseväge juhataja], who is in charge of the Regular Army and Civil Guard, is aided by General Headquarters [Kaitsejõudude Peastaap] and Civil Guard Headquarters [Kaitseliidu Staap]. A plan has been prepared to establish four Defence Areas [kaitseringkond]: Northern [Põhja],

Southern [Lõuna], Western [Lääne] and Maritime [Mere], with the respective headquarters located in Tallinn, Võru/Tartu, Pärnu/Viljandi and Kuressaare in Saaremaa. In a more detailed plan the country would be further divided into 16 Defence Districts. (VIRO 1993, 6)

Three services would be established: the Army [maavägi]; the Air Defence Forces, which would consist of radar units, anti-aircraft artillery and air force; and the Navy [Merivägi], which would be composed of coastal defence units, marines and a Navy proper (VIRO 1993, 6). The Air Defence Forces and Navy have not thus far been established. (KNUUTI 1993b)

Wartime defence forces would consist of *general forces* [üldrakendatavad väeosad] and *local forces* [territoriaalkaitse väeosad] (VIRO 1993, 6). The general forces, which would total some 15 brigades (KNUUTI 1993b), would engage the invader all over the country. Local forces would fight enemy air assault and landing troops and their special forces [spetsnaz] in their own district. Local defence would be organized by the Civil Guard Headquarters. (PEASTAAPI ÜLEM 1992, 5)

The Civil Guard is a voluntary, non-political defence organization that operates according to a manual confirmed by the government. It is commanded by the Chief of Civil Guard [Kaitseliidu ülemaga] aided by his staff (VIRO 1993, 7). The guard is composed of 16 Civil Guards [malev = troop] divided further into 25 local sections [malevkond]. (KNUUTI 1993b)

The Civil Guard has the right to issue its own manuals. It also has a youth organization [Nuoret Kotkat; Young Eagles] for 7-14 year old boys (HELME 1993) and a women's organization (KUBU 1992b). The aim of the youth organization is to promote children's will to defend their country and enhance their physical condition. (HELME 1993)

The Defence Forces' officer corps is educated at the War Academy [Sõjakool] which until the end of 1993 was a faculty of the National Defence Academy. A graduate is expected to be able to command an infantry platoon and carry out the tasks of a company commander. To ease the acute shortage of officers, by the end of 1993 five officer courses lasting 2-6 months had been arranged (RIUTTALA 1994, 50-51). The non-commissioned officers are trained at Fighting School [Lahingukool] situated in Võru. (MATTILA 1994)

To avoid a repeat of the tragic events of 1939 and 1940, the leadership of the Estonian defence is now committed to fight for the independence of the country, should it be threatened (HELME 1993; LAANEOTS 1992). Fighting will begin from the coasts and frontiers in order to allow time for mobilization, and the campaign will be conducted within the framework of a territorial defence concept. (HELME 1993)

However, when adapting the plans to the available limited resources, the conclusion has been that the war-fighting capability must first bring up to a level on which resistance is possible to conduct for some 3-4 weeks. (KNUUTI 1993b)

Sentries of Security

The Frontier Guard is an armed organization responsible for the inviolability of Estonian borders. In peacetime it is subordinated to the Ministry of the Interior and carries out its duties on the borders, airfields, harbours and sea frontier. In times of war and crisis it will be subordinated to the Supreme Commander of the Estonian armed forces. (VIRO 1993, 7)

In peacetime, the Coast Guard is responsible to the Board of Navigation [Veeteede amet] but functions operationally under the General Headquarters. In times of war and crisis, it will be attached to the Navy. (VIRO 1993, 8)

The Formations of Internal Security [sisekaitseüksused] are police and prison warder units (HELME 1993). These form the Operational Regiment of Internal Security [Sisekaitse Operatiivrügementi], which in peacetime is subordinated to the police. In times of war and crisis the regiment will be attached to the Defence Forces and subordinated to the Supreme Commander of the armed forces. (VIRO 1993, 8)

Rescue units are under the jurisdiction of the Civil Defence [kodanikukaitseasutus] and comply with the four Geneva Conventions from the year 1949 and their two amendments of 1977. In wartime they will not take part in armed action but will contribute to the total defence by carrying out their own responsibilities related to Civil Defence and rescue operations. (VIRO 1993, 8)

Whose armed Forces ?

The Estonian constitution vests the President of the Republic with almost no power in foreign policy issues in peacetime (NIIRANEN 1992), but his supreme leadership of the armed forces gives him a special role in times of peace and especially crisis. The President appoints officers and presents to the Parliament his choice as candidate for the Commander of the Defence Forces (SARASMO 1992b). In defence issues the President is aided by the Defence Council [Kaitsenõukogu]. (VIRO 1993, Appendix 5 and 6)

In times of crisis the President has the power to declare a state of war and to mobilize the armed forces if the country is invaded. Should some external circumstances prevent the assembling of Parliament he can make decisions in the name of Parliament, supported by the Prime Minister and the Speaker of the Parliament. If the country is in a state of emergency the Constitution concentrates even more decision-making power in the hands of the President, who stays outside day-to-day-politics. (SARASMO 1992b)

The relationships between the highest leaders of the armed forces will be regulated in laws yet to be enacted. In the draft of the defence doctrine it is stated that in peacetime the Commander of the Defence Forces, and in wartime the Supreme Commander [Kaitseväe ülemjuhataja] under whom the Defence Forces are to operate, should be directly responsible to the President. (VIRO 1993, Appendix 5 and 6)

At the government level, defence issues are the responsibility of the Minister of Defence aided by the Ministry of Defence [kaitseministeerium]. Together they formulate defence and military doctrines and look after legislation, organization, training and equipping of troops (REBAS 1993). They also direct defence policy, take charge of economic matters and look after issues related to the administration, infrastructure and health care of the Defence Forces. In the Parliament defence issues are handled by a permanent Defence Commission [riigikaitsekomisjon] (HELME 1993). Some initiatives have been taken in government circles to attach the General Headquarters more closely to the Ministry of Defence (LOUENIVA 1992). If

this happens, the influence of the government in defence issues would increase. Plans have also been presented to the effect that all the armed forces' units in which conscripts are serving should be responsible in peacetime to the Ministry of Defence (WALTER 1992). That would transfer the supervision of the Frontier Guard from the Ministry of the Interior to the Ministry of Defence. It would also increase the power of President in security issues.

Self Defence Capability

Certain ideological and psychological problems have existed in the will of citizens to defend their country. Some have a lingering opposition to service dating back to Soviet times (LAANEOTS 1992). Moreover, Estonian ex-Soviet officers are not regarded as fully appropriate or competent for the new tasks (LAANEOTS 1992, JÄRVE 1992). Conditions in garrisons have been spartan. Finally, not even legal sanctions exist against those who simply refuse to enter military service (SARASMO 1992a; KUBU 1992b; HS 19.3.1993, A14). Despite all this, some 70 per cent of males in the age cohort liable for service joined the ranks in 1993. (RIUTTALA 1994, 46)

The annual budget of the Defence Forces in 1993 totalled just over USD 20 million and comprised some 3-4 per cent of the national budget. Much of the funds had to be applied to rebuilding garrisons destroyed by departing Russian troops (HAAPAVAARA 1992, A18; LOUENIVA 1994a). By early 1994, the living conditions of garrisons had been brought up to a satisfactory level, as had the equipment necessary for training; and there was also more money available for other training purposes. (LOUENIVA 1994a)

In 1993, the Estonian Defence Forces were composed of three small infantry battalions ['Kalev' in Jägala, 'Viru' in Jöhvi and 'Kuperjanov' in Võru], a Signal Company in Jägala, a Guards Battalion, Transportation Battalion and Radar Battalion in Tallinn (HELME 1993, KNUUTI 1993b; KUBU 1992a; HAAPAVAARA 1992; WIKSTRÖM 1992). In 1992, small rescue/civil defence units were deployed at Jöhvi, Tartu, Tallinn and Pärnu, and in 1994 independent infantry companies were stationed at Pärnu, Tartu, Paldiski and Tapa.

In early 1994, the peacetime Army of some 5000 men consisted of motorized infantry equipped with small arms, some mortars, and anti-tank and anti-aircraft weapons. The aim is to increase the strength up to 10 000 men, of which one third would be professionals (LOUENIVA 1994a). Most of the four hundred officers in active service were Estonian ex-Soviet professional or reserve officers. The first ten officers graduated from the Finnish Military Academy in 1994 and another ten will graduate in 1995. (RIUTTALA 1994, 46; LOUENIVA 1994a)

Until such time as the Defence Forces have produced enough reserves to establish wartime brigades, it would of course be possible to use reservists that were trained in the Soviet Army. In spring 1993, each city still had an operating National Defence Section, charged with the task of carrying out mobilization and maintaining a list of those who had served in the Soviet forces. Available weapons were few. Moreover, a loophole in the covering legislation meant that the reservists could not be called into refresher training exercises.

In 1994, the Frontier Guard comprised 2400 men - 1400 professionals, 1000 conscripts and 100 Coast Guard men (KÖUTS 1994, 30). Equipment consisted of ex-Soviet light arms, and some lorries and technical equipment donated by Germany (TS 25.2.1993, 16; HELME 1993). The Coast Guard had one unarmed ex-Swedish and three lightly armed ex-Finnish patrol boats. (KNUUTI 1993b; AL 21.8.1992, 11)

Russia handed over to Estonia her former sea surveillance radar installations in Tahkuna, Kopu and Saaremaa in February 1993 (HS 17.2. 1993 C1). Two old L-140 aeroplanes of Czechoslovakian origin were additionally available for sea-patrolling. (HELME 1993)

Border guarding operations in early 1993 were still concentrated only around border crossing posts, and coast guard activities around Narvajoensuu and on the Narva. Because of the lack of personnel, Frontier Guard conscripts received only two months basic training before being sent to border posts. Their military skills and usefulness in wartime duties represent a rather modest level therefore.

In late 1993, the Civil Guard was about 6500 strong, including some 100 paid personnel (KNUUTI 1993b). Its

weaponry was motley and mostly acquired from various sources by the volunteers themselves (SARASMO 1992a). In Haapsalu and Pärnu there were also two old ex-Soviet patrol boats possessed by local civil guards. (JÄRVE 1992)

The efficiency and political reliability of the Civil Guard were at one point undermined by the rivalry between different political factions over the key issue of the attitude towards ex-Soviet Estonian Army officers (JÄRVE 1992; KUBU 1992b). The radical wing had been established in the late 1980's by citizens close to the Estonian government in exile (JÄRVE 1992). After some rebellious actions by the radicals, which even led to the retirement of the Minister of Defence in 1993 (KNUUTI 1993a), the situation now seems to be under control.

Western and Nordic countries have on many occasions refused to sell weaponry to Estonia (UMMELAS 1994). Thus, defence material is mainly of Soviet origin acquired from Russian sources and bought from countries such as Romania (IS 15.12.1992). Lately, some weapons have also been bought from Israel. The current hope is to purchase weaponry of NATO standards from Israel, China, South Africa and international markets. (UMMELAS 1994)

In March 1994, moreover, the United States lifted her arms sales embargo to Estonia, Latvia and Lithuania (TS 24.3.1994). Some efforts have also been made toward establishing a small-scale domestic defence industry. (KUBU 1992a, LINSIO 1992)

Long March

The building of Estonian armed forces and a viable defence capability is a project that will last decades. Small age cohorts, which cannot be trained either completely or properly, produce reserves very slowly. The quality of military training is suffering not only from the deficiency of material but from the lack of field manuals and instructors. Moreover, Russian military thinking, tactics and way of soldiering are not suitable for a small democratic country, and it will take decades before Estonia's own Military Academy provides enough adequately trained officers.

The lack of instructors and defence material will also make the use of reserves in local defence relatively difficult for a long time. The Civil Guard may provide some relief in this respect, but the number of its members should be drastically increased and cooperation between individual guards and the General Headquarters needs to be smoother.

Although the Estonian economy seems to be recovering quite well (HANTTU-KISKONEN 1992), the national product will remain small for years and there will be little in the way of funds to be spent on defence. According to one estimate, the minimum material level of the Estonian Defence Forces, proportioned to that of Finland, would be some 60 tanks, 20 interceptors, 6 missile boats and 100 armoured personnel carriers. The price of that amount of defence equipment would be about USD 400 million. (SANTAVUORI 1992)

There are plenty of weapons available on U.S. and world markets but only in exchange for hard currencies. Massive western aid or a miracle in the Estonian economy is therefore a prerequisite for solving the worst material problems quickly. If Estonia is left to equip her armed forces herself, it will be years before even the controlling of territory and airspace and the guarding of borders are on a satisfactory level. In realistic terms, the defence capabilities of Estonia will remain modest for some two decades.

However, as long as no crises arise in the Baltic Basin the matter is not serious. From the viewpoint of Finnish and Swedish security, the proximity of the southern coast of the Gulf of Finland, Paldiski and the larger Estonian islands are a real strategic issue. The ability of Estonia to control her own territory and defend it is important to both countries. In the end, the steady development of Estonia's control and defence capabilities is in the interest of all countries in the Baltic Basin, and ultimately in the interest of Russia as well.

5 LATVIA: LAND OF AMBER

With an area of 64 600 square kilometres, Latvia is a little smaller than Ireland and one third bigger than Denmark and Estonia. The Republic of Latvia borders on Estonia in the north, Russia and Belarus in the east, Lithuania in the south and the Baltic Sea in the west. The maximum length of the country is 210 kilometres measured from south to north and 410 kilometres measured from west to east. (TBS 1991, 89)

Baltic sources commonly give the overall length of Latvian borders as 1800 kilometres, 339 kilometres of which are common with Estonia and 610 with Lithuania (TBS 1991, 13, 89, 175). Measured on the map, however, land borders are only 1100 kilometres long, 275 kilometres of which are common with Estonia, 220 with Russia, 136 with Belarus and 455 with Lithuania. (GROSSE REISEKARTE 1992)

MAP 7: Latvia.

The northeasternmost corner of Latvia, the Abrene area which was joined to her in 1920, was annexed in 1945 to the Russian Republic (MISIUNAS & TAAGEPERA 1983, 71). Since then, the population of this 2000 square kilometre area has been Russified and in 1991 only some 300 of its inhabitants were Latvians (RISLAKKI 1991a). The Abrene area is not vital to the defence of Latvia, but Abrene itself, nowadays located on Russian soil, is a railway junction through which runs the shortest railway connexion between the Latvian cities Vecum and Karsava. (STIPRAIS 1991)

Latvia consists of four historical counties: Kurzeme in the west, Vidzeme [Livonia] in the north, Latgale in the east and Zemgale south of the Daugava River. Bedrock is limestone in the southwest and dolomite in the middle and the east. Most of the country is covered by glacial deposits, but also clay is found in several parts and sand near the coast. (TBS 1991, 90)

The coastal lowland is some 2 to 50 kilometres wide and varies in height from 5 to 60 metres (TBS 1991, 90). The highest point of the Kursa elevation in Kurzeme [Courland Peninsula] is Krievukalns, 184 metres above sea level. The central Zemgale plain is dominated by the Riga-Jelgava lowland, which in the north lies below sea-level and in the south does not rise more than 25 metres above it. (TBS 1991, 90; SILVANTO 1927, 12-13)

The Vidzeme elevation in the north rises to an average 180 metres above sea-level, the highest point, at 312 metres, being Gaizinkalns in the southeastern corner. The Vidzeme elevation also includes some parts of the Gauja River valley and stretches north of the Riga-Pskov highway A 212. The Latgale upland lies in the eastern part of the country where the land rises 170-180 metres above sea-level. (TBS 1991, 90; SILVANTO 1927, 12-13)

Some 41 per cent of Latvia is covered by forests. Richly wooded areas are found in the northern parts of Kurzeme and Vidzeme and along the lower courses of the rivers Daugava and Gauja. About 10 per cent of the country is swamp-land. The most extensive swamps lie in the coastal and East-Latvian lowlands, while the richest farmland is around Dobeles, Jelgava and Bauska. (TBS 1991, 89-90)

More than 3000 lakes larger than one hectare cover about 1.7 per cent of Latvian territory. Lakes are generally very shallow with an average depth of only 1-5 metres. Some 40 per cent of the lakes are in the Latgale elevation in the east, but there are many in the coastal lowland as well. The largest rivers are the Daugava and Gauja. Of the other more than 12 000 rivers, only 17 are longer than 100 kilometres (TBS 1991, 90). From the military point of view, the Venta River [Windau] which crosses the Kurzeme plateau, and all the rivers of the Riga-Jelgava lowland, are also significant.

