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REINFORCING NORWAY IN WAR: A DILEMMA IN NORWEGIAN NATIONAL SECURITY POLICY

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by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Operations Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Purpose: Norwegian national security policy of reassurance adversely affects NATO efforts to reinforce Norway.

Scope: This paper examines factors that could lead to a delay in deployment of NATO reinforcements; the effects that delayed deployment could have on Norway's military forces; and Norwegian alternatives for dealing with the problems of delayed deployment.

Conclusions: Given the existing constraints of Norwegian security policy, this paper concludes that Norwegian military planners could mitigate the effects of delayed reinforcement by using alternative methods of deploying units, adopting a less vulnerable basing mode, using sea-based options and using more politically acceptable reinforcements earlier.

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Abstract of
REINFORCING NORWAY IN WAR:
A DILEMMA IN NORWEGIAN NATIONAL SECURITY POLICY

The Norwegian national security policy of reassurance adversely effects NATO efforts to reinforce Norway. This paper will examine 1) the factors that could lead to a delay in deployment of NATO reinforcements; 2) the effects that delayed deployment of NATO reinforcements could have on Norway's military forces; and 3) Norwegian alternatives for dealing with the problems of delayed deployment.

Norwegian security policy has attempted to deter Soviet aggression with a dependence on NATO reinforcement and paradoxically, with reassurance about Norway's peaceful intentions by prohibiting peacetime establishment of foreign troops, bases, and nuclear weapons on Norwegian soil. Since this policy may inhibit the rapid deployment of NATO reinforcements in crisis, the Soviet Union could exploit Norwegian military forces and take advantage of this delay to attack Norwegian bases and prevent reinforcement.

Given the constraints of existing Norwegian national security policy, this paper concludes that Norwegian military planners could mitigate the effects of delayed reinforcement by using alternate means of deploying forces, changing the current basing structure and improving base defense systems, and using replacement forces that provide more politically acceptable reinforcements.

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REINFORCING NORWAY IN WAR:

A DILEMMA IN NORWEGIAN NATIONAL SECURITY

CHAPTER I

INTRODUCTION

> The defense of the northern region is dependent to a decisive degree on rapid reinforcement from the U.S. and the rest of NATO; yet increased restrictions on U.S. and NATO activities in Norway limit U.S. ability to bring force to bear quickly in defense of the region.[1]
>
> Discriminate Deterrence
> Report on the President's
> Commission on Integrated
> Long-Term Strategy

> [The U.S. report] clearly suffers from some distortions, since it pays no attention to the Nordic balance and the considerations of low tensions in the Northern region.[2]
>
> Johan Jorgen Holst
> Norwegian Minister of Defense

Reinforcing Norway in war, as evidenced by these divergent views, highlights a fundamental dilemma in Norwegian national security policy. This dilemma is Norwegian dependence on NATO reinforcement for deterrence of Soviet aggression and defense if deterrence fails, and reassurance to the Soviet Union not to destabilize the region with increased military forces. This policy reassures the Soviets about Norway's peaceful intentions to limit the presence of allied forces in and around Norway. By prohibiting peacetime establishment of foreign troops, bases and nuclear weapons on Norwegian soil, Norway may inhibit the rapid deployment of NATO reinforcement in crisis. Since the Soviet Union has continued to pursue an active policy, both militarily and politically,

aimed at precluding any threat from the Nordic region in event of war, the Soviets could exploit Norwegian military forces and take advantage of this delay to attack Norwegian bases and prevent reinforcement. This paper asserts that the Norwegian security policy of reassurance adversely affects NATO efforts to reinforce Norway in war and focuses on the factors that could lead to a delay in deployment of NATO reinforcement, the effects that delay could have on Norway's military forces and Norwegian alternatives for dealing with the problems of delayed deployment.

