AD-761 553

THE SIGNIFICANCE OF NORTH NORWAY TO NATO MILITARY STRATEGY

Max B. Scheider

Army War College
Carlisle Barracks, Pennsylvania

21 February 1973

DISTRIBUTED BY:

NTIS
National Technical Information Service
U. S. DEPARTMENT OF COMMERCE
5285 Port Royal Road, Springfield Va. 22151

AD 761553

STUDENT ESSAY

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the Department of Defense. [redacted]

21 FEBRUARY 1973

THE SIGNIFICANCE OF NORTH NORWAY TO NATO MILITARY STRATEGY

DDC
RECEIVED
JUN 19 1973
C

BY

COLONEL MAX B. SCHEIDER
CORPS OF ENGINEERS

Reproduced by
NATIONAL TECHNICAL
INFORMATION SERVICE
U S Department of Commerce
Springfield VA 22151

NONRESIDENT COURSE

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PENNSYLVANIA

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

USAWC RESEARCH ELEMENT
(Essay)

THE SIGNIFICANCE OF NORTH NORWAY TO NATO MILITARY STRATEGY

by

Colonel Max B. Scheider
Corps of Engineers

US Army War College
Carlisle Barracks, Pennsylvania
21 February 1973

ABSTRACT

AUTHOR: MAX B. SCHEIDER, COL, CE

TITLE: The Significance of North Norway to NATO Military Strategic

FORMAT: Essay

The purpose of this essay is to develop an appraisal of North Norway in order to determine the order of significance which should be attached to it in developing NATO strategy. Information was gathered from a literature search and from visits to the area while the author was assigned to the staff of Allied Command Northern Europe. While lacking vital intrinsic value, North Norway provides NATO with a base for forward surveillance and operations. It would be especially valuable for operations to block the sea routes between the Atlantic and the Soviet naval base complex in the Murmansk area. In addition, the credibility of NATO's collective security assurances would be seriously damaged if any NATO territory were occupied. The Soviet forces in the border area far outnumber the Norwegian forces and have the capability of rapidly isolating the area. The Norwegian decision not to base NATO troops and nuclear weapons in Norway contribute to its vulnerability. The essay concludes that Norway should continue to maintain screening forces to resist possible Soviet incursions and that NATO should maintain sufficient reserve forces which could be deployed as an alternative to a nuclear response.

THE SIGNIFICANCE OF NORTH NORWAY
TO NATO MILITARY STRATEGY

INTRODUCTION

During the past decade, NATO military strategy and the accompanying optimum NATO force levels have been the subject of many analyses, debates, and writings. In the United States, congressional pressure has been applied to reduce US contributions to NATO. While the Soviet invasion of Czechoslovakia in 1968 reduced this pressure, the Mutual and Balanced Force Reduction talks and the increased dialogues with the USSR will likely offset this effect. Increasing salary and weapons costs, continuing expenditures in Southeast Asia, and domestic spending needs will keep the pressure on to reassess NATO strategy and to lower US participation.[1] Thus, it appears likely that these issues will receive even more attention during the 1970s.

Current interest, understandably, is concentrated primarily on NATO's Central Region, where seven NATO nations have significant forces and where US contributions are most heavily invested. A complete analysis of NATO strategy, however, must include a consideration of the military

---

[1]Alain Enthoven and Wayne Smith, "What Forces for NATO? and from Whom?," Foreign Affairs, (October 1969), p. 81.

geography and the opposing forces along NATO's entire 4,000 mile front, from Norway's North Cape to Eastern Turkey.[2]

A commonly accepted assessment of the vulnerability of NATO's front isolates two primary threats and one secondary threat. The primary threats are described as one by land across the North German plain and one by sea and land across the Mediterranean and its littoral. The secondary threat consists of a threat to North Norway by amphibious, airborne, and land forces.[3] The threat across northern Germany has received primary attention from NATO since its formation, while the Mediterranean threat has received increasing interest in recent years, as Soviet naval forces there became competitive with the US Sixth Fleet. The secondary threat in North Norway, however, is infrequently included in assessments of NATO strategy, especially in US publications. In 1972, General Sir Walter Walker, Commander-in-Chief, Allied Forces Northern Europe, described popular awareness of this flank of NATO as "abysmally low."[4]

No determination of NATO, or US, force requirements would be complete without considering the degree of Allied effort which should be available to counter each of the threats to NATO. This paper, therefore, will consider the neglected threat to NATO

---

[2]James Holland, Allied Command Europe's Mobile Force (1966), p. 5.

[3]Hanson Baldwin, Strategy for Tomorrow (1970), p. 133.

[4]General Sir Walter Walker, "A Glance at the Future," Military Review, (September 1972), p. 23.

through North Norway.

In the case of North Norway, it is necessary to assess the characteristics of the area, the Soviet military threat, the Norwegian defense capabilities, and the relative significance of the area to both NATO and to the USSR. If the Northern flank is vital to NATO's interests and if Allied reinforcements would be required to defend it, adequate forces should be provided within the framework of any new NATO military strategy.

GEOGRAPHY

Before considering North Norway specifically, it is important to view its relationship with the rest of the nation. The entire country of Norway, minus its possessions, covers an area of 125 thousand square miles,[5] or approximately the same as the combined areas of the states of New York, Pennsylvania, and South Carolina.[6] Its population of 3.9 million[7] is less than that of metropolitan Detroit,[8] and is predominantly concentrated in the south. The southern coast is farther from North Cape than it is from Rome. This distance of 1100 air miles[9] makes

---

[5]NATO Information Service, NATO Facts and Figures (1971), p. 253.