Latvia's climate is variable. For instance, some 120-140 lows and gales are counted each year. The average temperatures in January vary from -2.6 °C in the west to -6.6 °C in the east, those in July from +16.8 °C to +17.6 °C. Annual precipitation is a moderate 600-650 millimetres. Because of numerous thaws, the snow cover seldom exceeds 15-20 millimetres. Exceptionally, in the Vidzeme elevation in the north about 50 centimetres snow may accumulate in ordinary winters. (TBS 1991, 90)

In 1990, some 916 500 people, and about 34 per cent of the total population, lived in Riga. Other large cities were Daugavpils [128 200], Liepaja [114 900], Jelgava [75 100], Jurmala [66 400], Ventspils [50 400] and Rezekne [42 900]. (TBS 1991, 89)

Thoroughfares

The total length of the Latvian road network is 20 600 kilometres (TBS 1991, 99). Main roads generally run from south to north and southwest to northeast, reflecting Latvia's significance as a transit area. From the military point of view, the Riga-Pskov highway and the section of the Via Baltica that runs across Latvia are of special importance.

The Ostrov-Rezekne Daugavpils-Kaunas/Vilnius highway is another major transit route. The Riga-Daugavpils highway running on the northern side of the Daugava is an important interstate road. Main roads are generally surfaced and broad, but the condition of the road network is not very good with the exception of the area around Riga.

MAP 7: Latvia.

Latvia's road network is connected with that of Estonia in more than 20 places, and with that of Russia by four highways and fewer than 20 smaller roads. Three main roads and about 15 smaller ones lead from Latvia to Belarus, and seven main roads and tens of smaller ones to Lithuania.

Some 271 kilometres of Latvia's 2397-kilometre-long railway network has been electrified (TBS 1991, 99). The gauge is 1524 millimetres, as in Russia. The railway between Riga and Daugavpils and the Karsava-Daugavpils section of the St. Petersburg-Warsaw railway are double tracked. Two railway connections run to Estonia, three to St. Petersburg, one to Moscow, one to Minsk and five to Lithuania. When the Soviet Union collapsed, Latvia got possession of numerous railway depots and engineering workshops located on her soil. (NURMI 1993)

The Daugavpils District in the southeastern part of Latvia holds special strategic value as a transit area because of its many crossroads and railway junctions. In 1991, the daily frequency of road traffic in that area was 2600 vehicles between Daugavpils and Vilnius and 400-900 between Warsaw and St. Petersburg. (GEIBA 1991)

All Latvia's seaports - Riga, Ventspils and Liepaja - are of strategic importance. The Bolderaja naval base near Riga was once a major Soviet naval shipyard (AL 28.6.1992, 27). Ventspils is Latvia's busiest export port and it was also the Soviet Union's only oil and gas export terminal on the Baltic Sea, the end point of the 1121-kilometre-long Polotsk-Ventspils oil and gas pipeline (TBS 1991, 99; HS 11.9.1991, C2). In 1989, about 38 million tonnes of freight including 32 million tonnes of oil products were handled in Latvian ports. (TBS 1991, 99)

Latvia's ordinary airports at Riga, Daugavpils and Ventspils were used by both civilian and military aeroplanes during the Soviet era. Soviet military air bases were located at Vainode, Tukums, Lielvarde, Jekabpils, Paplaka, Jelgava and Krutspils. (ÖB 1992, 7-8)

In 1992, calls to Finland could be made through Riga's NMT-450 mobile phone network (TKL 1991, 8; HS 9.10.1992, B13), and other international calls through satellite (PESONEN 1992, 19). In October 1992, a wider NMT-450 network became operational covering first the larger towns (HS 9.10.1992, B13). Telecommunications to Russia and other CIS countries still go via Moscow. International telecommunications will improve only after Latvia is connected with the fibreoptic cable coming from Helsinki via Tallinn.

Gulf of Riga and Baltic Sea

Relatively deep (POHJOIS-ITÄMERI 1982) and badly polluted (TIMONEN 1993), the Gulf of Riga is Latvia's and Estonia's mutual 'inner sea' which freezes only in the severest winters. It is reached in the north through the Strait of Suur Väin and in the southwest through the Strait of Irben, which separates Saaremaa from the northwest coast of Kurzeme. In the northeast, waters

become deep a few kilometres from the coast, but south of Salgagriva very close to the shore.

Off Latvia's west coast, the sea remains unfrozen even in the coldest winters. Coastal waters are shallow, less than 10 metres deep, up to 1-3 kilometres from the shore. At Ventspils, which lies at the mouth of the Venta, the sea-bed drops down to 40-50 metres about 15 kilometres from the coast. Near Liepaja, the water becomes 40 metres deep about 25 kilometres from the shore and the Gotland Deep is less than 50 kilometres from the city. (ETELÄ-ITÄMERI 1981)

The deep water nearby and the central location of Liepaja probably were the key factors behind the establishing of the main base of the Soviet Baltic Fleet there.

Latvia's coast is 500 kilometres long, straight, with no islands and very few capes (TBS 1991, 81). Its single prominent point protruding to the sea is Kolka Horn [Kolkasrags]. Underwater sand bars make the coastal waters unsuitable for seafaring or anchorages (SILVANTO 1927, 8), though they are easily navigated by amphibious vessels and hovercraft.

A long sand embankment runs parallel to the west coast some 30-60 metres from the shoreline. It is 10 metres high at maximum, broad, grass-covered, and with occasional tall trees. Here and there it disappears into the sandy shore. Sometimes yet another ridge runs parallel to the first, but this is either fully wooded or has become indistinguishable from the terrain of the coastal lowland. The eastern coast of the Gulf of Riga is in places bordered with bluffs but there is no regular embankment. (SILVANTO 1927, 9)

A highway runs along the coast, and between Riga and Saulkraist the Riga-Tartu railway. From the Gulf of Riga, four main roads run inland. Main roads also connect the larger coastal towns of Kurzeme to the cities of Tukums, Talsi, Kuldīga and Saldus.

Latvia set her territorial waters in 1990 at 12 nautical miles. The only places where problems of interpretation might occur are the waters between Roja and the island of Ruhnu and in the Strait of Irben. A question of some interest is whether Latvia is able to arrange adequate surveillance and control and sea-rescue activities in her wide territorial waters.

A Bare Majority

According to the 1989 census, Latvia had a population of 2 680 000, of which some 71 per cent lived in urban centres. The average density of population was 41 persons per square kilometre, but most of the population lived in an area covering only six per cent of the total territory, and especially in and around Riga. The density was lowest near Ventspils where it was only some six persons per square kilometre. (TBS 1991, 91-92)

Births in 1987 numbered 42 135 but in 1990 had declined to 37 918. Even mortality, which bottomed in 1988, began to increase again in 1990 (BARANOVSKI 1991). On the grounds of these statistics it is quite impossible to predict demographic development in Latvia, or the strength of the cohorts of able-bodied males that can be produced for the needs of the armed forces.

At 52 per cent [1 388 000] ethnic Latvians only just form a majority of the population. The largest minorities are Russians [906 000; 34%], Belarussians [120 000; 4.5%], Ukrainians [92 000; 3.5%], Poles [60 000; 2.3%] and Lithuanians [35 000; 1.3%] (TBS 1991, 93). In regard to language, it is notable that 48 per cent of the population uses Russian and not Latvian in daily communication. (VANHALAKKA 1992)

Latvians are clearly in the minority in Riga, comprising only one third of the capital's 916 000 inhabitants. Russians also form a vast majority in the strategically important city and district of Daugavpils. Some 84 per cent of Daugavpils' 128 000 inhabitants in 1992 were of other ethnic origin than Latvian (ANDREJEVS 1992). The population of the Daugavpils District in 1991 was 47 000, of which, by birth, 35 per cent were Latvians, 12 per cent Poles and 53 per cent Russians. (GEIBA 1992)

The large Russian population dates back to the time of the Czars when Latvia became a popular place for retired army officers; the trend continued after 1945. In 1991 some 60 000 ex-Soviet officers lived in Latvia (KARVONEN 1991). An influx of Russian workers occurred in the early 1960's when the country became heavily industrialized. The underlying purpose of this may have been Russification since Latvia had neither raw

materials nor a labour force of its own, essential for the production. (ANDREJEVS 1992)

Latvia's Inter-Movement, supported by about 300 000 Russians, was banned in August 1991 (HOLOPAINEN 1991) but some undercover activities may still be going on. In autumn 1991 the violent special troops, OMONs, responsible to the Soviet Ministry of the Interior, were expelled from the country. Some 50 of them never did leave, however, and evidently went underground, many of them with their firearms. (ANDREJEVS 1992)

The Parliament passed the very strict Bill of Citizenship in June 1994 (HS 22.6.1994, C1). Citizenship is granted to all those who lived in Latvia in 1940, and to their descendants. This group includes some 400 000 people who are not ethnic Latvians. (ANDREJEVS 1992)

Approximately one third of the 800 000 people, who do not meet the basic criterium, but are older than 16 and born in Latvia after 1940, can apply citizenship in 1996-2000. The remaining 500 000 can apply citizenship after the year 2000, but the quota will be no more than some thousand new citizens annually. (HS 23.6.1994, C2)

The Government has since the end of June 1994 tried to get the Bill being changed because the strict formulation is likely to harm Latvia's relations with the European Union and the European Council (HS 23.6.1994, C2). It is thus possible that the Bill may be later reformulated.

In poor economic and socially unstable times, the large Russian minority residing in strategic areas of the country could pose a security risk. In considering the question of citizenship it needs to be remembered that too liberal regulations in this respect may in time threaten the status of ethnic, Latvian-speaking Latvians in their own country.

There are some 7000 to 8000 ethnic Latvian males in each age cohort and, if 80-90 per cent of them could be trained in national service, reserves would increase by 6000 to 7000 men annually. After 20 years, Latvia's wartime armed forces would then consist of some 140 000 men. A wartime army of that size could easily sustain an effective territorial defence throughout the country.

Paved Road from Pskov

From Latvia's perspective, the major strategic object is Riga with its harbours and airports. However, the capital is not easily conquered by raid owing to its geographical location; a successful operation would almost certainly presuppose the use of substantial ground forces or a strong 'fifth column'. Another strategically valuable area is the southeastern corner of the country, which Russia, Belarus and Lithuania also find of interest.

In the north, between Ainazi and Valga, swampy and in places also wooded border areas could easily be defended by fighters able to exploit the terrain. Coastal defence lines could of course be penetrated by a flanking operation from the sea. In this direction, Limbazi-Valmiera-Smiltene, and Valmiera itself, possess definite strategic value since the road network towards Riga becomes significantly denser to the south and southwest.

The paved road running from Pskov in Russia via Estonia to Riga is the most important strategic direction in the northeast. Aluksene and Gulbene are also of some significance from the operational viewpoint, since numerous smaller roads run towards them from the east. From Gulbene there is a road connexion to the Daugava River, which passes by the Vidzeme Uplands.

In the northeast, swampy, wooded and hilly terrain is favourable to the defender, although certain roads there are accessible to the invader. In the east-southeast the defence can be based on the Vidzeme Uplands, which channels movement into a few passages.

With its density of road and rail connections the Ludza-Rezekne-Kraslava-Daugavpils area in the southeast is suitable for strategic troop concentrations. The area is part of the Latgale elevation, whose wooded and hilly terrain with abundant lakes favours the defender. In the defence of Rezekne and Daugavpils, the Krsava-Ludza-Kraslava level is of great importance because the road network west of there allows the attacker wide freedom of operation.

Northwest of Daugavpils there opens an access to Riga by the road and railway running on the north bank of the Daugava. These traffic routes can also be accessed directly from Rezekne at Jekabpils and Plavinas. On the south bank of the Daugava there is another road, whose condition significantly improves in

Jekabpils. The river itself is not an unsurmountable obstacle with modern military equipment.

The road network of the plain south of the Daugava River is sparse in the east, and south of Jekabpils roads run mainly from north to south or northeast to southwest. The Plain is favourable for attack and it was used for offensive purposes in both world wars. Despite its numerous rivers, the Jelgava-Bauska region in the western part of the Plain is a natural invasion route toward Riga because of the dense road network. The Zemgale plain is difficult to defend but with guerilla operations may offer some means to slow down enemy movement.

The Kursa elevation in Kurzeme [Courland Peninsula], and the Venta River flowing across it, are natural hindrances to invasion from the west. Kursa channels movement in two directions: to the coastal plain and the Jelgava-Bauska lowland. In the direction of the Jelgava-Bauska lowland, the Kursa elevation may only provide a sheltered assembly area for counterattacks. But against an attack directed towards Riga from the coast of the Baltic Sea, it offers good opportunities for defence.

Latvia's seacoast is easily penetrated by landing craft and especially hovercraft. Coastal sand dunes covered with trees may favour the defender in places, but they can also be controlled by fire from sea and air. The Coastal plain and Kursa elevation allow easy surveillance and control of the territorial waters, coast and air space. The Strait of Irben can be blocked by mines, artillery and coastal missiles from both sides.

Topographical features favour a defence begun from the borders and coasts. Latvia, it would seem, should put her emphasis on vast reserves, a territorial defence concept based on guerilla tactics, and the use of surface-to-air, anti-tank and coastal missiles.

Squeezed as she is between Estonia and Lithuania, Latvia has a critical need to cooperate with her neighbours and adjust her defence plans with theirs. Cooperation is particularly important in the northeastern, eastern and southeastern parts of the country. In the light of history it would also seem wise to arrange the defence of the Bauska-Jelgava area in cooperation with Lithuania.

In Case of Fifth Columns

A Draft for a Defence Concept was prepared in Latvia's Ministry of Defence in 1991-1992 and is due to be passed by the Parliament elected in 1993.

Note: By July 1994 discussion of the draft (LATVIA 1992) in Parliament was still going on. If not otherwise noted, therefore, the synopsis that follows is based on the draft and does not necessarily reflect parliamentary decision.