Chapter II examines the limitations of Norway's national security policy of reassurance, base policy, and concept of self-restraint within the framework of the Nordic Balance as factors that could lead to a delay in deployment of NATO reinforcement. Chapter III analyzes the effects that delay could have on Norwegian military forces by comparing Soviet and Norwegian strategy and available forces. Chapter III also examines the NATO forces that are likely to be committed to north Norway in crisis and asserts that delays in preventing NATO forces from deploying and arriving in north Norway could prevent timely deployment of future reinforcements. Alternate means of deploying forces, changes to current basing structure and other replacement options are evaluated in Chapter IV as alternative approaches for dealing with Soviet efforts to prevent deployment of NATO reinforcement. Chapter V concludes that Norwegian desire for crisis stability and reassurance makes use of a NATO Rapid Reaction Force the most feasible, politically acceptable reinforcement approach.

CHAPTER II

FACTORS THAT COULD LEAD TO A DELAY IN DEPLOYMENT OF NATO REINFORCEMENT

Norwegian national security policy is based upon a balance between security and reassurance. With regard to security, the Norwegian Ministry of Defense Proposition No. 1 for the Budget Period 1991 recognized the Soviet threat in the north and underscored the continued need to link Norway closely with the European and Atlantic security system through NATO membership. The ministry maintained that security in the north cannot be regionalized and that the "military imbalance can only be counterweighed through Norway's connection to Western cooperation through NATO."[3]

Norway's policy of reassurance is founded in the "Base Policy" of 1 February 1949 which states that:

> Norway will never take part in a policy with aggressive aims. She will never allow Norwegian territory to be used in the service of such a policy. The Norwegian government will not enter 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.[4]

In 1957 Norway extended the policy to include a prohibition on nuclear weapons and over time has added the following exercise restrictions:

- no allied aircraft may operate east of 24°E (approximately 100nm from Soviet territory at the closest point);
- no allied naval vessels may operate in Norwegian territorial waters east of 24°E.
- no allied ground exercises are permitted in the northernmost county of Finnmark, which borders on the Soviet Union; and
- the number of allied air and naval forces allowed simultaneously in various parts of Norway are limited.

In summary, these restrictions are designed to limit Norway's NATO membership in three ways: 1) prohibiting the peacetime establishment of foreign troops and bases; 2) prohibiting the deployment of nuclear weapons; and 3) restricting full-scale allied exercise participation.

Norwegian leadership has recognized, however, the limitations of this reassurance policy. Defense Minister Holst noted that "to guarantee security and stability, and to preserve the state of low tension in the area, it is important to Norway that allied naval forces are present in the Norwegian sea with reasonable regularity, but without indicating any desire for permanent presence."[5] Combining these peacetime political constraints with wartime needs, Norway has cooperated with the U.S. in certain instances by relaxing reassurance restrictions. Specifically, a 1951 policy clarified which bases were made available to allies in war; a 1960 Invictus Agreement between Norway and the USN allowed aircraft to operate from Norwegian bases in wartime or special circumstances; the 1974 Collocated Operating Bases agreement allowed the USAF to use airfields and stockpile material; a 1981 agreement provided for prepositioning of equipment for use of the USMC's MPB; recent deployment of ASW electronic detection equipment in northern Norway assisted in detection of Soviet submarine quieting programs; and tolerance of U.S. presence in Norwegian waters in support of Forward Military Strategy objectives occurred. While these cooperative steps are encouraging, it is important to note, as will be developed later in this paper, they are still restrictive. On numerous occasions I have landed in Norway to complete a maritime patrol aircraft operational detachment and been required to recycle through Iceland to avoid Invictus time constraints

and to complete ASW missions against Soviet submarines operating in the Norwegian Sea.