[6]US Bureau of the Census, Statistical Abstract of the United States (1972), p. 169 (hereafter referred to as "Statistical Abstract").

[7]T. N. Dupuy, COL, (Retd) and Wendell Blanchard, COL, (Retd), The Almanac of World Military Power (1972), p. 103.

[8]Statistical Abstract, p. 8.

[9]William Shirer, The Challenge of Scandinavia (1955), p. 29.

communications and reinforcement operations difficult. The Norwegian coastline stretches for 2100 miles. If the larger fjords and islands are included, the coastline measures approximately 12,000 miles.[10] The many islands along the western coast form an almost uninterrupted, sheltered passage for ships from Stavanger in the south to North Cape in the north. This passage, called the "Inner Leads," has one significant break of 40 miles at the southern boundary of North Norway. The Atlantic rollers there make the passage rough and hazardous and tended to isolate North Norway from the rest of the country until modern times.[11] The narrow width of the country, varying from a maximum of 267 miles in the south to 4 miles near Narvik in North Norway,[12] offers little room for military maneuver.

North Norway is composed of the three northern most counties of Nordland, Troms, and Finnmark, from south to north,[13] with most of the region lying north of the Polar Circle. Its area of 43.6 thousand square miles comprises one-third of Norway's total area and is slightly smaller than Pennsylvania.[14] A population of 451 thousand,[15] smaller than that of metropolitan Flint,

---

[10]O. J. Skattum, "Topography," in The Norway Year Book (1967), ed. by Egil Tveterås, p. 12.

[11]Frank Stagg, North Norway, A History (1952), p. 13.

[12]Sigurd Ekeland, Norway in Europe, An Economic Survey (1970), frontispiece.

[13]Thomas Derry, A Short History of Norway (1957), p. 12.

[14]Hallkjell Jensen, A Geographical Survey of North Norway (1966), p. 6.

[15]Skattum, p. 9.

Michigan,[16] is unevenly distributed in small towns and clusters of houses, with over 90 percent of the inhabitants living less than three miles from the coast or fjords. Over one-half of the population lives in Nordland, the most southern county, and approximately one out of two people live on an island.[17] The largest town in the region is Tromsø, with a population of 34,000. The population density varies from approximately 17 inhabitants per square mile in Nordland, to 13 in Troms, to 4 in Finnmark.[18] These densities compare to an average density of over 60 for the continental United States.[19]

The topography of Nordland, Troms, and western Finnmark is characterized by large mountains, many fjords, and numerous islands. Eastern Finnmark differs from the rest of the region in that it is dominated by a large, gently rolling mountain plateau, with wide valleys, lakes, and marshes. The coastline in the east has few islands to shelter its approaches, but its fjords are much longer and wider than those to the west. Within all of North Norway approximately one percent of the area is under cultivation, 65 percent is bare mountain, 14 percent is forested, and the remaining 20 percent is water or marshland.[20]

The weather is considerably milder in North Norway than would be normal at these latitudes, due to the warming influence

---

[16] Statistical Abstract, p. 838.
[17] Jensen, p. 34.
[18] Skattum, p. 9.
[19] Statistical Abstract, p. 5.
[20] Jensen, pp. 7-13.

of the Gulf Stream. Its effect decreases in the inland areas, however. The inner districts of Finnmark experience an average of 230 frost nights each year, compared to only 130 frost nights per year in the islands of Lofoten and Vesterålen. The temperature differentials between coastal and inland areas lead to strong winds and heavy fog in the region. East Finnmark is especially exposed to the winds and squalls which may make the fjords unnavigable for days at a time in the autumn and winter.[21] Fog occurs along the coast mainly in the summer, and in the inland areas in the winter.[22]

The light conditions are typical of arctic regions, with long periods of darkness in the winter and with the midnight sun in the summer. At North Cape, for example, the sun is above the horizon continuously from 22 May to 29 July.[23]

Transportation facilities in the region are limited and are subject to interruption by the weather. The predominant means of transport continues to be by sea. Narvik and Kirkenes are the largest transit ports due to significant iron ore shipments. Except for the harbors in Nordland and Kirkenes in Finnmark, the port crane capacities are small. A short rail line connects Narvik with the Swedish railway system, which links with

---

[21] Ibid., pp. 21-24.
[22] Ibid., p. 16.
[23] Shirer, p. 8.

the Norwegian railway in the south. Shipments over those lines would be subject to restrictions by the neutral Swedish government in times of tension or conflict. In 1961 the Norwegian railroad was extended to Bodø, in Nordland. The only other large harbors that have rail connections with the south are Mo and Mosjøen, also in Nordland. The journey over the 435 mile Nordland railway from Trondheim to Bodø takes over 13 hours.[24]

One major road, Route 50, runs the length of North Norway. Travel along its unsurfaced 1050 mile length requires the use of 5 ferries. During the winter, the route is frequently blocked by snow at most of the mountain passes which lie above the tree line. Some of these obstructions remain for from four to six months. During World War II, the Germans expended large quantities of materiel and labor in vain attempts to keep the road open during the winter.[25]

There are seven airfields in North Norway which have sufficient capacity for military use: Bodø, Andøya, Bardufoss, Tromsø, Alta, Banak (Lakselv), and Kirkenes. All of the airfields are used for commercial traffic. Military traffic is generally restricted at Banak and Kirkenes due to their proximity to the Soviet border. All of the fields are kept open throughout the year, but are subject to infrequent interruptions due to low visibility.