According to the Minister of Defence, Mr. Valdis PAVLOVSKIS, the only way to ensure Latvia's security is to participate in European security systems such as WEU or NATO. It is Latvia's long-range goal, therefore, to join these organizations. (TS 1.3.1994, 12)

Latvia will also cooperate with other European countries and develop a defence system with her neighbours (LATVIA 1992, 1). Latvia is a member of NACC, has signed the Partnership for Peace agreement and regards close ties with NATO as the main security guarantee for the Baltic republics. (HS 26.3.1994, B17)

The road to defence cooperation among the Baltic republics may be rocky because of the lack of historical precedent, economic means and ciphered telecommunications (STIPRAIS 1992). The first joint battalion size manoeuvre was nevertheless held in southern Estonia in February 1994. (TS 23.2.1994, 12)

Other joint projects will be the surveillance of borders, air space (TS 1.3.1994, 12) and territorial waters, organizing a joint peace-keeping unit by November 1995 (ETA 1994), regular meetings of defence ministers and chiefs of the general headquarters, and further joint field manoeuvres. (KNUUTI 1993b)

Latvia does not regard a democratic Russian government as an external threat. But a threat might emerge if imperialistic, nationalistic forces were to gain power in Moscow (KNUUTI 1993a). It cannot be excluded that an external attack against the Baltic republics could materialize even in post-Cold War Europe. (PAVLOVSKIS 1992, 1, 3)

Armed units within the country that might be moved to re-establish a Communist or other form of totalitarian government

pose a certain threat (LATVIA 1992). Some groups may even possess heavy weaponry (STIPRAIS 1992) received from Russia's armed forces (PAVLOVSKIS 1992, 2). These armed groups consist of Communists and Russian activists but also Latvian extreme nationalists. (TS 25.11.1992, 11)

The Home Guard of the Latvian Popular Front [Aizsargis] was established at the outset of the campaign for re-independence (THE GUARDIAN 23.3.1990, 10; THE TIMES 5.5.1990, 18). Some hundreds of members of this former nationalistic security organization allegedly began underground activities as early as August 1991 (ZVAIGZNE 1991). Even the legal Latvian Civil Guard [Semzsargis] was responsible in 1992 for 54 armed incidents in which 7 persons were killed and 31 wounded. (KNUUTI 1993b)

The strategic objectives of the defence system are to safeguard Latvian territory and air space, and to defend the country by military and other means until aid can be acquired from the international community. The defence system must also be capable of guaranteeing governmental functions in times of invasion and terrorist activities. The defence forces must be able to implement mobilization and fulfil their responsibilities under centralized and decentralized leadership, and be prepared to use guerilla tactics if need be. (LATVIA 1992, 1-2)

Parliament's Defence Forces

Latvia's national defence is supervised by the State Defence Council functioning under the Parliament [Saeima] and headed by the President who is also the Speaker of the Parliament. The Defence Council has the power to order mobilization and to declare a state of war, the latter only with parliamentary consent, however. (LATVIA 1992)

In *peacetime* the Defence Forces are headed by the Commander of Defence Forces who also coordinates the activities of the Frontier Guard and Civil Guard in border areas. During a *state of war* the President is the Supreme Commander of the national Defence Forces, under whom the Commander of Defence Forces conducts all military action. The Ministry of Defence

[Aizsardzibas ministrija] prepares a national defence plan to be approved by the Defence Council. (LATVIA 1992)

The Defence Forces consist of the Frontier Guard, Mobile Riflemen Forces [light infantry], Air Forces, Air Defence Forces and Navy. In the event of an invasion the Mobile Riflemen Forces will be supplemented by reservists and, together with the Civil Guard, form the Riflemen Forces. (LATVIA 1992, 4)

The Frontier Guard is responsible for guarding the borders and preventing illegal border crossings. Mobile Riflemen Forces take care of defence operations throughout the country, function as a Rapid Reaction Force, assist the Frontier Guard in protecting the borders and take care of mobilization preparations. (LATVIA 1992, 4)

The Civil Guard [Semzsargis] is a public, volunteer military organization (LATVIA 1992, 5) supervised by the Parliament in peacetime and the Ministry of Defence in wartime (KNUUTI 1993b). It participates in Latvia's national defence and civil defence, protects important objectives, and gives aid to the Frontier Guard. The Civil Guard Headquarters supervises individual civil guards, and sees to their mobilization and combat readiness. (LATVIA 1992, 5-6)

Other security assets are the special units of the Ministry of the Interior, the Unit for Protection of the Constitution [an intelligence organization], civil defence units and the units of non-violent resistance. Non-violent resistance would rely on mass disobedience, sabotage and other such activities, targeting these against a puppet government set up by an occupier or against those who seize power in a coup. (LATVIA 1992, 7)

Difficult Beginning

Conscription is universal but conscripts may serve either in the armed forces where the tour of service is 18 months or in substitute service. Reserves are composed of men trained in the ranks of the Defence Forces or Civil Guard. Young men of Russian origin who can be expected to take out Latvian citizenship have, in practice, also been accepted as conscripts (STIPRAIS 1992). Latvia's defence expenditures totalled 3.6 per cent of the government budget in 1993. (KNUUTI 1993b)

The Defence Forces were not established until February 1992 (STIPRAIS 1992) because the Frontier Guard had been placed in top priority. In autumn 1993 the strength of the Army was some 800 men in two mechanized battalions. The Navy had three vessels, in addition to which Germany had donated two unarmed mine sweepers and three missile boats. Air Forces had eight Mi-8 helicopters, twelve An-2 transporters and two L-410 liaison aircraft. Frontier Guard was composed of about 2500 men and Civil Guard of 10 000 persons including some females. (KNUUTI 1993b)

Plans call for an increase in the number of conscripts to 75-80 per cent of males in the age cohort, which would provide the Army with some 2000 and the Frontier Guard with about 5000 men each year (STIPRAIS 1992). The army would consist of four mechanized infantry battalions, one reconnaissance battalion and a signal and an engineer unit. The army would be equipped only with light infantry weapons and have neither field artillery nor tanks. The Frontier Guard is to be 5500 men strong and be composed of one brigade with nine battalions. (KNUUTI 1993b)

Already in autumn 1992 the number of Civil Guard members was 15 000, of which some 800 commanding officers and sergeant majors of companies were paid by the government (STIPRAIS 1992). A preliminary plan called for the establishment of one civil guard battalion in each of Latvia's eight provinces (ZVAIGZNE 1991). The overall number of reserves has been targeted at about 100 000 men. (KNUUTI 1993b)

The training programme for officers in the Frontier Guard commenced in October 1991 (STIPRAIS 1991), and the Military Academy, which is subordinated to the Minister of Defence, was established in autumn 1992. Latvia has also signed a protocol on officer training with Poland and is ready to accept western educational aid (STIPRAIS 1992). Although help has been obtained from some western military advisers of Latvian origin, the officer corps for a long time will consist predominantly of ex-Soviet officers.

Unique Defence Problems

Estonia's and Latvia's threat scenarios are alike, and both countries are preparing to face internal as well as external threats. However, Latvia's internal threats have their origins in the history and in the strong ethnic minorities. One can predict that the actual capability of both countries to defend their territories will remain on a low level for decades.

The drafts of Estonia's and Latvia's defence concepts differ in one essential point. In building her peacetime armed forces, Latvia is planning to put much greater emphasis than Estonia on the Frontier Guard because of her considerably longer land borders. Surveillance and control of these borders with normal equipment is also more difficult. Another relevant factor may be that ethnic Latvians are a minority in the strategic eastern parts of the country and in the capital.

A further difference between Latvia and Estonia is that Latvia has tied her national defence tightly to Parliament. The government's only avenue of influence is through the National Defence Council, which even then is chaired by the President, who is also the Speaker of the Parliament. During peacetime, on the other hand, the Defence Forces are subordinated to the Defence Minister and his ministry.

Another notable point is that, as in Estonia, the Supreme Commander is named only in times of war. These arrangements are probably aimed at guaranteeing the implementation of national defence in all political circumstances conceivable.

In addition to having common threat scenarios, Estonia and Latvia both place emphasis on the concept of territorial defence. Peacetime armies will remain small in both countries, which can add trained reserves only at the rate of some thousands of men annually. Local defence is therefore in the hands of local civil guards whose professional capabilities are modest owing to inadequate training. Nevertheless, the readiness to carry out a territorial defence is an ingredient difficult for an adversary to calculate, and serves to raise the invasion threshold.

In 1992, a mere USD 2.41 per capita was spent on defence purposes (PAVLOVSKIS 1992, 4), and even then a considerable

portion of the funds had to be used to restore the barracks destroyed by the Russians during their withdrawal. It seems quite clear that the economic situation in Latvia will not improve markedly in the near future and the economic means to enhance the real defence capability will remain at a modest level for a considerable time to come.

6 LITHUANIA: LAND OF THE CROSS AND HOLY POSTS

The Republic of Lithuania is an industrialized agricultural country with a land and freshwater area of 65 200 square kilometres. This makes it a little bit larger than Belgium and Denmark. The total length of Lithuania's land borders is some 1747 kilometres. In the north, the 610-kilometre frontier with Latvia follows the historical border of Kurzeme. To the east and south, the 727 kilometre-long border with Belarus runs along the Baltic uplands. (TBS 1991, 175)

In the southwest, Lithuania shares a border of 110 kilometres with Poland and one of 303 kilometres with the Königsberg/Kaliningrad administrative region, which since 1945 has belonged to Russia. This border follows the ancient eastern border of East Prussia, running along the Nemunas River down to the coast of the Baltic Sea. The length of Lithuania's seashore is only 99 kilometres. (TBS 1991, 175)

In March 1939, Lithuania was forced to cede the Klaipeda [Memel] area north of the Nemunas, and her only port, to Germany (TBS 1991, 180). In October of the same year, the Soviet Union returned to Lithuania her ancient capital Vilnius and some 6800 square kilometres of adjacent areas. One year later some strips of ancient Belarus soil were annexed to the northeastern, southeastern and southwestern parts of the Vilnius area. (MYLLYNIEMI 1977, 84; MISIUNAS & TAAGEPERA 1983, xvi; ÖMZ 4/1990, 335)

MAP 8: Lithuania.

During the campaign for Lithuania's re-independence in 1990, the Brezhnevite leadership of Belarus announced that "...in case Lithuania gains re-independence, Belarus shall claim the returning of Vilnius and six rural areas..." (BINYON 1990). It is thus possible, though not probable, that the Vilnius area might lead to disputes between Lithuania and Belarus in the future. Poland and

Lithuania, on the other hand, have announced that they will respect their present borders and lay no territorial claims. (AN 4.11.1992, 2; GRÖNHOLM 1993a)

Industrialized Farmland

Dominating Lithuania's short seacoast is the Pajuria lowland, only 15 to 20 kilometres wide and with a mean elevation of less than 50 metres above sea-level. East of the lowland lies the Zemaiciu [Samgitian] upland, which attains its highest point of 234 metres at Medvegalis. The central Lithuanian lowland, stretching as much as 100 kilometres from west to east, and lying about 35-90 metres above sea-level, commands the middle part of the country, north of Kaunas. (TBS 1991, 175)

The eastern and southern parts of Lithuania form part of the Baltic elevation, rising up to 282 metres above sea-level and bounded in the southeast by a sandy plateau. In the east are the Svencioniu and Medininku ridges, part of the Lithuanian-Belarus upland, whose highest point of 294 metres is Mt. Juozapine. (TBS 1991, 175)

There may be oil in the sea-bed of Lithuania's territorial waters and in the western part of the country, while iron ore and granite are found in the southeast. Limestone, quartz sand, dolomite, gypsum and gravel are other important minerals (TBS 1991, 176). An installation for producing unleaded gasoline was allegedly under construction in the oil refinery in Mazeikiai in 1992. (KUBU 1992c)

Only some 28 per cent of the territory is wooded, 38 per cent of the trees being pine, 21 per cent spruce and 21 per cent birch. The most extensive woodlands are in the southwestern part of the country. The central lowland has the most fertile farmland in Lithuania. (TBS 1991, 176)

The 2833 lakes larger than half a hectare and the 1600 smaller lakes cover only some 1.5 per cent of the country. Most of the lakes lie in the northern part of the Baltic elevation, on the Aukstaiciu upland. The overall length of Lithuanian's 29 900 rivers is 63 700 kilometres; 758 of these rivers are longer than 10 kilometres, the longest being the Nemunas [937 km], Neris [510 km], Venta [350 km] and Sesupe [298 km]. (TBS 1991, 175)

The prevailing winds are from the west and the weather conditions are a mixture of coastal and continental climate. Mean temperatures are -4.9 °C in January, +17 °C in July and +6.1 °C over the whole year. Average precipitation varies from 540 mm on the central lowland to 930 mm on the Zemaiciu upland. Annual statistics report 40-100 foggy days and 15-30 days with thunderstorms. (TBS 1991, 176)

Lithuania's largest city is her capital city of Vilnius where some 592 500 people lived in 1989. Other cities are Kaunas [430 000], Klaipeda [206 000], Siauliai [148 000] and Panevezys [129 000]. (TBS 1991, 176)

Transit Routes

Lithuania's main thoroughfares are the Vilnius-Kaunas-Raseiniai-Klaipeda, Kaunas-Jurbarkas-Klaipeda, Riga-Panevesys-Ukmerge-Vilnius, Riga-Siauliai-Tilsit and Daugavpils-Kaunas-Königsberg highways. The Riga-Panevesys-Kaunas-Marijampole road forms the southernmost section of the Via Baltica. The west-east thoroughfares to and from the Kaliningrad region are strategically important to Russia. Some 13 larger roads run into Lithuania from Latvia, 16 from Belarus, four from Poland and eight from the Kaliningrad region. Main roads are usually in good condition, while the state of smaller roads varies widely.

The railway gauge is 1524 mm and the overall length of the railways some 2000 kilometres. The Moscow-Minsk-Vilnius-Kaunas-Königsberg and St. Petersburg-Vilnius-Warsaw railways are of strategic importance. The major interstate railways are Daugavpils-Panevesys-Siauliai-Klaipeda, Vilnius-Kaunas-Siauliai-Klaipeda, and Vilnius-Kaunas-Siauliai-Riga. Swieciany-Vilnius, Vilnius-Kaunas and the Lithuanian section of the Vilnius-Warsaw railroad are double tracked.

A new oil terminal was under construction in 1992 at Klaipeda, Lithuania's only strategically and economically important port (KUBU 1992c). The Soviet Baltic Navy once used it as its Coast Guard base (VIDRIUSKAS 1991). The coast around Palanga is suitable for landing craft (ETELÄ-ITÄMERI 1981), but there are no harbours. (VASILIAUSKAS 1993b)

Latvia's largest airport is in Vilnius, with others in Kaunas, Palanga and Siauliai (TBS 1991, 186). Besides these, the Soviet Air Force had bases in Kedainiai, Panevėžys (ÖB 1992, 7-8) and probably even in Marjampole and Karmelava. Soviet Air Defence Forces were also garrisoned in Mickunai and Alytus. (BANKS 1992b)

Lithuania was linked up with the international telecommunications network through a digital exchange in August 1992 (HS 27.8.1992, C1). This allowed direct satellite telephone calls at least to Copenhagen (VASILIAUSKAS 1993b) and Norway (GEUST 1992). The new telephone exchange was a joint project of the Lithuanian Telephone Company and the American U.S. West Company (TS 27.8.1992, 11). Telephone connections to CIS countries still go via Moscow.

Kurisches Haff

Lithuania's southwestern coast is part of the Kurisches Haff, which is a long shallow lagoon separated from the open sea by a sandspit, Kurische Nehrung. The depth of the lagoon varies from 0.5 metres in the north to 5 metres in the south. To the west of the Kurische Nehrung the waters are only 2-7 metres deep, but about one kilometre from the shore the sea-bed drops down to 16-18 metres. (KAUNAS 1978; ETELÄ-ITÄMERI 1981)

Kurische Nehrung itself is 2 to 3 kilometres broad, stretching from Zelenogradsk in the Kaliningrad region to off Klaipėda. A road runs along the spit, and sea defences have been built on the western coast of the Lithuanian section (ETELÄ-ITÄMERI 1981; KAUNAS 1978). Sea defences may be effective against an enemy using that part of the spit for landing operations. Alternatively, Kurisches Haff can be used as an axis of advance and the Kurisches Haff for amphibious operations with hovercraft.

There are no capes or islands along the 40 kilometres of coast between Klaipėda and the Latvian border. Waters shallower than 10 metres stretch 1-8 kilometres out to sea and the sea-bed does not drop down to some 20 metres until 12 kilometres off the coast.

The Pajuria lowland is more or less open terrain across which a main road runs from Klaipeda to Liepaja. Three main roads lead inland from the coast, and from Klaipeda there are railway connexions to Latvia, Siauliai and Tilsit. (ETELÄ-ITÄMERI 1981; KAUNAS 1978; RAVENSTEIN 1992)

Surveillance and control of Lithuania's short and open coast are not a problem, even with scanty resources, but these activities must also be extended to the waters of Kurische Haff. Access to Klaipeda's harbour is also easy to block. Another coastal object to be defended besides Klaipeda is Palanga. With the openness of the coast, it could easily be defended with mobile, truck-mounted coastal missiles.

Ethnically Homogeneous

In 1989, the population of Lithuania was about 3 670 000, of which some 68 per cent lived in cities and towns and 47.4 per cent were males. The average density of population was 56 inhabitants per square kilometre. Lithuania's birth-rate has been declining since 1961, and in 1989 only 55 000 births were registered. (TBS 176-177)

Lithuania is ethnically fairly homogeneous. In 1989, 2.9 million of the population [79.6 %] were Lithuanians, 0.35 million [9.4%] Russians, 0.258 million [7.0%] Polish and 0.063 million [1.7%] Belarussians. Some 90 per cent of Russian nationals lived in cities and towns, while the number of Polish urban residents was about 58 per cent, with most of them living in Vilnius. (TBS 1991, 176-177; SAARIKOSKI 1993)

The small number of Russians reflects the policy of the Lithuanian government during the 1960s and 1970s not to accept the mammoth Soviet factories that would have brought in masses of Russian workers. During the campaign for re-independence, the political Jedintsvo movement (IL 10.1.1991, 13) sprang up among Russians who supported Communism and the Soviet Union (FT 10.9.1991, 2). The movement was joined by members of the Soviet KGB and OMON and allegedly gave military training to civilians. (HS 7.9.1991, C2)

About half of the ethnic Russians have lived in the country for centuries. By 1994, all Russian military units had been repatriated. Some 85 per cent of Russians have received Lithuanian citizenship and Russia has made no accusations of their nationals being mistreated (GRÖNHOLM 1993b; LINSIÖ 1994b). Although a Russian pro Soviet Union Rossija society still exists (LINSIÖ 1994b), it is clear that the Russian minority will not cause major problems in Lithuania.