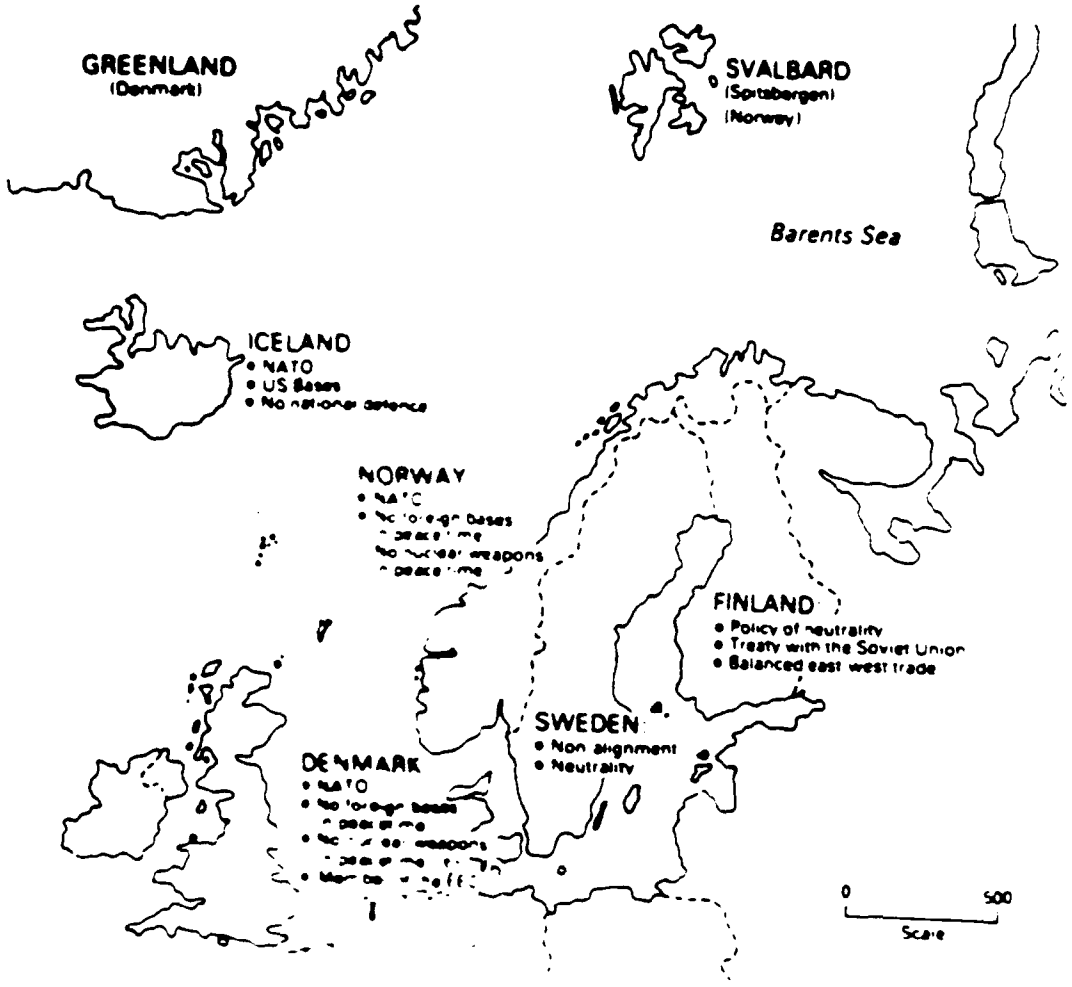
Norway's national security policy is also intertwined into the concept of the Nordic Balance, coined by Arne Olar Brundtland of the Norwegian Institute of International Affairs. Although Nordic countries chose different roads to security as illustrated by Figure 1, over time the chosen policies have crystallized into a "coherent pattern of mutual considerational and restraint."[6] Key elements of the Nordic Balance concept include:

- Finnish pledges by treaty repel attacks on herself or on the Soviets through Soviet territory and to consult with the Soviets if threatened by Germany;
- Swedish reaffirmation of non-alignment in peacetime and armed neutrality in war;
- Icelandic membership in NATO but lack of military forces;
- Norwegian and Danish support as NATO members but self-denial of NATO military support; and
- Soviet potential to dominate the region militarily but lack of coercive force to date.