---

[24]Jensen, pp. 44-46.
[25]Ibid., p. 47.

WORLD WAR II OPERATIONS

One means of assessing the characteristics of possible future military operations in North Norway, and the strategic advantages to be gained, is to review the German operations in that area during World War II. The staff of the German Navy initiated the original studies for the conquest of Norway in the late fall of 1939 and remained the strongest proponent of the operation.[26] The principal objective of the plan was to obtain bases on the west coast of Norway from which the German Navy could operate in the Atlantic without fear of being blockaded as it was in World War I. It was anticipated that the British would soon intervene in Scandinavia and the Baltic area, either by actual occupation or by pressure on the neutral nations to restrict German shipping. The availability of ports for German naval operations in the Atlantic in 1940 was similar to that of the USSR today. The ports on the Baltic were considered vulnerable, since it was probable that the Allies would block the Baltic approaches. Russia had made the port of Murmansk available for German use, and, in October 1939, provided a separate base in Zapdnaya Litsa Bay for the German Navy. However, Admirals Raeder and Doenitz believed that additional bases were required at Trondheim and Narvik to achieve

---

[26]Earl Ziemke, The German Northern Theater of Operations 1940-1945 (1960), p. 17.

freedom of action.[27]

On 9 April 1940, German troops landed at six ports in southern Norway and in Narvik in North Norway. The operation was well executed, generally, with the most serious opposition encountered in the Narvik area. On 8 June 1940, the Allies evacuated Narvik, and the next day the Norwegian Army surrendered. The Germans then proceeded to occupy the remainder of the country. In June 1941, Germany declared war on the Soviets and commerced operations in Finland and in northern Russia. These operations continued sporadically until 8 May 1945, when the Germans surrendered. Although these land operations were conducted largely outside of North Norway, general observations can be made concerning warfare under Arctic conditions.

The effectiveness of equipment was greatly reduced and primary reliance was placed on men who were trained and experienced in Arctic operations. Mobility was low and momentum was difficult to maintain. Since roads were difficult to build, those few that were in existence were critical to operations. The control of other areas was relatively unimportant. The Germans found that there was no season that favored offensive operations. The weather and terrain always created problems. Mobility was generally better during the winter when the ground was covered by snow and ice. However, that advantage was

---

[27] Ibid., p. 5.

offset by the near constant darkness. Late winter offered the advantage of increasing daylight, but operations had to be concluded by the time the thaw began in the spring.[28]

More significant than the land operations, were the German naval and air activities. The many Norwegian ports, fjords, and inlets provided protection for the German naval and merchant ships and allowed them to break out into the Atlantic in the face of superior Allied naval forces. However, the German Navy which was comparatively weak when the operations began, suffered significant losses during the offensive which offset the advantage of the additional bases and never permitted their full exploitation.[29] The Norwegian airfields permitted air cover along the coast and limited Allied surface naval activity in that area.

The main advantage of the newly gained naval and air bases in North Norway was realized in operations against the Allied convoys carrying military materiel to Murmansk. From August 1941 through March 1945, four million tons of supplies were delivered by convoys to this port.[30] These convoys were provided protection by naval escort ships, including aircraft carriers. The long Norwegian coastline flanked the convoy

---

[28] Ibid., pp. 317-320.
[29] Ibid., p. 111.
[30] Mairin Mitchell, The Maritime History of Russia 848-1948 (1949), p. 389.

route and offered many opportunities for strikes by submarines, surface vessels, and aircraft. The most vulnerable section of the route was off North Norway where, during most of the year, the convoys had to come within 300 miles of the air bases in order to avoid the pack ice to the north.[31] The German Navy used Kirkenes, Trondheim, Vadsø, and the inlets in Finnmark to cover this area.[32] The operations there have been described as:

> ...off the coast of Finnmark were sacrificed the lives of hundreds of seamen of the Western Powers. German planes from Bardufoss aerodrome, and submarines from bases in North Norway, made the narrow waters between Norway's coast and the edge of the polar ice a veritable inferno.[33]

The size of the German forces which were available to attack the convoys depended upon conflicting requirements in other theaters. In general, they were reluctant to risk their surface vessels, even when they were in the area. In July 1942, the Germans made one of their most successful attacks on Convoy PQ17, using 264 combat aircraft which they had assembled in the vicinity of North Cape. After the first day's attack, the Allied naval escorts were called back and the merchant ships were ordered to disperse. After a series of individual attacks, the Germans claimed that the entire convoy was destroyed. The British conceded that 23 out of the 34 ships were

---

[31]Ziemke, p. 237.
[32]Mitchell, p. 388.
[33]Stagg, p. 196.

sunk. Convoy operations were suspended for a period of two months after the attack. Thereafter, the German forces were never again that large, nor were the attacks so successful.[34] Throughout the war, however, the Germans demonstrated the threat to sea movements to and from the Soviet northern ports of having North Norway occupied by a hostile power.[35]

Although only a reinforced corps was used by the Germans to conquer Norway, an entire Army was deployed to defend it. The large coastline was potentially vulnerable to the superior Allied seapower and the poor internal lines of communication ruled out a mobile defense. In 1942, Germany anticipated an Allied attack in North Norway and began reinforcing the forces there. The naval forces in North Norway at that time included one battleship, three heavy cruisers, eight destroyers, four torpedo boats, and 20 submarines. The German Army of Norway included five infantry divisions, one panzer division, one mountain division, two security divisions, three area garrisons, 20 fortress battalions, 152 heavy coast artillery batteries, 66 artillery batteries, and torpedo and depth charge units.[36] These defenses were never seriously tested. Near the end of the war, the Germans evacuated most of

---

[34]Ziemke, p. 239.