The Polish minority, small in number and professing the same Roman Catholic faith (TBS 1991, 176) as Lithuanians, may be more of a problem. Most Poles live in the southeastern part of the country. The older people speak a Belarus dialect, while the younger ones speak Russian (TBS 1991, 176). Most of the Polish intelligensia moved back to Poland in the 1960's leaving the poorest and less educated peasants and pensioners behind. (RISLAKKI 1991b)

The Polish minority has at times strained Lithuanian-Polish relationships (HS 29.9.1992, C1). However, after year-long negotiations, Lithuania and Poland have normalized their relations and on 26 April 1994 agreed upon a Pact of Friendship and Good Neighbourliness (TS 27.4.1994, 15). The Pact is being heralded as opening a new, warmer era in the relations of the two countries. (TS 19.3.1994, 15)

The approximately three million ethnic Lithuanians easily produce more than 25 000 males a year. By training 80-90 per cent of these, Lithuania's reserves would grow by about 20 000-22 000 soldiers annually. Theoretically that would enable the country to mobilize a wartime army 300 000 strong and thereby establish a comprehensive territorial defence.

Two Directions

Because of the Russian base at Kaliningrad, Lithuania is forced to orient her defence planning in two different directions. The most important strategic objectives are the capital city of Vilnius and the seaport of Klaipeda, which are situated at opposite ends of the country and, at least in theory, could both be captured by a raid. The presence of Kaliningrad underscores the importance of

cooperation with Latvia in arranging the defence of the western and central parts of the two republics.

Lithuania can be invaded in the northwest either from Liepaja or along the route between the Kursa and Zemaiciu uplands to the Pajuria lowland and along there to Klaipeda. A coastal invasion could be supported by flanking operations from the sea. The defence of the Pajuria lowland is difficult to arrange because of the flat terrain and the short distance from the Latvian border to Klaipeda. In this direction, the defence should be based on the wooded areas around Palanga and the Zemaiciu upland.

The defence against an enemy approach between the Kursa and Zemaiciu uplands could begin at the Venta River and its valley, with the main lines of defence established on the uplands. The Zemgale lowland offers a natural axis of advance from Riga towards the central Lithuanian lowland and Kaunas. Such an invasion would be extremely difficult to ward off because of the wide open farmland in the central lowland.

Many roads run to the lowland from Latvia, and rivers do not channel movement except from west to east, and even then only to a limited extent. The central lowland narrows in the south and inspection of maps suggests that, from the level of Siauliai-Panevesys southwards, defence could increasingly be based on wooded areas.

An invasion from the northeast towards Kaunas and Vilnius could begin from the comparatively open central Latvian lowland. In this area, the good and dense road network is mainly directed from northeast to southwest and south. On maps, the terrain along the northeastern frontier is shown as wooded and with abundant lakes, but open from the Anyksciai-Utena level, and wooded again from Ukmerge southward. The River Sventoji would hinder an advance towards Kaunas. In the south, the Neris River can be assumed to have some defensive value.

The defence of Lithuania's eastern border could be based on the wooded and hilly Baltic upland where also rivers running from southeast to northwest offer defence possibilities. The few roads run mainly along the upland; only from the south and south-southeast are there major roads running towards Vilnius. The Baltic upland can be regarded as an excellent area for light infantry and guerilla operations.

MAP 12: Soviet Invasion Plan of 1940.

Nevertheless, the Soviet Union did not regard the Baltic upland as an obstacle in their invasion plan of 1940. A major attack would have been directed right across the upland towards Riga. Massive use of helicopters would nowadays make such an attack even easier to execute, but easy to repulse, too, with portable surface-to-air missiles for example.

MAP 8: Lithuania

A major highway runs from Suwalki in Poland via Kaunas to Daugavpils in Latvia. On maps, the terrain in this direction looks to be mostly open in the south; however, a natural basis for defence is offered by a discontinuous wooded zone, 30 to 40 kilometres wide, surrounding Kaunas. Around the point where the borders of Poland, Lithuania and the Kaliningrad area come together, defence could be started in the wooded terrain in the north of the Suwalki upland.

As long as the Kaliningrad area continues to house a large Russian military base, Lithuania must take it seriously into account as a potential threat. In the First World War Germany attacked Lithuania from Königsberg in both directions, Kybartai-Kaunas and Jurbarkas-Panevėžys. Likewise in the Second World War the Germans used two main directions, this time Jurbarkas-Panevėžys and the Pajūria lowland from Klaipėda northwards.

The terrain east of the Kaliningrad region is open up to the woods around Kaunas. The terrain is also open and flat north of the Nemunas River advancing from Jurbarkas towards the northeast. The Pajūria lowland is equally as difficult to defend against attack from the south as against attack from the north. The Nemunas can be regarded as an obstacle of some degree.

To repulse attacks on Lithuania from the Kaliningrad area would appear difficult owing to the open and flat terrain. However, deep territorial defence and guerilla-type operations might offer advantages to the defender. A territorial defence based on wooded areas, the uplands and abundant anti-tank and surface-to-air missile weaponry would, in general, seem to be a credible defence solution for Lithuania

Collective Security

Although Lithuania regards no country as her enemy, general instability in the east (BANKS 1992a) and the fact that Russia still regards the Baltic republics as her satellites (BANKS 1992b), or 'close foreign countries', are factors to be reckoned with. Local army officers regard Lithuania as a transit area that cannot be defended by Lithuania alone (VIDRIUSKAS 1991; KNUUTI 1993a). The Kaliningrad region is also considered a problem, not only for Lithuania but for Latvia and Estonia. (VASILIAUSKAS 1993b)

Lithuania, along with the other Baltic republics, is swiftly trying to associate herself with the European Union, NATO, other western cooperation arrangements and the Visegrad group (HS 26.3.1994, B17; TS 27.4.1994, 15). Her national defence is based on territorial defence and European security architecture, with the object of resisting the attacker as long as possible, so giving a signal to the outside world that Lithuania has been invaded. (KNUUTI 1993a)

Lithuania and Russia signed a treaty on 29 July, 1991, in which Lithuania's independence and the existence of the Kaliningrad region were both guaranteed. At the same time another treaty was signed on the freedom of movement of people and goods to and from Kaliningrad via Lithuania. Lithuania even promised to deliver gas and electricity to Kaliningrad by means of energy imported from Russia. (FT 30.7.1991, 2)

On 8 September, 1992, an agreement was signed with Russia on the repatriation of Russian troops (LIETTUA 1993) and this has already been implemented. As part of the agreement, Lithuania acquired some Russian navy vessels (TS 8.11.1992, 11) in exchange for building 2700 flats in Kaliningrad for Russian officers (HS 9.9.1992, C1). The reason for these agreements may be that the Russian minority is very small in Lithuania and Russia badly needs guaranteed land connexions to Kaliningrad.

Professional Stand-by Brigade

The president of the Republic of Lithuania is vested with a considerable amount of power. He selects the candidate for Prime

Minister for approval by the Parliament and he may remove and appoint ministers and dissolve Parliament. The President can also exercise a veto to prevent or delay legislation from coming into force. He conducts the foreign policy of the country and is the Supreme Commander of the Defence Forces. (RISLAKKI 1993a)

National defence is conducted by the Minister of Defence aided by four assistant defence ministers. In spring 1993, the first of them was the Commander-in-Chief of the armed forces, the second was responsible for civil defence, the third for administration and finance and the fourth for maintenance (TORLEIF 1993). The Ministry of National Defence receives four per cent of the government budget and deals with issues concerning the armed forces, the frontier guard, civil defence and rescue formations. (KNUUTI 1993a)

The Commander-in-Chief of the armed forces is the commander of the Army, Navy and Air Force, Frontier Guard, National Defence School, Voluntary Units, and a 300-person-strong Nuclear Power Plant [Ignalina] Protection Battalion. In addition, he is responsible for the ordnance of the armed forces. (TORLEIF 1993)

In autumn 1993, the Lithuanian Army consisted of a 2000 strong, mainly professional Field Brigade, and a Training Brigade in which some conscripts got their basic military education (KNUUTI 1993b; VASILIAUSKAS 1993b). The Field Brigade's eight lightly armed battalions were deployed in provincial centres to serve in the event of internal disturbances (VASILIAUSKAS 1993b). Its organization has been regarded as top heavy and it may be divided into two parts. (KNUUTI 1993a)

Universal conscription applies to males 19 to 27 years old. So far, however, the conscription has been selective; for while the size of age cohorts has been 10 000 to 12 000 men, only about 3500 were fulfilling their one-year-long national service in the armed forces in autumn 1993. (KNUUTI 1993a)

Territorial Defence units and the units of the National Guard [SKAT] are voluntary units. *Territorial Defence Units* are composed of 19 to 35 year-old reservists. Training of these units was intended to take place only in infrequently held [refresher] exercises. It is thus likely that men conscripted into these units do not in fact complete their one-year tour of national service.

The higher command of the units is composed of professional army officers. (VASILIAUSKAS 1993a)

National Guard [Civil Guard/SKAT] is a 10 800-strong voluntary defence organization commanded by a volunteer Chief of Staff. The defence of the parliament building against Soviet OMONs executed by its members in 1991 made the organization quite popular. In summer 1993, some 140 members of SKAT Detachment no. 226 rebelled against the "Communist" security administration, forcing the resignation of the Minister of Defence. Members of SKAT also disciplined the local mafia in a way authorities had neither the possibility nor power to do. (KNUUTI 1993a; 1993b)

Some 3000 men, most of whom were conscripts, served in the ranks of the Frontier Guard [Border Control Service] in 1993 (KNUUTI 1993b). Eventually the Guard is to be increased in strength to some 4000 men. (VASILIAUSKAS 1993a)

The 600-man Navy acts as a Coast Guard in peacetime (VASILIAUSKAS 1993b). In autumn 1993 it had two Grisha-class corvettes and four patrol boats (KNUUTI 1993b). The seaport of Klaipeda was protected by surface-to-air missiles. (VASILIAUSKAS 1993b)

The equipment of the 800-man Air Force [Flight Service] consisted of four L-39 jet trainers, two L-410 liaison planes and 20 An-2 transporters. The control of the lower airspace was inadequate because only civilian radars were available. (KNUUTI 1993a; 1993b; TORLEIF 1993)

The Lithuanian defence budget was about USD 15 billion in 1993. Seventy per cent of this went to salaries, pensions, training and daily maintenance. Thirty per cent was allocated to defence material, and one third of this to equipping paramilitary forces: the Frontier Guard, the 'Ignalina' Battalion, and the National Defence School. (TORLEIF 1993) Lithuanians did not want solely ex-Soviet equipment and attempts have been made to acquire material from the West as well. (VASILIAUSKAS 1993b; BANKS 1992a)

Partisan Defence

The defence doctrine of Lithuania was in the process of formulation at least in February 1993 (VASILIAUSKAS 1993b).

What seems sure is that it will not be based upon the Russian way of military thinking, which is regarded as unsuitable for the defence of a small country. Some have suggested that the national defence should be constructed, in one way or another, upon the example of the Israeli system. (BANKS 1992a)

For the time being, military thinking is based on the assumption that an attacker could paralyze the C³I system of Lithuania's defence forces. This means that the Field Brigade must be able to execute independent battalion-size operations (TORLEIF 1993). It is further considered that Lithuanian conventional forces cannot defend the country against a powerful enemy that uses modern technology, and the defence of the country should instead be based on a type of partisan warfare by Territorial Defence units. (THE INDEPENDENT 1991)

Voluntary units that can be mobilized within a few hours would first guard strategic objectives and supplement the Field Brigade. If the attacker could not be stopped, voluntary units would commence guerilla-type operations. In 1991, the old Forest Brethren even instructed the leadership of the defence forces in partisan tactics and in creating a resistant network all over the country. (THE INDEPENDENT 1993)

Special Case

Lithuania proclaimed her re-independence in 1990 and began to set up her armed forces one year earlier than Estonia and Latvia. In her favour she had some 1200 ex-Soviet Lithuanian army officers available (VIDRIUSKAS 1991) and many former Forest Brethren ready to be used as consultants in partisan tactics. Ex-Soviet officers had, however, only been promoted up to the level of regimental commanders, which left their knowledge of national defence issues somewhat skimpy. (VASILIAUSKAS 1993b)

Lithuania's strategic position is weaker than that of Estonia and Latvia, with the Kaliningrad region near by and the necessity to provide transit traffic. Belarus is another factor making for uncertainty, because of her political engagement with Russia and the probability that Russian troops will remain in Belarus until the end of the century (SKIERNIEWSKI 1992). On the other

hand, neither Russian troops nor large Russian minorities were present on Lithuanian soil in 1994.

Lithuania differs from her northern neighbours in forming, with Belarus and Poland, part of a strategic entity that is easily influenced by military developments in the Ukraine. By 1993, cooperation concerning Russian transit traffic to and from Kaliningrad had not been initiated between Lithuania and her neighbours.

Lithuanians elected social democracy as their way to the future in 1992, and a Lithuanian ex-communist as their president in 1993 (TS 17.11.1992, 11; TS 27.10.1992, 14; HS 16.2.1993, C1). Up until spring 1994, neither of these choices had had any evident negative impact on the building of Lithuanian national defence or security policy, rather the contrary.

In 1992, the economy of Lithuania, based mainly on agriculture, was driven into deep recession (KUBU 1992c; HS 31.10.1992, B16), but in spring 1994 it seemed already to be steadily recovering, and some analysts were predicting that the country was about to find its way toward enduring development (PAUL 1994). If such a trend prevails, Lithuania might also have the means to develop her armed forces, step by step but harmoniously

7 KALININGRAD GARRISON

At the outset of both World Wars, huge numbers of German troops were deployed in East Prussia. In 1915, the Eighth German Army consisting of one cavalry and nine infantry divisions invaded eastwards from the area. In June 1941, the German North Army Group comprising 21 infantry, three motorized and three tank divisions attacked from the northern parts of East Prussia across the Baltic states (TIPPELSKIRCH 1959, 318-319; VOLKMANN 1932, 48). In the heavy battles of autumn 1944 and winter 1945, East Prussia was conquered by overwhelming Soviet troops. (TIPPELSKIRCH 1960, 133, Map 2)

The area was divided in two after the war, the southern part being annexed to Poland, while the northern part, covering about 15 000 square kilometres, was re-named Kaliningrad and annexed as an oblast [administrative region] to the Russian Federation. The region quickly became a huge garrison area; Kaliningrad was closed to foreigners; and the port of Pillau [Baltiysk] was sealed off from other parts of the oblast. An effective ethnic purge was directed at the two million German civilians, after which the population was quickly Russified. (NUTT 1991; HELLÉN 1992)

Undulating Lowlands

Low gently rolling hills and swampy lowlands dominate the landscape of the region. The largest rivers are the Niemen [Nemunas], forming the border with Lithuania, and the Pregel, which flows from east to west across the region. In 1991, the Kaliningrad region was home to about one million people representing 77 nationalities (NUPPONEN 1992a, A19), while the City of Kaliningrad had a population of 0.4 million (LUOMA 1991a). After the collapse of the Soviet Union, Western estimates of the number of soldiers have varied between 120 000 and 300 000. (LUOMA 1991b; PETERSEN et.al. 1993, 59; NOWAK 1992)

MAP 17: Kaliningrad.

The northern border of the oblast runs along the Niemen River, which is crossed by one road bridge and one railway bridge at Sovetsk [Tilsit]. The northwestern and northern parts of the province are open and hilly. In the east the frontier first runs along the Shervinta River [Sesupe] and then, in the south, through the northwestern part of the wooded Suwalki upland.