Norway's role in the Nordic Balance is important because the concept of self-restraint encourages Norwegian national security policy of reassurance. Norwegian leaders believe this concept contributes to stability and a low degree of tensions in all of Nordic Europe.[7]

FIGURE 1

THE NORDIC BALANCE



Source: Eric Grove, NATO's Defense of the North (McLean, VA: Brassey's Inc., 1989), p. 90.

The Norwegian security dilemma is complicated by her strategic importance and demographics. With a 2642 km straight line coastline (28000 km counting fjords) on the Norwegian and Barents Sea, a 176 km border with the Soviet Union, and 716 km border with Finland, Norway's four million population occupy an enormous territory of great strategic value that they cannot defend alone.[8] Norway's strategic importance centers around her proximity to the Soviet Union. Specifically,

- Norway borders on key Soviet base complexes on the Kola Peninsula, home to two-thirds of the Soviet SSBN fleet, as well as the Northern Fleet.
- Norway holds the key to controlling the Norwegian Sea, Soviet access to the Atlantic Ocean, and Soviet interdiction of NATO SLOC's between North America and Europe. Norway has excellent airfields, ice-free naval dispersal areas and easy access to SLOC's.
- Norway lies under the polar routes that combat U.S. strategic bases and the Soviet heartland.

Since her small population base makes it impossible for Norway to create a force needed to ensure equality with her powerful Soviet neighbor, Norway meets the challenge of her strategic importance with a "security policy based on the inherent right of self-defense as provided for in Article 51 of the Charter of the U.N."[9] and a Total Defense Concept. A prerequisite for the Total Defense Concept is the plan to battle on Norwegian territory only; the need for a modern, industrialized society that possesses the resources and surplus of goods suited for military use;[10] and the ability to mobilize more than 300,000 civilians for military service.

Three factors, then, could lead to a delay in NATO reinforcement. First, the Norwegian government is committed to a low-tension policy and will decide when to allow allied reinforcement into Norway. The Main

Guidelines for the Defense Establishment During the Period 1984-1988, for example stated that, "it is up to the Norwegian authorities to determine whether and when allied reinforcements are to be summoned to the country."[11] Because Norwegian leaders are committed to reassurance, they may view an increase in magnitude and frequency of NATO activity as threatening to the Soviet Union and not request timely reinforcement. Second, Norwegian self-restraint and concern for destabilizing the Nordic Balance may cause a delay. Third, Norwegian leaders may delay mobilization of the Total Defense Concept and request for allied reinforcement to avoid disruption of the Norwegian civilian population base.