[35]Nils Örvik, Europe's Northern Cap and the Soviet Union (1963), p. 20.

[36]Ziemke, p. 217.

Finnmark, destroying everything in the area, although the Russians stopped at Tanafjord.[37]

THE SOVIET THREAT

After World War II, the Soviets took over the portion of Finland which extended to the coast, gaining the Petsamo region and the port and naval base at Pechenga.[38] The annexation created a common border of 122 miles between the USSR and Norway.[39] The April 1948 treaty of mutual assistance between the Finns and the Soviets required the Finns to construct roads and railways in Finland that lead toward the Swedish ore fields at Kiruna - Gällivare and the nearby Norwegian port of Narvik. These lines were also linked with Soviet facilities, creating a network which could enable the Soviets to move into this area rapidly and to cutoff most of North Norway.[40]

One of the most important considerations for the Soviets in the north is their access to the sea which it provides. The Soviet Navy is organized into four fleets, the Northern Fleet, in the Murmansk area, and the Baltic, Black Sea, and Pacific Fleets.[41] The Baltic and Black Sea Fleets must pass through

---

[37]Shirer, p. 48.

[38]Robert Herrick, Cdr (Retd), Soviet Naval Strategy (1968), p. 56.

[39]US Dept. of State, Office of the Geographer, Norway-USSR Boundary, (1963), p. 1.

[40]Örvik, p. 24.

[41]Siegfried Breyer, Guide to the Soviet Navy (1970), p. 203.

narrow straits which are controlled by NATO members and which would probably be blocked in times of conflict.[42] The Pacific Fleet has secure access but is remote from the Atlantic crises areas and could not effectively support naval operations in a NATO war.[43] Therefore, it is not surprising that the Northern Fleet is the largest of the four - not only in total forces, but also in numbers of submarines.[44]

Despite the severe climate in the area, the Soviets have placed a high priority on the extensive development of their Arctic bases, the most important of which are at the ice-free ports of Murmansk and Poliarnyi. In addition to normal modern facilities, bombproof shelters have been blasted into the rock along the coastline to protect submarines and small warships. Murmansk, on the northwest coast of the Kola Peninsula, is the terminus of a 900 mile railway to Leningrad, has a population of over 200,000, and is the main base of the Northern Fleet. Over 500 fishing vessels are based there, along with the naval ships. Poliarnyi is north of Murmansk and has a well protected harbor, as well as a base for aircraft and flying boats. Other naval bases in the area include Pechenga (Pesamo),

---

[42]Herrick, p. 136.

[43]Anthony Harrigan, "The Soviet Sea Power Challenge", NATO's Fifteen Nations (June-July 1968), p. 19.

[44]Gordon Livingston, LTC, The Political-Military Impact of Soviet Naval Strategy Upon Norway as a Member of NATO, Thesis (Newport, RI, 15 April 1971), p. 2.

Severodvinsk, and Arkhangelsk.[45]

Since Soviet naval ships are frequently reassigned among the fleets, estimates of fleet strengths must be revised constantly. One estimate made in the spring of 1970 gives an example of the composition of the Northern Fleet. It includes 5 cruisers, 5 missile destroyers, 15 conventional destroyers, 20 missile patrol boats, 250 naval aircraft, 105 conventional submarines, and 45 nuclear submarines. It is significant to note that the remaining 25 nuclear submarines in the Soviet Navy at that time were assigned to the Pacific Fleet.[46]

The forces in the North from the other Soviet Services are equally impressive. It has been estimated that the Soviets have seven mechanized divisions on the Kola Peninsula,[47] backed up by seven forward divisions in the Leningrad area and at least five in support.[48] An additional 4,000 man brigade of naval infantry (marines) is located in the Kola area.[49] These elite troops were reactivated in 1964 and have been equipped with armored amphibian tanks and improved landing boats and

---

[45]Breyer, pp. 201-211.

[46]David Fairhall, Russian Sea Power (1971), p. 251.

[47]Mark Forster, "Outflanked by Events", Manchester Guardian, 17 July 1972, p. 20.

[48]Drew Middleton, "NATO Termed Vulnerable in North", New York Times, 6 July 1970, p. 10.