The frontier is laid out mainly along open terrain and is crossed by one railway and four main roads. The 200-kilometre-long border with Poland does not follow any natural features but proceeds in an almost straight line through open terrain. Crossing it are a canal, three railway lines and some twenty major roads. (KALININGRAD 1978)

Forests grow mainly in the northeastern and southeastern parts of the oblast as well as on the northwest coast, from where a wooded zone stretches south around Kaliningrad and Tshernjahovsk. The highest points of the region lie in the Suwalki upland in the southeast and in the Natangen upland in the southwest. Elsewhere the land is broken and hilly and rivers abound. (KALININGRAD 1978)

The railway and road connections to Russia run via Vilna-Smolensk, Vilna-Daugavpils and Klaipeda-Riga-Pskov. The most important inland traffic routes are the road and railroad connections from Kaliningrad to Sovetsk, Kybartai and Baltijsk. Sovetsk is also connected with Tshernjahovsk by a railway. A channel has been dug from the Niemen River to the southeastern part of Kurisches Haff lagoon, where a water route opens along the Deima and Pregel rivers and the Masuria Canal to the Masuria Lake area in Poland. (KALININGRAD 1978)

The shallow waters, only 2 to 4 metres deep, at the southern end of the Kurisches Haff, form the northwest coast of the oblast. West of Kurische Nehrung, the sandspit that separates the lagoon from the open sea, the sea-bed quickly descends to more than 16 metres. A road runs along the Kurische Nehrung, but there are no harbours. (KALININGRAD 1978)

A railway runs around the Samland Peninsula in the west. The port of Pionerskij lies on the north coast, and that of Svetlin on the south coast of the Peninsula. The port and naval base of

Baltiysk command the southern end of the sand spit extending southwest from the Samland Peninsula. (KALININGRAD 1978)

The northern part of the Frisches Haff, whose waters are no more than a few metres deep, forms the southwestern coast of the province. The lagoon is separated from the Baltic sea by the Frische Nehrung sandspit, some kilometres west of which the seabed descends to 50 metres. A narrow passage leading from the lagoon to the open sea goes between the two spits (KALININGRAD 1978). The coastal waters of the Kaliningrad oblast are ice-free all year round (HELLÉN 1992) but also polluted. (TIMONEN 1993)

Oil and Amber

The Kaliningrad region possesses rich natural resources. In 1992, about one million tonnes of crude oil was allegedly pumped from its soil (HELLÉN 1992) and plans called for production to be extended out to sea.

The region also exported amber and agricultural products, and fish in amounts representing about one tenth of the Soviet Union's total catch. The surplus of agricultural products, consisting mainly of meat, dairy products, eggs and vegetables, was exported to St. Petersburg and Moscow markets. Also the timber resources are economically significant. (NUPPONEN 1992a, A20-21)

In autumn 1992, most industrial machinery was of pre-war vintage (HELLÉN 1992). Some 30 per cent of the main industrial products - pulp, paper and vodka - were exported to East-European countries. The oblast imported 80 per cent of its electricity from Lithuania, but self-sufficiency will be much enhanced by a new 540 MW power plant running on Siberian gas. Electricity needs for the future are estimated at 800-1000 MW. (NUPPONEN 1992a, A4, A20-21)

Kaliningrad oblast was not a major investment target after the war since the region was probably meant to be used as a medium of exchange for the final neutralization of Germany. Because of the exceptionally high standard of living the oblast has lately been regarded as Russia's Western Europe.

The younger, enterprising-minded generation would like to make the region a free-trade zone after the manner of Hong Kong. Cheap labour and energy might allure foreign investors if free repatriation of profits and full rights of ownership were granted. On the other hand, military concentrations, lack of hotels and the primitive level of roads and other infrastructure will certainly give pause to serious foreign investment. (HELLÉN 1992)

Attack Columns

During the Soviet era, the 11th Guards Army was stationed in the oblast, with its headquarters, signal regiment, one tank division, one motorized infantry division and two artillery divisions garrisoned in Kaliningrad. One tank division was deployed in Sovetsk and one motorized infantry division in Gusev. (TMBINE 1991-1992, 17, 33)

The Headquarters of the Soviet Baltic Fleet, one marine brigade and a naval spetsnaz brigade were in Kaliningrad, and large numbers of warships were based in its harbours and warplanes on its air bases. (TMBINE 1991-1992, 17, 33)

The 11th Army was regarded as the second or third echelon of the Group of Forces meant to launch an attack on the approaches to the Baltic and on southern Norway (TMBINE 1989-1990, 17-18). Their second mission was anticipated to be an amphibious operation in southern Sweden. (TMBINE 1990-1991, 18)

After the repatriation of Soviet and Russian forces from Germany, Poland and the Baltic republics, the forces stationed in Kaliningrad are no longer regarded as capable of such aggressive operations without considerable reinforcements. (TMBINE 1991-1992, 17)

Numerous Russian forces entered, and left, the Kaliningrad area in 1992 and 1993. The troops of the 11th Army were still there in late 1992, and at least a signal battalion and two anti-tank artillery regiments were stationed in Kaliningrad; a reconnaissance battalion, a detached tank battalion and an anti-aircraft artillery regiment in Gusev; and an engineer battalion in Mamovo. (PETERSEN et al. 1993, 61)

Besides that, an air mobile brigade was garrisoned in Tshernjahovsk and a helicopter regiment in Kaliningrad. The Russian Air Forces used Lugovoje, Tshernjahovsk, Shalovsk and Nivenskoje as their bases. (PETERSEN et al. 1993, 61)

Surveillance and Supply Base

The 11th Army may be diminished to the size of an Army Corps (Pavel GRATSHEV/ JVD, 1.8.1992, 6) and its divisions to brigades in Russia's efforts to reduce her armed forces. As all Russian troops seem to be in a continuous state of change at the moment, it is impossible to estimate their final number, nature and tasks. In any event, the troops and their equipment garrisoned in Kaliningrad oblast form a potential threat at least to Lithuania and Poland.

Strategically, however, Kaliningrad oblast is no longer an assembly area for strategic reserves or amphibious units but a forward naval, air and surveillance base. The Baltic Sea is only 300 kilometres wide at Baltijsk, which allows easy surveillance of the sea and air traffic of its southern parts, and cutting off of this in times of crisis. With the ground, naval and air forces, marines, spetsnaz units and missiles in the oblast, it is also possible in theory to exercise an effect on Poland, Germany, Sweden and the Baltic republics.

The ports of Kaliningrad and Baltijsk are of utmost importance to the Russian Baltic Fleet, though this has decreased in size dramatically, and will continue to do so (HS 3.3.1993, C1; TS 3.3. 1993, 17). After Tallinn, Paldiski, Riga, Ventspils, Liepaja and Klaipeda naval bases were handed back to their real owners, the Kaliningrad oblast and the bottom of the Gulf of Finland remained the only base for the Baltic Fleet.

The end of the Gulf of Finland can easily be blocked, for instance at the level of Porkkala-Tallinn. None of its harbours - Vyborg, Primorsk, St. Petersburg or Kronstadt - have enough naval capacity without extensive new construction. So long as Russia remains economically weak, it is more than probable that the main strike capacity of the Baltic Fleet will be based in Kaliningrad and Baltijsk harbours.

Both harbours also possess considerable ship-building and dock capacity. For instance, IVAN ROGOV-class amphibious ships and missile boats of UDALOV class have been built in Kaliningrad's Schichau shipyard (NIELSEN 1991, 13). Plans also call for the harbour capacity of the oblast to be increased (HS 19.9.1991, C2). Because of Kaliningrad's location, nevertheless, it is strategically a vulnerable forward base, and useful more in peacetime than wartime.

Splendid Future Behind

By 1993, the proprietary rights of Kaliningrad oblast had not been questioned in the west. Lithuania, Poland and Germany have officially announced that they have no claims on East Prussia or Kaliningrad. Poland has neither historical nor legal right to the region, and if the area were to be handed over to Germany, a new Polish Corridor, with all its problems, would be established. Germany also legally abandoned all her claims to the area in an agreement signed in Moscow in 1970. (PETERSEN et.al. 1993, 62)

Some historical argument, dating back to the 13th century, exists for the annexation of the Kaliningrad region to Lithuania as the county of 'Karaliaucius Tvankste'. Although some maps drawn in Vilnius show the area with place-names written in Lithuanian, annexation can be regarded only as a hypothetical possibility. Lithuania has neither the economic means to re-build Kaliningrad nor the strength of population needed to absorb the hundreds of thousands of Russians who would certainly remain in the area.

In theory, the province could be forced to proclaim independence, as was the case of Belgium in 1830, Austria in 1918 and Egypt in 1922 (NUTT 1991). This alternative is hardly realistic, however, since the region does not have an indigenous population. The Prussians were absorbed by the Germans by the year 1500 and the Germans were replaced by Russians only some 50 years ago.

Russia's attitude towards the future of her oblast is quite uncomplicated. Foreign Minister Andrei KOZYREV, for instance, addressing seamen in Baltijsk on 15 March, 1993, stated that a

continuous and effective Russian presence in Kaliningrad is absolutely essential for Moscow. He also characterized the oblast as the cornerstone of the Russian military and economic interest in the Baltic region. (HS 16.3.1993, C3)

It would appear therefore that Russia will not give up her Kaliningrad oblast or its military bases, at least not in the foreseeable future. How long the foreseeable future is remains to be seen.

8 THREE SCENARIOS

Once all Russian troops have left the Baltic republics, the expected slow development of their own defence capacity will leave the region a *de facto* military vacuum, possibly even for some decades. As long as no major political, economic or military tensions exist between Russia and the West, this state of affairs will certainly not have any negative impact on the peaceful and cooperative countries of the Baltic Basin.

However, soon after the collapse of the Soviet Union, certain threat scenarios regarding the Baltic region were published both in the United States and in Russia. The underlying motives for the advancement of these scenarios are difficult to discover, but the mere issuing of them shows that the Baltic republics have already been subjected to a keen and wide outside military scrutiny and speculation. The scenarios and the conclusions drawn from them are thus of interest to other Baltic Basin states as well.

Invasion of Poland

In late 1991 the U.S. Ministry of Defense and the Joint Chiefs of Staff outlined seven different threat scenarios for various corners of the world, describing situations in which the U.S. armed forces might get involved in real action in the next ten years. These scenarios are also to be utilized in planning the future organization of the U.S. armed forces and budgeting for them. (TYLER 1992a, 1, 4; TYLER 1992b)

The seventh scenario dealt with a major attack launched on Western Europe along the southern rim of the Baltic region. The situation is initiated when an imperialistic and authoritarian government gets into power in Russia and begins pressing former Soviet republics, alleging as a pretext that the rights of Russian minorities are being oppressed. Finally, the Russian government insists on autonomy for the Russian minorities living in Belarus, Estonia, Latvia and Lithuania. (TYLER 1992b)

A period of accelerating tension lasts for six to eight months, after which 18 Russian and six Belarus divisions cross the Lithuanian border continuing their attack along the Polish-Lithuanian frontier. Lithuania asks NATO for help and NATO sends 5000 Rapid Reaction Force soldiers to Western Poland. NATO also conducts a 30-day partial mobilization in which it establishes 18 divisions and 66 tactical air wings. (TYLER 1992b)

The scenario presupposes that the United States puts more than seven army divisions, 45 tactical air wings, four heavy bomber wings, six carrier groups and one marine division at NATO's disposal. Further, planning is based on a calculation that it takes some 90 days before a NATO mobilization force has been assembled and readied for action. (TYLER 1992b)

NATO Infiltration

A scenario put forth by Commodore A. DEMTSHENKO in 1992 reflects the strategic viewpoints and fears of Russian officers. It starts from the assumption that Russian troops will all be repatriated from the Baltic republics and the Baltic Fleet will be pushed forward to the harbours of Kaliningrad oblast and crammed into the harbours at the eastern end of the Gulf of Finland. NATO seizes the opportunity and increases its influence and presence in the Baltic Sea and the Baltic republics. (DEMTSHENKO 1992)

According to this scenario, NATO has already made plans to place Baltic naval bases, harbours and airports at its disposal. These would be formed into a forward base area for NATO's naval and air forces belonging to the Rapid Reaction Forces of its Allied Forces Europe [AFNORTH]. DEMTSHENKO also alleges that the decision to establish special Rapid Reaction Forces in the Baltic Sea was made as early as 1991. (DEMTSHENKO 1992)

Further it is assumed that NATO will establish a Standing Naval Force [SNF] in the Baltic Sea, composed of Strike Force, Mine Warfare Force, Anti Submarine Force and Light Force. Its main base would be the Gdynia naval base, while Lithuanian, Latvian and Estonian harbours would serve as replenishment and forward bases for SNF vessels. (DEMTSHENKO 1992)

From 1994 on, NATO would begin to place C³I containers in Latvia and Estonia, making it possible to deploy NATO's standing operational combined arms force in the republics. The air defence system of the Baltic republics would later form the basis for NATO's air defence in this direction. (DEMTSHENKO 1992)

DEMTSHENKO further supposes that NATO wishes to store supplies and equipment in the republics, enabling it to maintain its forward forces and to reconnoitre CIS countries. Finally, he argues that the Baltic republics will be attached to NATO's sphere of activities by 1994-1995 when the repatriation of Russian troops will be complete. (DEMTSHENKO 1992)

Long Arm

The American scenario contains some interesting ingredients, on the basis of which conclusions can be drawn on the alternatives for long-term strategic development in the Baltic Basin.

Russia and Belarus are firstly presupposed to be pursuing a common military policy and acting together. Secondly, the United States is not offering a helping hand to Lithuania but to Poland, and the scenario bears only on Lithuania and Poland, not the other Baltic republics. A third point of interest is the calculation that NATO's mobilization will be slow and the forces will be ready for action only after some delay.

One conclusion that can be drawn from this scenario is that neither the United States nor NATO regard themselves as either willing or able to defend the Baltic republics in the event of a Russian attack. Yet another notable point is that NATO would, however, be prepared to send its troops to Poland, this underscoring the importance of Poland as Germany's eastern defence zone.

The U.S. scenario suggests two different patterns of strategic development for the Baltic Basin, neither excluding the other. The Baltic republics could be connected with the European security and defence arrangements by using Poland as a dummy. This arrangement would resemble the policy that was pursued in the 1920's, albeit in vain.

The second alternative supposes that Finland, Sweden, Norway and Denmark later on develop some common sub-regional defence cooperation, probably within the framework of WEU and NATO. This alternative could contain a provision for these Scandinavian countries to give military aid to Estonia and Latvia, while the United States helped Poland.

Dread and Paranoia

Commodore A. DEMTSHENKO's scenario is by no means just a personal view. Dr. Vitali TSYGICHKO (1991) and Minister Raivo VARE (1992a), for instance, have stated that at least the conservative officers of CIS' General Headquarters regard the lowered level of military confrontation as a temporary phenomenon only. Both men consider that the conservative officers in particular expect a situation similar to the Cold War to return in 15 years.

At root, DEMTSHENKO's scenario reflects Russia's need for free access to the Baltic Sea and the fear of this possibility being denied. Feeding the fear is the awareness that Russian military might has been diminished in general and especially in the Baltic Basin. In emphasizing that Lithuania is important to NATO, DEMTSHENKO indirectly refers to the significance of Lithuania's road and railway connections to Russia.

Paranoiac, however, are the schedules DEMTSHENKO has outlined for NATO expansion. The only signals of NATO's interest in the Baltic republics by 1993 have been the enlargement of its area of responsibility to the Baltic Sea, a naval visit to Tallinn in 1992, and the BALTOPS-93 naval exercise, in which also Russian naval forces took part.

DEMTSHENKO's scenario is further paranoiac in the anticipation of NATO as an aggressive military alliance. The Alliance has swiftly diminished its stand-by military force. Its policy, moreover, has been extremely restrained regarding the civil war in the former Yugoslavia and the crises in the former Soviet Union. This restraint might be influenced by the strategic nuclear arsenal Russia still has ready at her disposal.

In this respect, any expansiveness of NATO could be expected to occur at the earliest after the START II agreement has been fully implemented. The mere complete repatriation of Russian forces from Estonia and Latvia would hardly act as a tripwire to a process of expansion as described in the Russian scenario.

In Two Days

The American and Russian scenarios are, quite frankly, rich in perspicuity but largely imaginative, and focus on developments in the long run. A more comprehensive threat scenario that might be implemented the moment an imperialistic government gets hold of power in Russia has been outlined by the Balts themselves.