CHAPTER III

THE EFFECTS DELAYED DEPLOYMENT OF NATO REINFORCEMENT COULD HAVE ON NORWEGIAN MILITARY FORCES

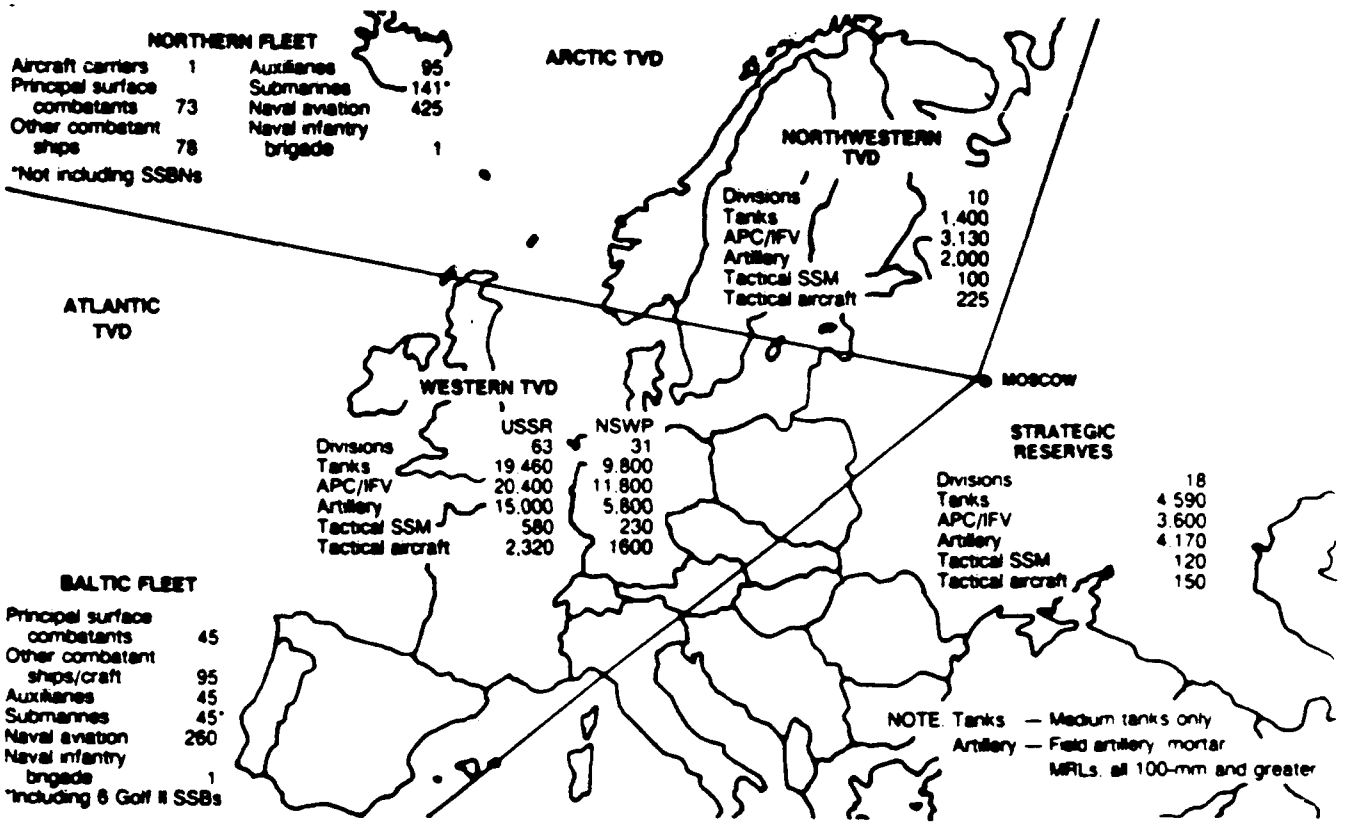
Assessment of the operational effects of delayed reinforcement requires a comparison of Soviet and Norwegian strategies and available forces in the far north. In the event of war, the Soviet Union would have three strategic objectives in northern Europe:

- o defending the homeland from attack and extending the mean defense perimeter of the Soviet European heartland in the event of U.S. strategic bomber and SLCM attacks;
- o protecting the Soviet SSBN bastions in the Arctic and Barents Sea; and
- o interdicting NATO SLOC's between North America and Europe to disrupt the flow of reinforcements.[12]

Although the Soviet strategy in the far north is defensive overall, the Soviets would have to launch offensive operations to achieve these strategic objectives. To provide a secure defense of air and sea in the north, the Soviets would need to seize, destroy or deny NATO use of airfields in North Norway. To defend SSBN bastions, the Soviets would need to move into the Norwegian Sea and eliminate NATO naval forces there. To interdict SLOC's the Soviets would have to conduct offensive operations and control the Norwegian Sea and North Atlantic.[13] Figure 2 illustrates the Soviet theaters of strategic military action surrounding Norway while Figure 3 depicts the Soviet air and naval bases on the Kola Peninsula. Given the Soviet doctrine of overwhelming and annihilating their enemies, these figures indicate the forces available to exploit gaps in Norwegian defenses and achieve Soviet strategic objectives.