[49]William Stoneman, "Elaborate NATO Force Puts on Smooth, Awe-Inspiring, Display in Arctic Waters", Chicago Daily News, 26 September 1972, p. 27.

ships.[50] They have participated in the large Soviet maneuvers in 1968 (SEVER) and in 1970 (OKEAN), during which they were transported along the length of the Norwegian coast and later conducted amphibious assault landings on the Kola Peninsula.[51] Air support is provided by an estimated 300 Soviet Air Force planes based on or near the Kola Peninsula. This force could be augmented rapidly by using the 40 airfields in the area.[52]

In July of 1971, Norway's Prime Minister Trygve Bratteli stated that, "It seems quite clear ... that there are more Soviet military forces in the North today than ever before, possibly with the exception of World War II." However, he went on further to say that he considered the buildup as part of the overall Soviet global deployments, not as a specific threat to Norway, and that Norway would not attempt to expand its forces in reaction.[53]

CINCNORTH later described the tasks of the Soviet Northern Fleet as:

> a. To counter the threat posed by the Allied POLARIS and POSEIDON missiles.
> b. To paralyze the Supreme Allied Command Atlantic attack carriers before aircraft could be airborne.
> c. To ensure control of strategic

---

[50]"Soviet Maritime Power", NATO's Fifteen Nations, June-July 1968, p. 15.

[51]Johan Holst, "The Soviet Buildup in the North-East Atlantic", NATO Review, September-October 1971, p. 22.

[52]Stoneman, p. 27.

[53]"Oslo Cites Soviet Buildup", Washington Post, 7 July 1971, p. A12.

maritime areas.
d. To ensure passage for their own nuclear-powered submarines to areas along the east coast of America.
e. To cut NATO supply and communication lines.
f. To give naval support to operations against fortified coasts.
g. To play a propaganda role for Soviet strength and reduce confidence in US guarantees about the defense of Europe.[54]

If this assessment is correct, it is apparent that several of the tasks, especially b, c, e, and f, could vitally influence the security of Norway.

NORWEGIAN DEFENSE FORCES

Norway's total active Armed forces currently number 35,900, or slightly less than one per cent of the population. Of this number, 18,000 are in the Army, 8,500 in the Navy (including 800 in the coastal artillery), and 9,400 in the Air Force.[55] Except for the officers and senior NCOs, the forces are manned by conscripts who serve for 12 months in the Army, or for 15 months in the Navy and Air Force. Her annual military expenditures amount to $411 million, or 3.3% of the gross national product.[56]

---

[54]Walker, p. 24.
[55]International Institute for Strategic Studies, The Military Balance 1972-1973 (1972), p. 23.
[56]Dupuy and Blanchard, pp. 103-104.

The forces of the other NATO nations, especially the naval forces of the Federal Republic of Germany, contribute significantly to the defense of southern Norway. This permits Norway to concentrate a large part of her defense capability in North Norway.[57]

The Norwegian Army is organized into one Regimental Combat Team (RCT) which is based in North Norway, the Royal Guard in the south, and independent battalions, support elements, and training units.[58] The Army is equipped with 200 light and medium tanks, 30 artillery pieces, and a number of armored cars and armored personnel carriers.[59] The land forces in North Norway include a company at Kirkenes, a frontier battalion in the vicinity of Banak, the RCT near Tromsø, and a company at Bodø.[60] The bulk of the forces are 18 or 19 year olds who have received three months of training before being stationed in the north for the remaining nine months of their active duty.[61]

Norwegian Air Force units include one interceptor squadron with F-104Gs, five fighter-bomber squadrons with F-5As, one reconnaissance squadron with RF-5As, one maritime

---

[57]Johan Holst, Norwegian Security Policy: The Strategic Context (1966), p. 10.

[58]Robert Sellers, ed., "Norway", Armed Forces of the World (1971), p. 181.

[59]Dupuy and Blanchard, p. 105.

[60]Forster, p. 20.

[61]Drew Middleton, "Norway Is On Watch at NATO's Frontier," New York Times, 4 July 1970, p. 2.

patrol squadron, one transport squadron and two helicopter squadrons. The major air bases in the north are at Bodø, Bardufoss, and Andøya.

The major naval units include five frigates, 15 coastal submarines, five minelayers, 10 coastal minesweepers, two patrol escorts, 20 fast patrol boats (being refitted with the Penguin SSM), and 26 torpedo boats. Naval facilities in North Norway include bases at Harstad, Tromsø, and Trondheim.[62]

It has been estimated that the Soviet forces outnumber the Norwegian forces in the frontier area by 4 to 1 in men, 15 to 1 in tanks, 6 to 1 in artillery, 4 to 1 in ships, and 7 to 1 in aircraft.[63] To offset this disparity, Norwegian strategy relies heavily on the rapid mobilization of its 180,000 reservists and 75,000 home guards.[64] The credibility of the reserve forces as a deterrent, however, is questionable. The population distribution of Norway results in the majority of the reserve forces being mobilized in the south. Assuming that an adequate state of training is maintained, sufficient warning time must be available to mobilize the forces and to transport them to North Norway with their equipment. Suitable transportation and reception facilities are extremely limited in the north, and would be prime targets in time of war.

---

[62] The Military Balance 1972-1973, p. 23.
[63] Stoneman, p. 27.
[64] The Military Balance 1972-1973, p. 23.