In this scenario, if Russia were to attack the Baltic republics, it would attack all of them at once, from the east and the southwest. In such an onslaught the troops of Kaliningrad oblast would be used first; and while their use would be only a signal and a political manoeuvre to the West, it would be a question of life and death to the Baltic republics. (KNUUTI 1993a)

The tank division garrisoned in Sovetsk, for instance, could reach Riga in ten hours. Klaipeda, Liepaja and Ventspils could be captured and the Baltic coast of the Baltic Sea sealed off by raids of airborne battalions. Lithuania could be taken with a mere two divisions from Kaliningrad, one being directed to Vilnius and the other to Kaunas. (KNUUTI 1993a)

Signal intelligence has picked up new units being placed in Ingermanland east of Estonia, and the Leningrad Military District has received other new troops. In addition to these, the airborne division garrisoned in Pskov could be used in Estonia. Thus, all the Baltic republics could be conquered in two days. (KNUUTI 1993a)

This threat scenario was the framework for the staff exercise held by the Russian Northwestern Group of Forces in Estonia and Latvia in April 1993.

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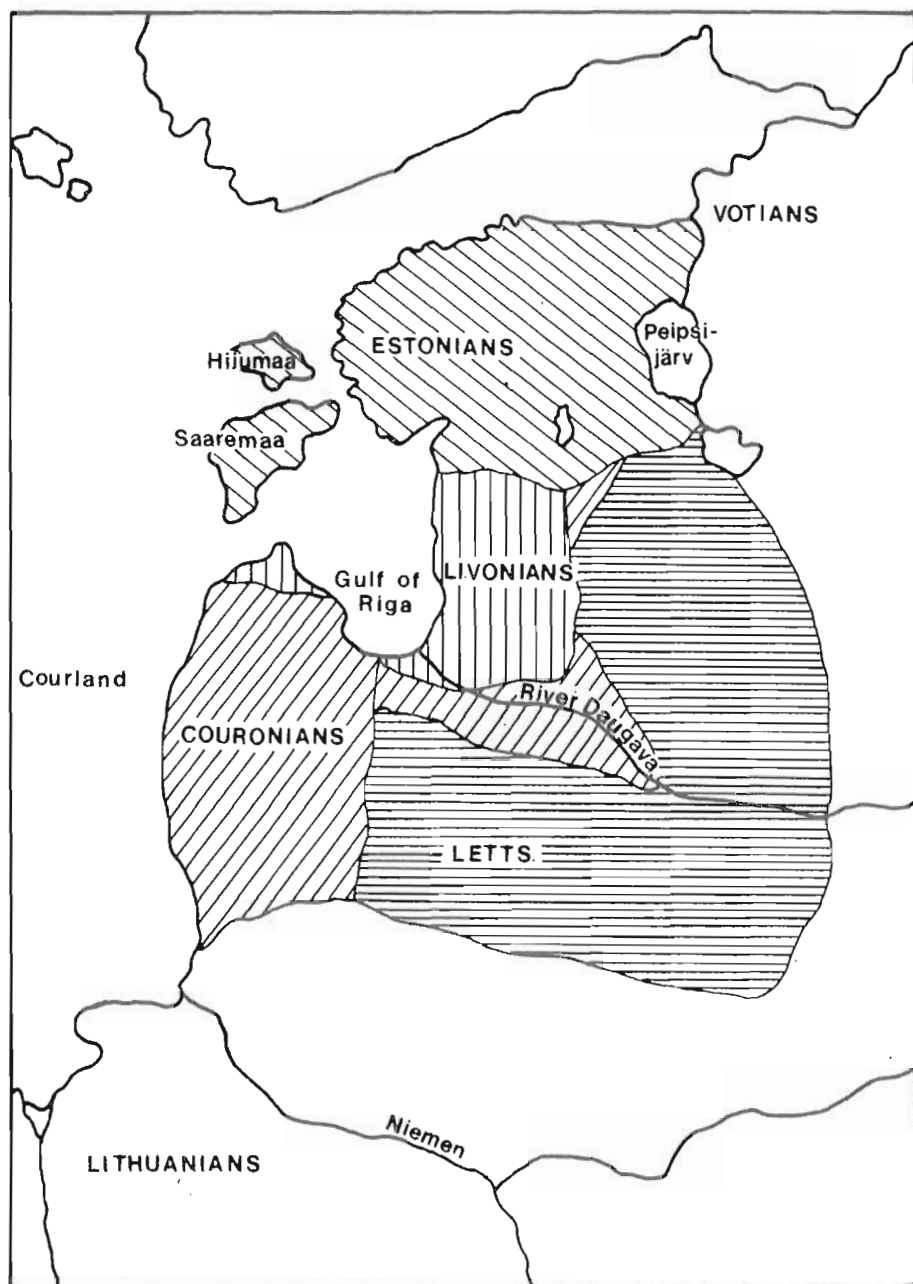
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MAP 1