FIGURE 2

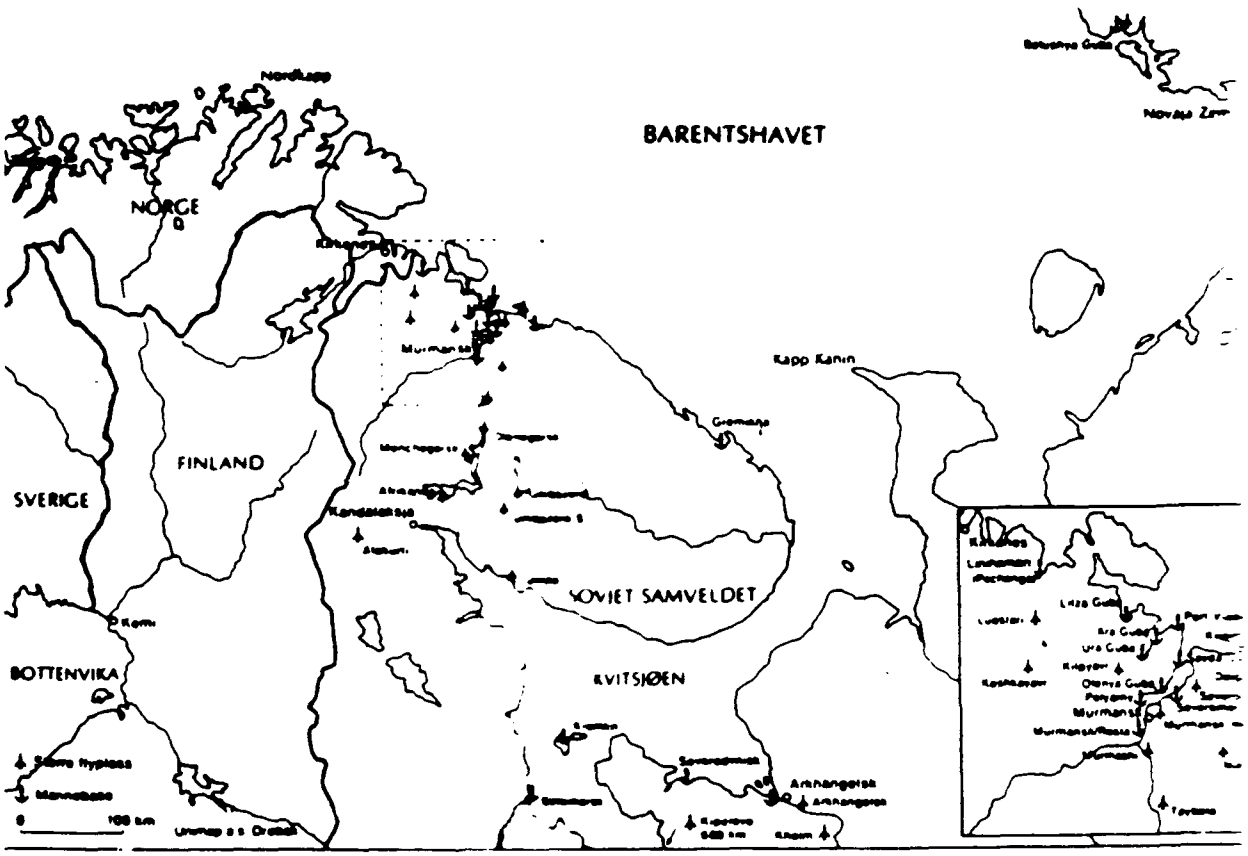
THEATERS OF STRATEGIC MILITARY ACTIONS SURROUNDING NORWAY



Source: John Lund, Don't Rock the Boat (Santa Monica, CA: The Rand Corporation, 1989), p. 44.

FIGURE 3

SOVIET AIR AND NAVAL BASES ON THE KOLA PENINSULA



SOURCE: Norwegian Atlantic Committee, 1986

These strategic objectives, which are indicative of Soviet intent in time of crisis, coupled with the formidable Soviet threat on the Kola Peninsula clearly indicate that the Soviets pose a formidable threat in the northern region.