Norwegian defense planners are disturbed by the buildup of Soviet border forces and the possibility that little warning would be available if the Soviets employed them in an invasion under the pretext of maneuvers, as they did in Czechoslovakia.[65]

NORWAY AND NATO

Unlike NATO's Central Region, a rapid incursion across the Norwegian border would not automatically involve the forces of several NATO nations. On 29 January 1949, when Norway was considering joining NATO, the Soviets sent a diplomatic note asking Norway's intentions and, specifically, if Norway would make bases available for foreign forces. On 1 February, Norway sent a return note stating that it would

> ...not join in any agreement with other States involving obligations to open bases for the military forces of foreign powers on Norwegian territory as long as Norway is not attacked or exposed to threats of attack.[66]

In December 1957, the Norwegians expanded on this ban by stating in the NATO ministerial meeting in Paris that "...Norway does not intend to allow storage of nuclear weapons or the installation of firing bases for medium range rockets on Norwegian territory."[67]

---

[65]Johan Holst, A Norwegian Look in the Early Seventies (1969), p. 16.

[66]Phillip Burgess, Elite Images and Foreign Policy Outcomes: A Study of Norway (1969), p. 127.

[67]Bjørn Østrup, The Foreign Policy of Norway (1968), p. 8.

This restriction was further extended on 31 March 1963 when Premier Gerhardsen stated in Helsinki that the nuclear ban also applied to participation in a multilateral nuclear force.[68]

One rationale for Norway's refusal to base foreign troops and nuclear weapons is the "Nordic Defense Balance" theory. According to this theory, by practicing self-restraint in its relations with NATO, Norway tends to maintain equilibrium in Scandinavia. Too much participation by Norway would cause the Soviets to move into Finland, causing a total loss of its independence and reducing Swedish mobilization warning time. The current restrictions on NATO participation are considered as bargaining points to be used to counter possible Soviet aggressive actions. The present environment in NATO, however, tends to detract from the credibility of these issues. It is not certain that foreign troops and nuclear weapons would be made available rapidly for permanent basing to counter Soviet actions short of war, especially if the actions were directed against Finland or Sweden. Nor is it certain that the Norwegian Storting (Parliament) would approve permanent basing in less than drastic circumstances.[69]

---

[68]Niels Haagerup and Nils Orvik, The Scandinavian Members of NATO (1965), p. 6.

[69]Orvik, p. 43.

There are several arrangements for NATO military participation in Norway that are not excluded by the base-and-bomb ban. Most of the Norwegian forces are earmarked to come under the operational command of CINCNORTH in time of war. Allied staff officers are stationed at the headquarters of Allied Forces Northern Europe (AFNORTH) at Kolsås, outside of Oslo.[70] NATO and bilateral maneuvers are frequently conducted in Norway to exercise possible reinforcement plans. To avoid threatening the USSR, the Allied exercises are not conducted in Finnmark, and foreign military aircraft are restricted from flying over Norwegian territory east of 24°E.[71]

Of particular importance to Allied Command Europe (ACE) defense plans for Norway is the ACE Mobile Force (AMF). This light, highly mobile force was organized in 1960 to react to limited attacks, particularly on the NATO flanks.[72] Composed of forces from eight nations stationed in the Central Region, it includes eight battalion groups, an armored reconnaissance squadron, and tactical air support squadrons.[73] In addition to its capability to reinforce North Norway rapidly with moderate forces, it provides a multinational NATO presence to oppose any aggression. The force is not intended, however, to provide

---

[70]Einar Løchen, Norway in European and Atlantic Operations (1964), p. 14.

[71]Holst, Norwegian Look, p. 15.

[72]Stanley Harrison, "Defense of the Atlantic Community," US Naval Institute Proceedings, October 1969, p. 45.

[73]Military Balance 1972-1973, p. 15.

adequate reinforcement to counter a determined Soviet attack. It does not have air transport of its own and is deficient in such aspects as sustained ground mobility, communications, standardized equipment, logistic support, and multilingual personnel.[74]

The Standing Naval Force Atlantic (STANAVFORLANT) is the naval force assigned to Allied Command Atlantic (ACLANT) in peacetime and can be employed in a manner similar to the AMF. Its composition varies, but normally consists of four frigates and destroyers from several of five NATO members. It can be deployed rapidly to deter amphibious threats to North Norway.[75]

Norway has been a full participant in the NATO Infrastructure Program. Under its provisions, airfields, naval bases, petroleum storage facilities, communications networks, and warning sites have been constructed. These facilities not only aid Norwegian defense, but contribute significantly to NATO's surveillance capabilities. A recent example is the NATO Air Defense Ground Environment (NADGE) complex, stretching the length of the NATO front. This system of interlocking radars, computers, and air defense installations is intended to detect hostile aircraft and to launch missiles or fighters

---

[74]Holland, p. 19.

[75]M. Van Der Stoel, "The Northern Flank of the NATO Alliance," NATO Letter, September 1969, p. 18.

to intercept.[76]

STRATEGIC SIGNIFICANCE

In assessing the strategic importance of North Norway, consideration must be given both to the advantages which accrue to NATO by its use, as well as to the advantages of denying its use to the Warsaw Pact. Its intrinsic value, from a NATO-wide viewpoint, is limited to that coming from fishing, minerals, and hydroelectric power, and can not be judged as vital. Its primary significance is derived from its geographical position with respect to the polar air routes, naval access routes between the Soviet Union and the Atlantic, and the major northern Soviet military base area.[77] Of almost equal significance is its political status as a part of NATO.