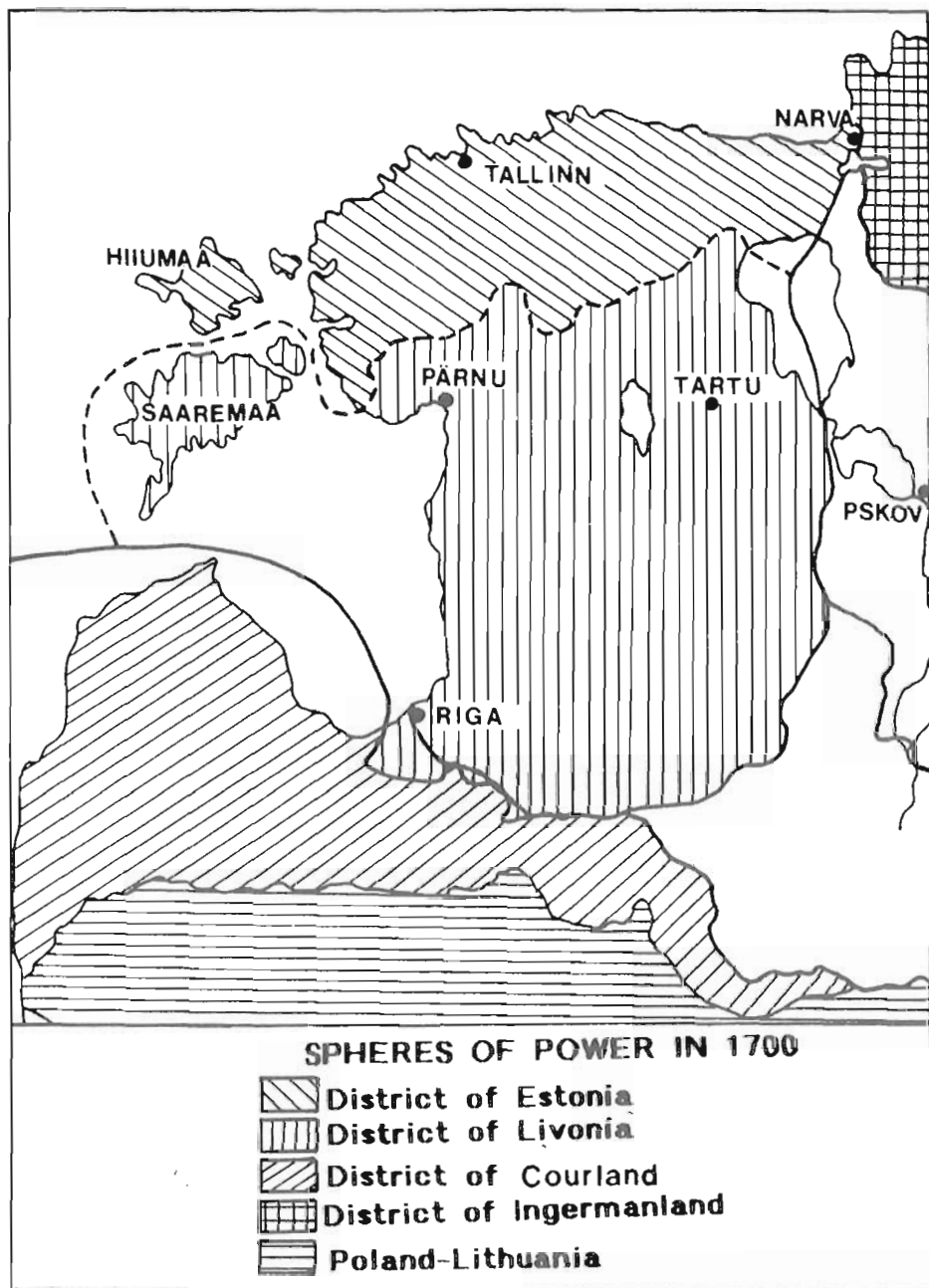
BALTIC STATES 1920-1930

SOURCE: MYLLYNIEMI 1977, 10

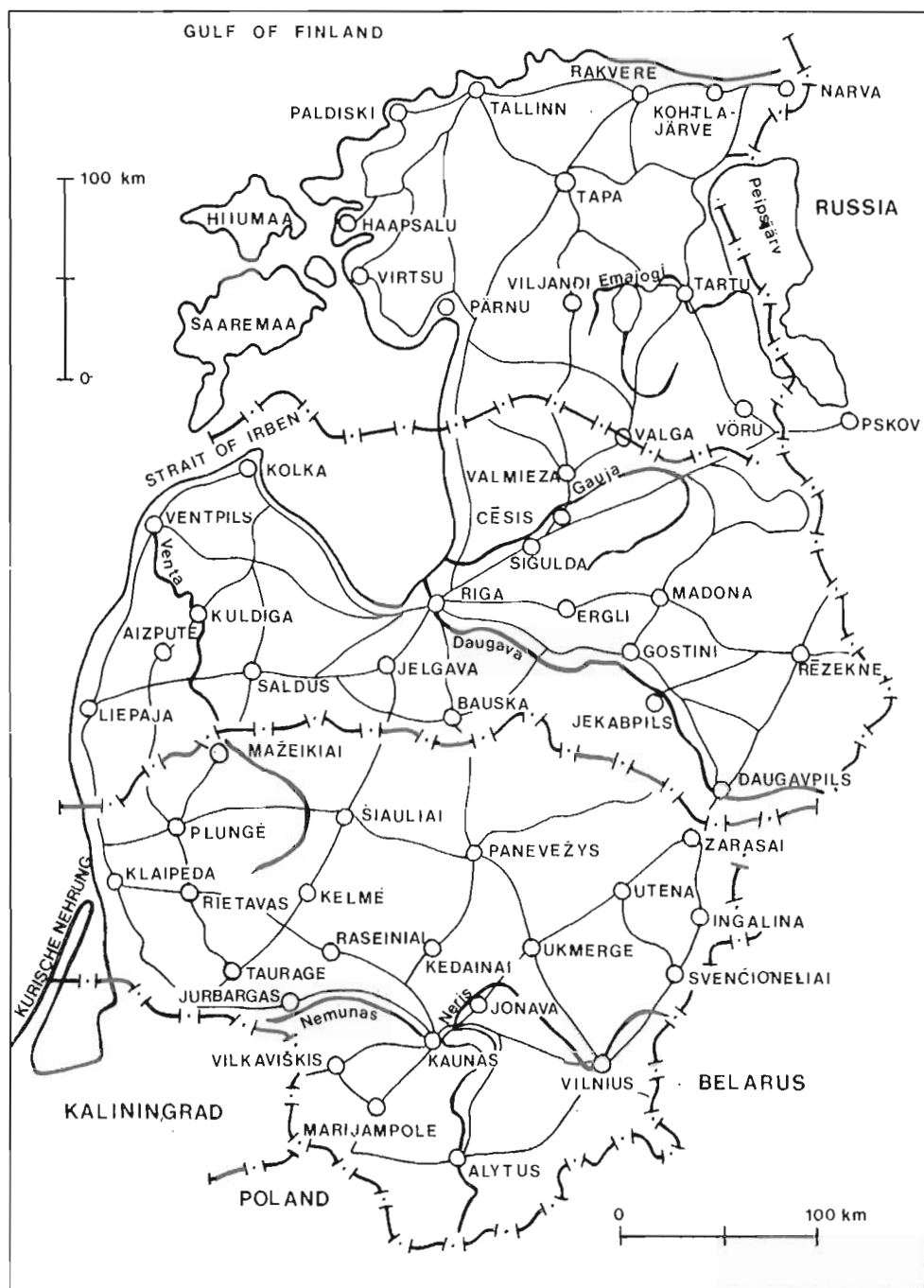


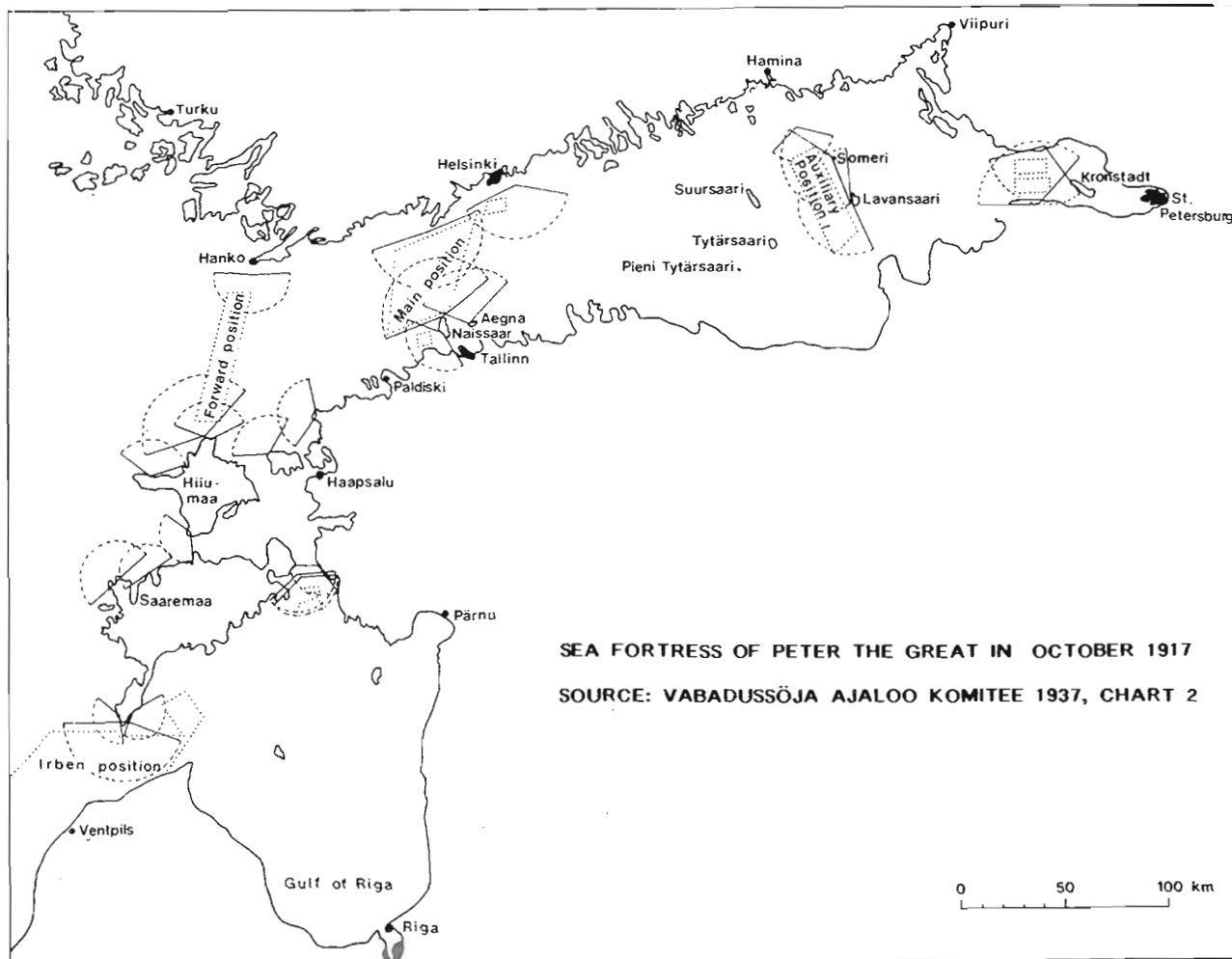
EARLY BALTIC NATIONS

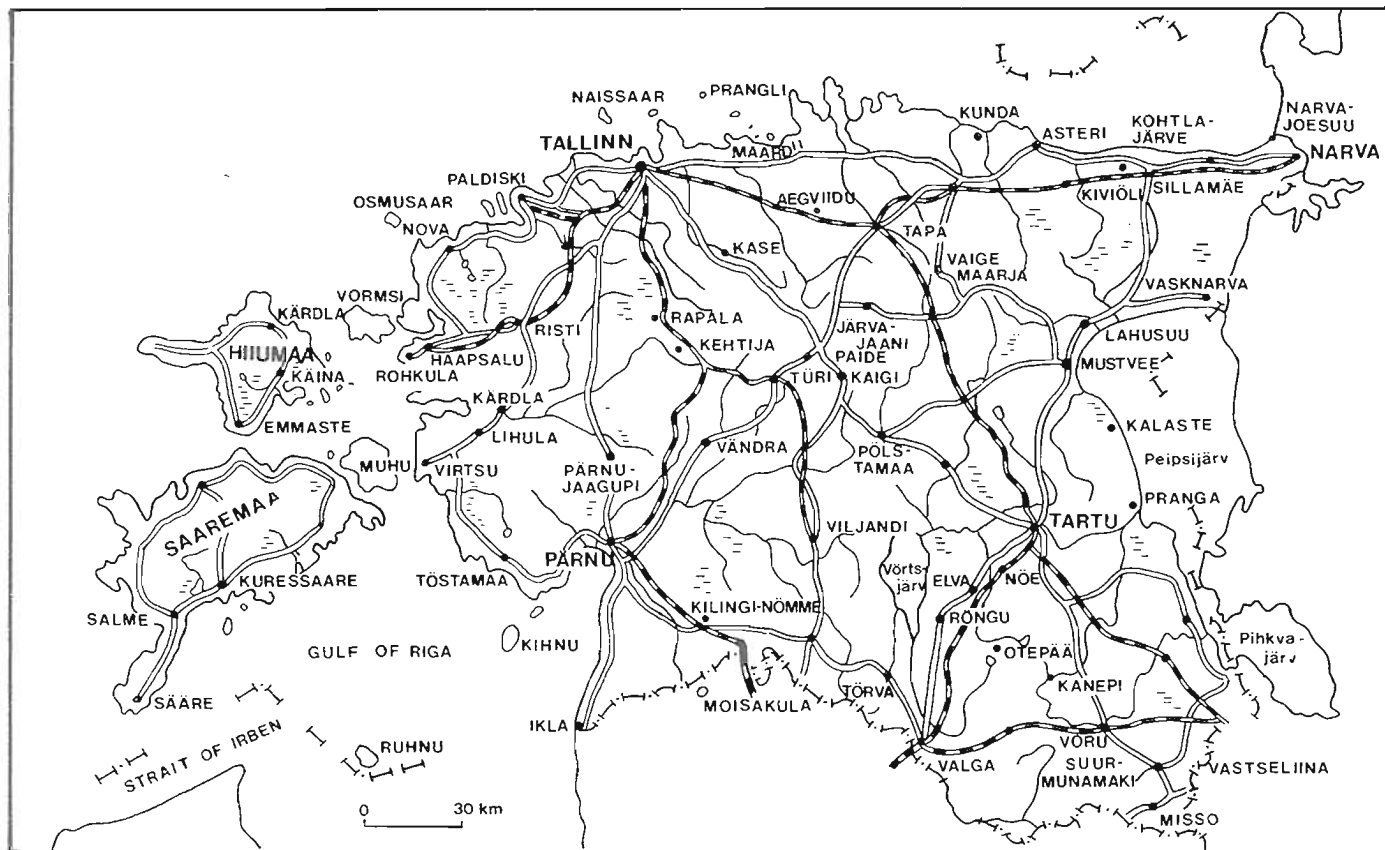
SOURCE: ALAJOKI et.al. 1991, 5



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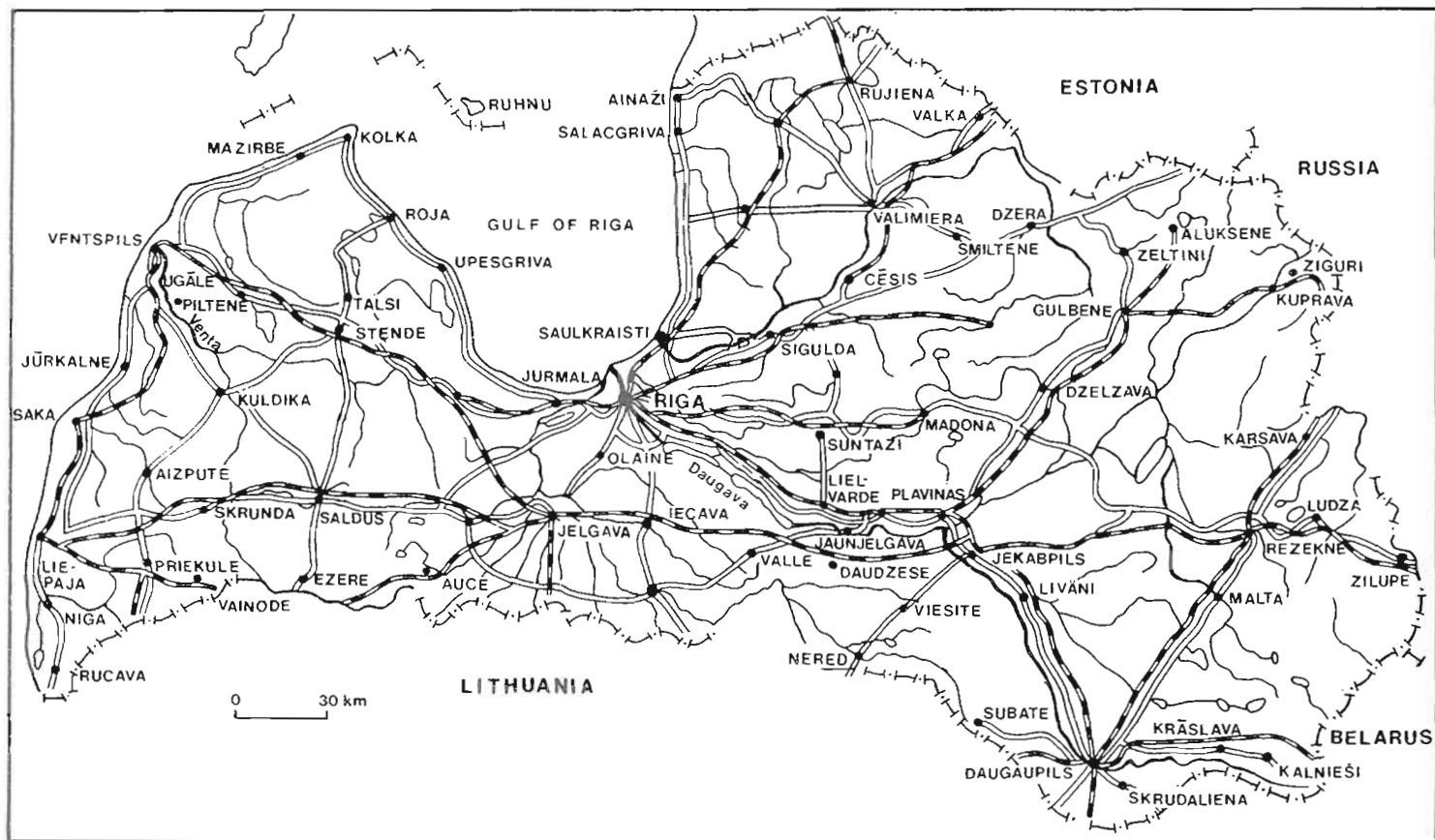