North Norway lies beneath the most direct routes for aircraft and missiles between the industrial centers of the USSR and North America. It provides, or could provide in times of tension, early warning surveillance systems, forward bases for interceptor aircraft and missiles, and forward strike bases.[78] In these roles, North Norway probably is of more value to NATO than it would be to the USSR, since it directly

---

[76]Drew Middleton, "Defense Network is Tested by NATO," New York Times, 19 September 1971, p. 19.

[77]Holst, Norwegian Security Policy, p. 6.

[78]Samuel Van Valkenburg and Carl Stotz, Elements of Potical Geography (1954), p. 230.

adjoins the Soviet Union.

The Soviet Navy has progressed from a coastal defensive force to the world's second naval power.[79] Its large submarine force and growing fleet of modern surface vessels pose a threat to the sea approaches to Europe. However, to be an effective force, the large Northern Fleet would require assured access to the Atlantic from its northern bases. North Norway flanks this narrow line of communication and provides NATO with bases for air and sea reconnaissance, as well as electronic surveillance facilities, to track ship movements in peacetime. In wartime, these bases plus the many deep fjords would provide several hundreds of miles of dispersed operating areas for NATO submarines and surface ships. Intelligence estimates indicate that the Soviets regard the control or neutralization of these bases and surveillance systems as vital to the deployment of their Northern Fleet.[80] Control of North Norway by the Soviets would offer several additional advantages for their naval operations. Their fleet could be dispersed along the coastline to reduce its vulnerability. Use of the western ports would increase the time on station for conventional submarines and provide better positions to interdict Atlantic sea routes. Better air cover could be provided for the fleet by

---

[79]Baldwin, p. 65.

[80]Drew Middleton, "NATO Aides Voice Concern Over Weakness of Northern Defenses," New York Times, 15 December 1971, p. 12.

operating at such bases as Andøya and Bodø.[81]

North Norway in NATO hands threatens the Soviet base complex on the Kola Peninsula, which is saturated with ships and facilities for the naval, fishing, and merchant fleets.[82] Ground advances into Soviet territory have been launched from North Norway twice in modern times - by the Allies during the Russian Civil War and by the Germans during World War II.[83] Also, the Norwegian and Barents Seas offer good areas for Polaris submarine operations. In contrast with the coast of North Norway, the Kola area is too far east and too sheltered by shoals to be of use for a land based sonar system for detecting submarines.[84]

Regardless of its military value to NATO or to the Warsaw Pact, North Norway has vital political significance as a part of the treaty organization's territory. NATO's cornerstone of strength is its success in collective security. Under its umbrella, no NATO territory has been lost since its formation. If any NATO soil were successfully taken over by the Warsaw Pact, the credibility of the pledges made by the great powers would be virtually destroyed. Without the assurance of collective military support, the smaller nations would likely find accommodation with the Warsaw Pact to be the

---

[81]Holst, Norwegian Security Policy, p. 20.
[82]Örvik, p. 27.
[83]Holst, Norwegian Security Policy, p. 19.
[84]Örvik, p. 29.

only realistic alternative. North Norway offers the most favorable area for a Soviet incursion designed to trigger such a disintegration of NATO. No foreign troops or nuclear weapons are available in the area. A port or an island could be occupied rapidly under some pretext, with little or no opposition and with little likelihood of a nuclear response.[85]

CONCLUSIONS

It can be concluded that the comparison of the Soviet and Norwegian military forces in the north indicates that the Norwegian forces are too weak to do more than to screen the area and to delay a Soviet advance. The Soviets have the capability of rapidly isolating and occupying North Norway by using a combination of simultaneous ground, airborne, and amphibious attacks. The AMF and STANAVFORLANT could play important political and psychological roles if they are deployed soon enough, but their size is insufficient to stop a determined attack. NATO could be forced to choose between the alternatives of deploying massive forces to liberate the occupied areas, initiating a nuclear response, or doing nothing.

North Norway has considerable military significance to NATO as a forward surveillance and operating base. The credibility of the Alliance to provide collective security for its

---

[85] *Ibid.*, p. 6.

members gives it added significance. For the Soviets, control of the coast of North Norway is vital to its ability to interdict the NATO maritime lines of communication.

The deployment of sufficient conventional NATO forces to defend North Norway against the current Soviet threat appears unlikely, and probably undesirable. It is important, however, that Norway maintain adequate defenses to insure that the Soviets will not be tempted to risk an incursion in the belief that it can be accomplished without resistance. It is equally important that NATO maintain sufficient reserve forces to provide a conventional reinforcement capability as a possible alternative to a nuclear response, or to no response at all.

Max B. Scheider
MAX B. SCHEIDER
Colonel, CE

BIBLIOGRAPHY

1. Baldwin, Hanson W. Strategy for Tomorrow. New York: Harper and Row, 1970.

2. Breyer, Siegfried. Guide to the Soviet Navy. Annapolis: US Naval Institute, 1970.

3. Burgess, Phillip. Elite Images and Foreign Policy Outcomes: A Study of Norway. Columbus: Ohio University Press, 1969.

4. Bøstrup, Bjørn. The Foreign Policy of Norway. Oslo: Press Department, Royal Ministry of Foreign Affairs, 1968.

5. Cox, David. "Sea Power and Soviet Foreign Policy." United States Naval Institute Proceedings, June 1969, pp. 32-44.

6. Derry, Thomas. A Short History of Norway, London: Allen and Unwin, LTD., 1957.

7. Dupuy, T. N., COL, (Retd) and Blanchard, Wendell, COL, (Retd). The Almanac of World Military Power. Dunn Loring: T. N. Dupuy Associates, 1972.