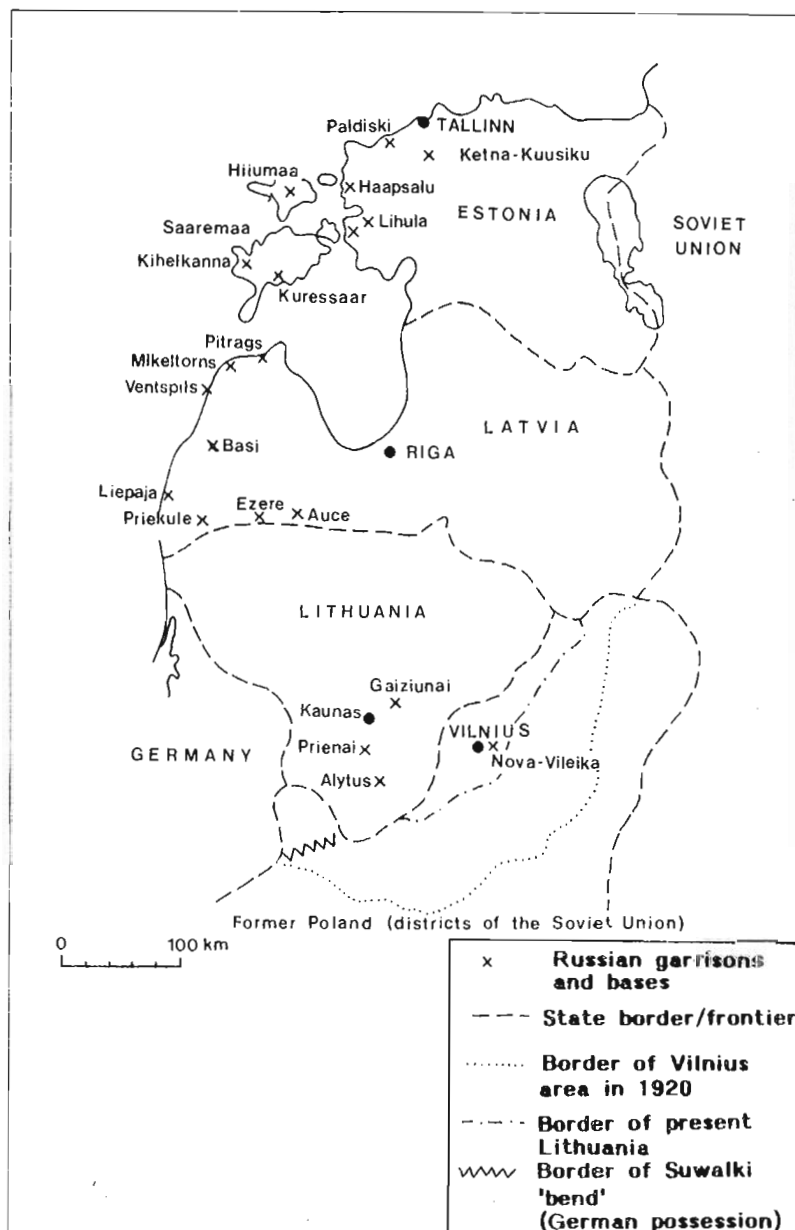
ESTONIA

SOURCE: TBS 1991, 12: RAVENSTEIN 1992



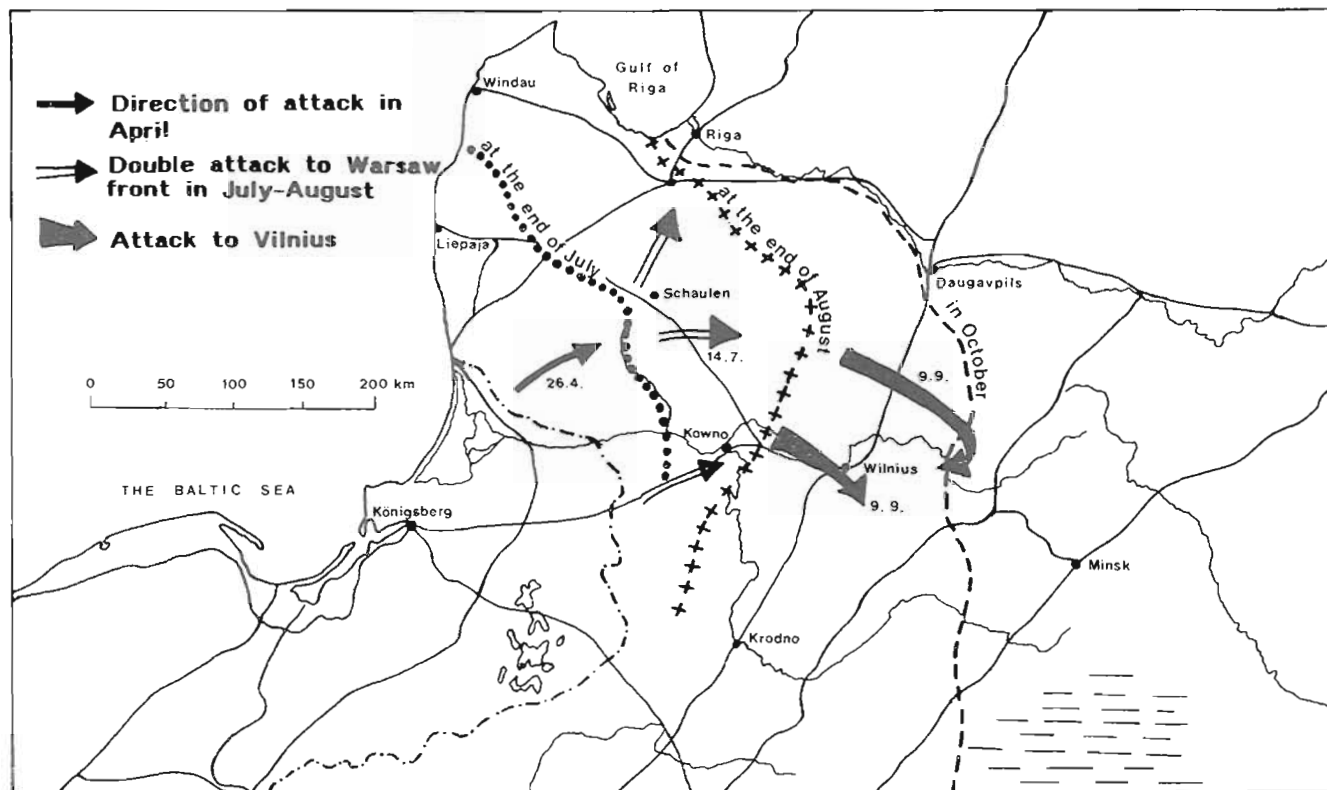
LATVIA

SOURCE: TBS 1991, 88; RAVENSTEIN 1992



SOVIET BASES IN 1940

SOURCE: KRONLUND 1991, 170



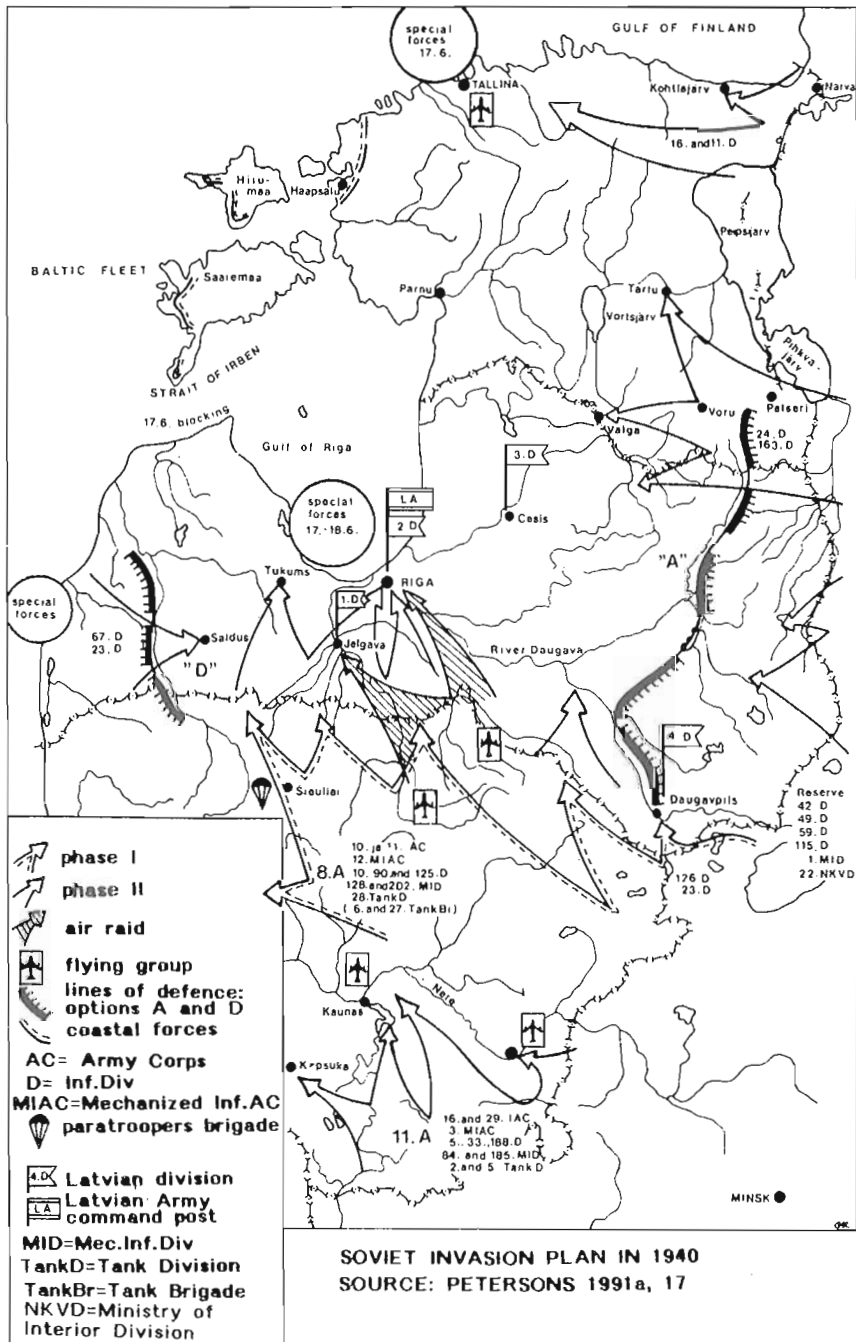
GERMAN ATTACK IN 1915

SOURCE: VOLKMANN 1932, MAP 2, DRAFT a

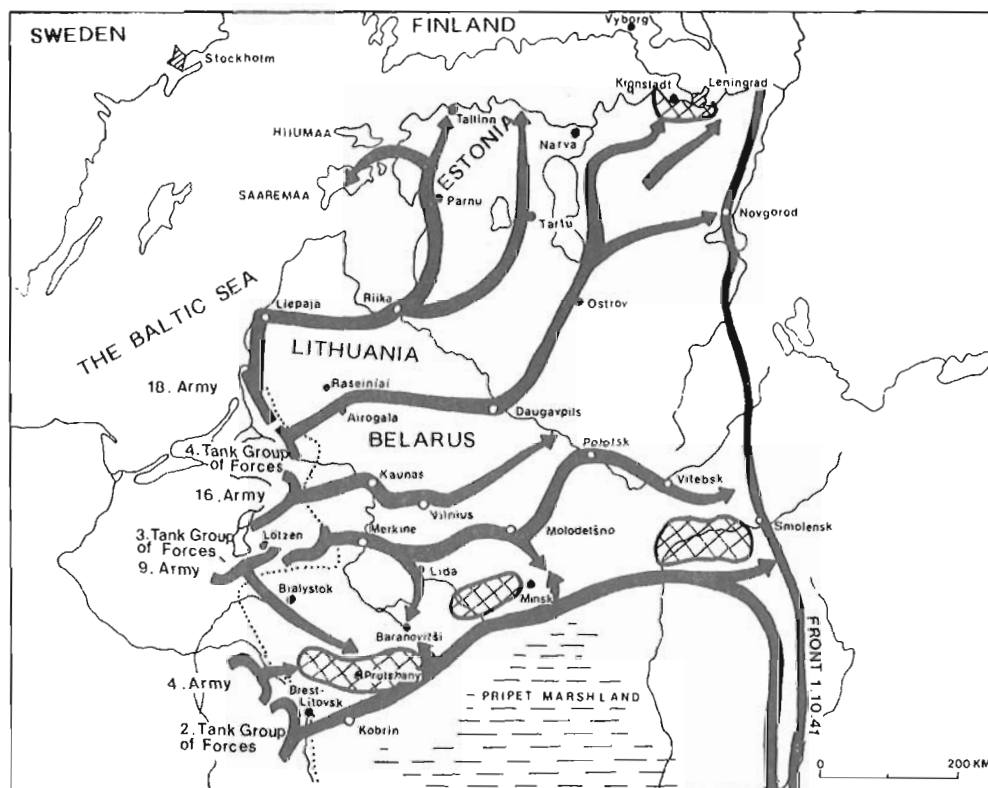


BALTIC DEFENCE LINES IN THE 1930's

SOURCE: ANDERSON 1978, 133-135; PETERSONS 1991a, 17; 1991b, 2

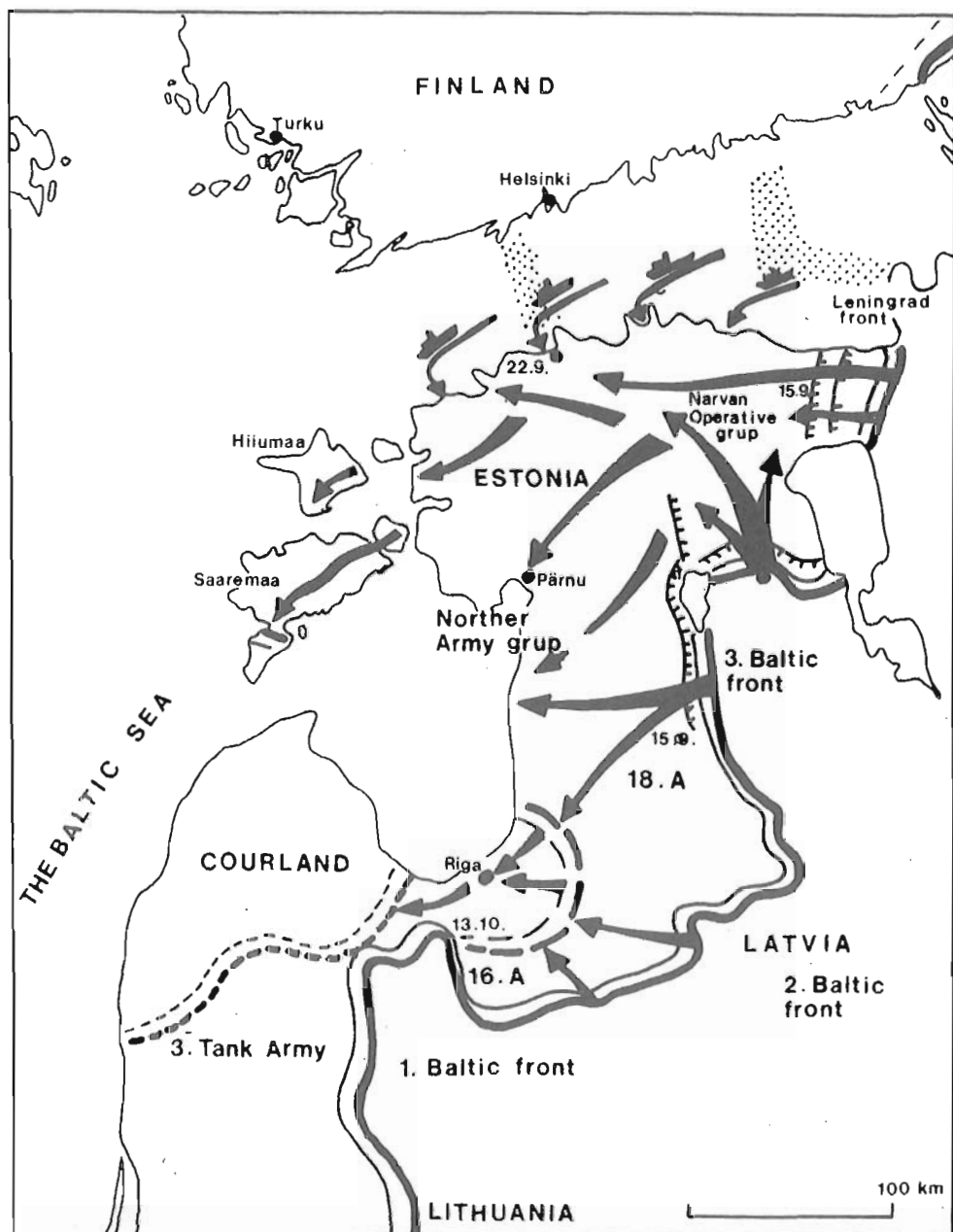


SOVIET INVASION PLAN IN 1940
SOURCE: PETERSONS 1991a, 17



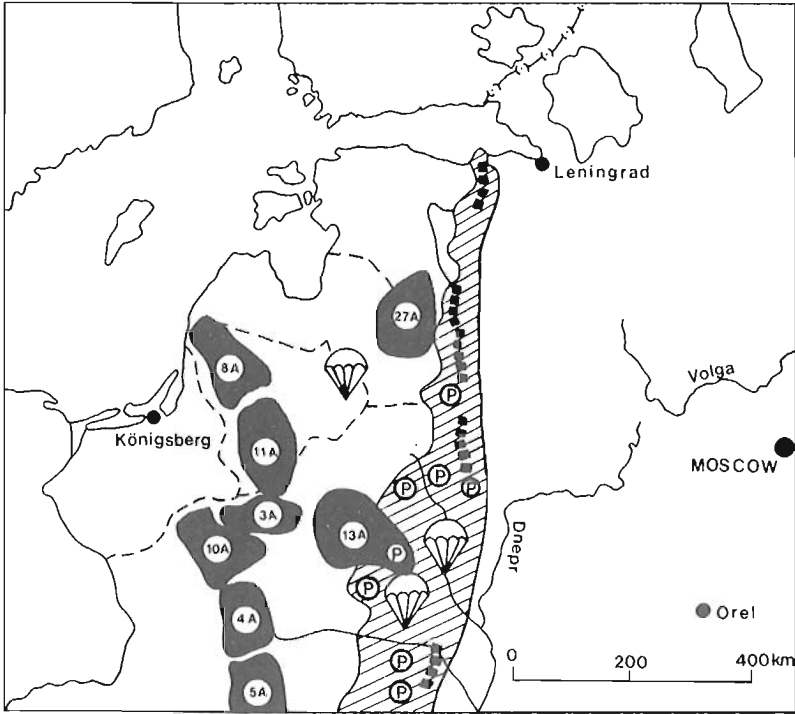
GERMAN ATTACK IN 1941






SOURCE: BAUER 1973a, 545



CONQUEST OF BALTIC REGION IN 1944

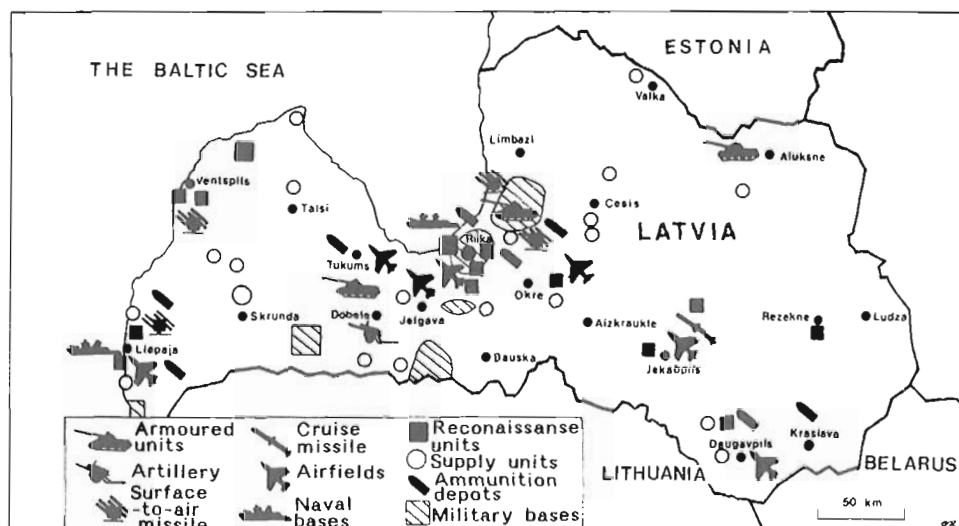
SOURCE: TIPPELKIRCH 1960, 131



-  8th Army of the Soviet Union
-  Partisans
-  Soviet paratrooper Army corps
-  Fortified area
-  Defence zones prepared in 1930's

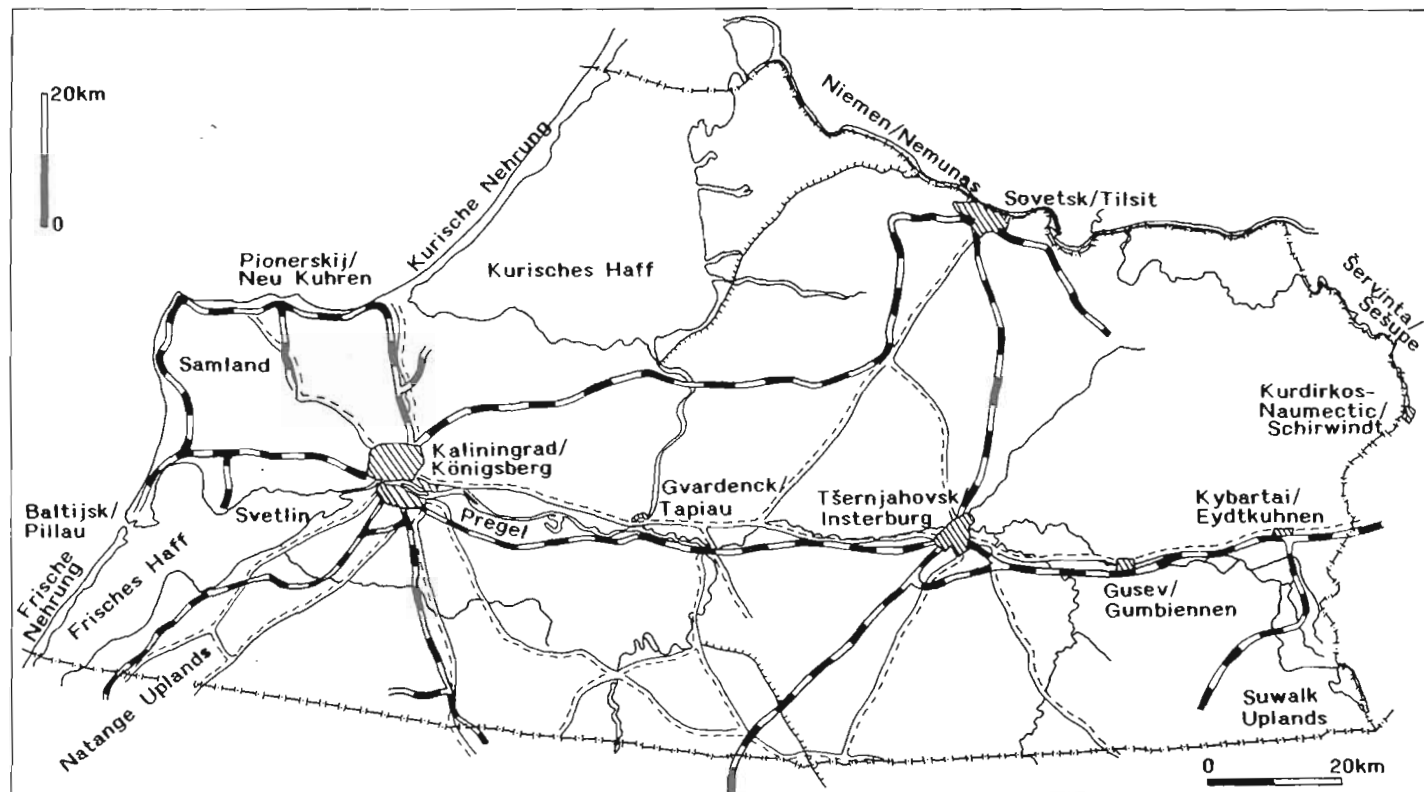
SOVIET DEPLOYMENT IN 1941

Source: Suvorov 1990, map 1 and 2



SOVIET ARMED FORCES IN LATVIA IN 1992

Source: Ministry of Defence of Latvia ; HS 9.2.1993, C3



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