8. Ekeland, Sigurd. Norway in Europe, An Economic Survey. Oslo: Press Department, Royal Ministry of Foreign Affairs, 1970.

9. Enthoven, Alain and Smith, Wayne. "What Forces for NATO? And From Whom?," Foreign Affairs, October 1969, pp. 80-96.

10. Fairhill, David. Russian Sea Power. Boston: Gambit Inc., 1971.

11. Forster, Mark. "Outflanked By Events," Manchester Guardian, 17 July 1972, p. 20.

12. Haagerup, Niels and Orvik, Nils. The Scandinavian Members of NATO. London: The Institute for Strategic Studies, Adelphi Papers No. 23, 1965.

13. Harrigan, Anthony. "The Soviet Sea Power Challenge." NATO's Fifteen Nations, June-July 1968, pp. 18-23.

14. Harrison, Stanley. "Defense of the Atlantic Community." United States Naval Institute Proceedings, October 1969, pp. 44-49.

15. Heath, Air Marshal Sir Maurice. "Is the Posture of NATO Correct?" The Royal Air Forces Quarterly, October 1969, pp. 205-208.

16. Herrick, Robert, CDR (Retd). Soviet Naval Strategy, Annapolis: US Naval Institute, 1968.

17. Holland, James. Allied Command Europe's Mobile Force. Oslo: Norwegian Institute of International Affairs, 1966.

18. Holst, Johan. A Norwegian Look in the Early Seventies, Croton-On-Hudson: Hudson Institute, June, 1969.

19. Holst, Johan. Norwegian Security Policy: The Strategic Context. Oslo: Norwegian Institute of International Affairs, 1966.

20. Holst, Johan. "The Soviet Build-Up in the North-East Atlantic." NATO Review, September/October 1971, pp. 21-23.

21. Jensen, Hallkjell. A Geographical Survey of North Norway, Oslo: Norwegian Institute of International Affairs, 1966.

22. Livingston, Gordon, LTC. The Political-Military Impact of Soviet Naval Strategy Upon Norway as a Member of NATO. Thesis, Newport: US Naval War College, 15 April 1971.

23. Lochen, Einar. Norway in European and Atlantic Operations, Sarpsborg: Universitetsforlaget, 1964.

24. McNulty, James. "Soviet Sea Power: Ripple or Tidal Wave." United States Naval Institute Proceedings, July 1970, pp. 18-25.

25. Middleton, Drew. "Defense Network is Tested by NATO." New York Times, 19 September 1971, p. 19.

26. Middleton, Drew. "NATO Aides Voice Concern Over Weakness of Northern Defenses." New York Times, 15 December 1971, p. 12.

27. Middleton, Drew. "NATO Termed Vulnerable in North." New York Times, 6 July 1970, p. 10.

28. Middleton, Drew. "Norway is on Watch at NATO's Frontier." New York Times, 4 July 1970, p. 2.

29. Mitchell, Mairin. The Maritime History of Russia 848-1948. London: Sedgwick and Jackson, Ltd., 1949.

30. NATO Facts and Figures. Brussels: NATO Information Service, 1971.

31. "Norway." Armed Forces of the World. New York: Praeger, 1971.

32. Örvik, Nils. Europe's Northern Cap and the Soviet Union. Cambridge: Harvard University Center for International Affairs, 1963.

33. "Oslo Cites Soviet Buildup." Washington Post, 7 July 1971, p. A12.

34. Robbins, James. Norway's Role in Western Defense: Some Norwegian Viewpoints. Santa Monica: The Rand Corporation (RM-2603), 25 July 1960.

35. Shirer, William. The Challenge of Scandinavia. Boston: Little, Brown and Co., 1955.

36. "Soviet Maritime Power." NATO's Fifteen Nations, June-July 1968, pp. 12-16.

37. Stagg, Frank. North Norway, A History. London: Allen and Unwin, Ltd., 1952.

38. Stoneman, William. "Elaborate NATO Force Puts on Smooth, Awe-Inspiring Display in Arctic Water." Chicago Daily News, 26 September 1972, p. 27.

39. The Military Balance 1972-1973. London: The International Institute for Strategic Studies, 1972.

40. Tveterås, Egil, ed. The Norway Year Book 1967. Oslo: Johan Grundt Tanum Forlag, 1967, pp. 11-18. "Topography," by O. J. Skattum.

41. US Bureau of the Census. Statistical Abstract of the United States. Washington: US Government Printing Office, 1972.

42. US Department of State. Office of the Geographer. Norway-USSR Boundary. Washington: US Government Printing Office, 1963.

43. Van Der Stoel, M. "The Northern Flank of the NATO Alliance." NATO Letter, September 1969, pp. 16-19.

44. Van Valkenburg, Samuel, and Stotz, Carl. Elements of Political Geography. Englewood Cliffs: Prentice - Hall, 1954.

45. Walker, General Sir Walter. "A Glance at the Future," Military Review, September 1972, pp. 21-30.

46. Wuorinen, John. Scandinavia. Englewood Cliffs: Prentice - Hall, 1965.

47. Ziemke, Earl. The German Northern Theater of Operations 1940-1945. Washington: US Government Printing Office, 1960.