According to Rear Admiral Rolf Pedersen, Inspector General of the Royal Norwegian Navy, Norwegian strategy consists of three stages to sustain balance between security and reassurance:

- o maintain adequate forces in north Norway at a high level of training and readiness. This should ensure adequate holding time to . . .
- o enable reinforcements from southern Norway to mobilize and reinforce Norway and endure until . . .
- o NATO's reinforcements arrive.[14]

This strategy is designed to "maintain low tension in nortn Norway and, at the same time, safeguard her strategy and freedom of action."[15] To achieve these strategic goals, RADM Pedersen recognized that "Norway must rely on timely reinforcements when we ask for them in a critical situation" and that "the Norwegian military must be able to hold out until NATO reinforcements reach combat theaters."[16]

Norwegian military forces, therefore, have three primary functions. In the north, they must maintain readiness and not reduce NATO reinforcement capabilities to the point where the Soviets would be tempted to launch an isolated attack or pressure northern Norway. In the south, they must reinforce and support northern Norway.[17] Available forces to meet these functions consist of the Royal Norwegian Navy (RNoN), Royal Norwegian Army (RNoA), Royal Norwegian Air Force (RNoAF), Total Defense Concept additions and NATO reinforcements.

Norwegian naval defense forces (Table 1) consist of three branches:

- Coastal artillery with coastal batteries, torpedo batteries and controllable minefields;
- Navy with submarines, frigates, motor torpedo boats, minelayers, minesweepers and auxiliary ships; and
- Coast Guard which functions as part of the RNoN.

These forces have as their main mission protection of Norwegian territory from attacks launched from the sea. This mission is divided into three main portions:

- surveillance;
- anti-invasion; and
- protection of SLOC's.

Surveillance is accomplished by submarines, maritime patrol aircraft, coast guard vessels, coastal artillery units, coastal radar stations and an alert coastal population to provide an outer line of defense along Norway's 28000 km coastline.

The maritime triad of the anti-invasion concept centers around delays and channelization; survivability and perseverance; and mobility and concentration of forces.[18] The delay and channelization effect is designed to win time for Norway to concentrate her forces or channel naval invasion to areas less vulnerable or easier to defend. This effect is accomplished by coastal artillery installations located to protect the entrances to crucial resource centers; 20 seafront batteries; defense minefields; and new Ula (S-300) and updated Kobben (S-318) submarines. 38 motor torpedo boats (MTB) and 61 F-16 fighters provide mobility and concentration of forces to inflict losses on enemy amphibious and troop transport ships before the invasion force comes ashore. Protection of SLOC's is important because ground/rail transportation between northern and southern Norway is

extremely limited. To protect vital SLOC's between Trondelag and Vest Fjorden or important approaches to key facilities, i.e. supply base north of Ofotfjord, the Navy's main base at Haakonsvern, enemy submarines will be intercepted by Norwegian frigates, corvettes, coast guard vessels and requistioned fishing vessels using sonar and mines. MPA and MTB's will be used for attack while OSLO class F-300's, Sea Sparrows, RNoAF Hawk missiles, and coastal artillery missiles will provide air defense.[19]

The RNoA is truly a mobilization army with a peacetime strength of 19000 and a mobilization strength of 165000. The majority of the standing land forces are stationed in north Norway in the Finnmark and Troms Land Districts. After mobilization the army can field 13 independent brigades, six of which would be stationed in north Norway. Table II indicates the ground forces likely to be committed to North Norway in crisis and more importantly the estimated time after mobilization it will take for these forces to be available in place. The Home Guard forms an important adjunct to Norway's regular forces and would play a key role in the mobilization process. Home Guard members keep their weapons at home, report to their mobilization point within three hours, and conduct LOC protection, local roadblocks and anti-sabotage.[20]

"The primary task of the RNoAF, both nationally and in the NATO context, is defensive air defense of key areas and air bases to secure Norwegian and NATO air, land and naval operations."[21] The major effort will be to fight for air superiority over key defense areas. This operational concept requires a defense in depth with F-16 fighters providing forward defense, and area Norwegian Adapted Hawk (NOAH) surface-air missiles (SAM) (deployed to defend the six main air bases in north and central Norway) and SHORAD systems providing the second and

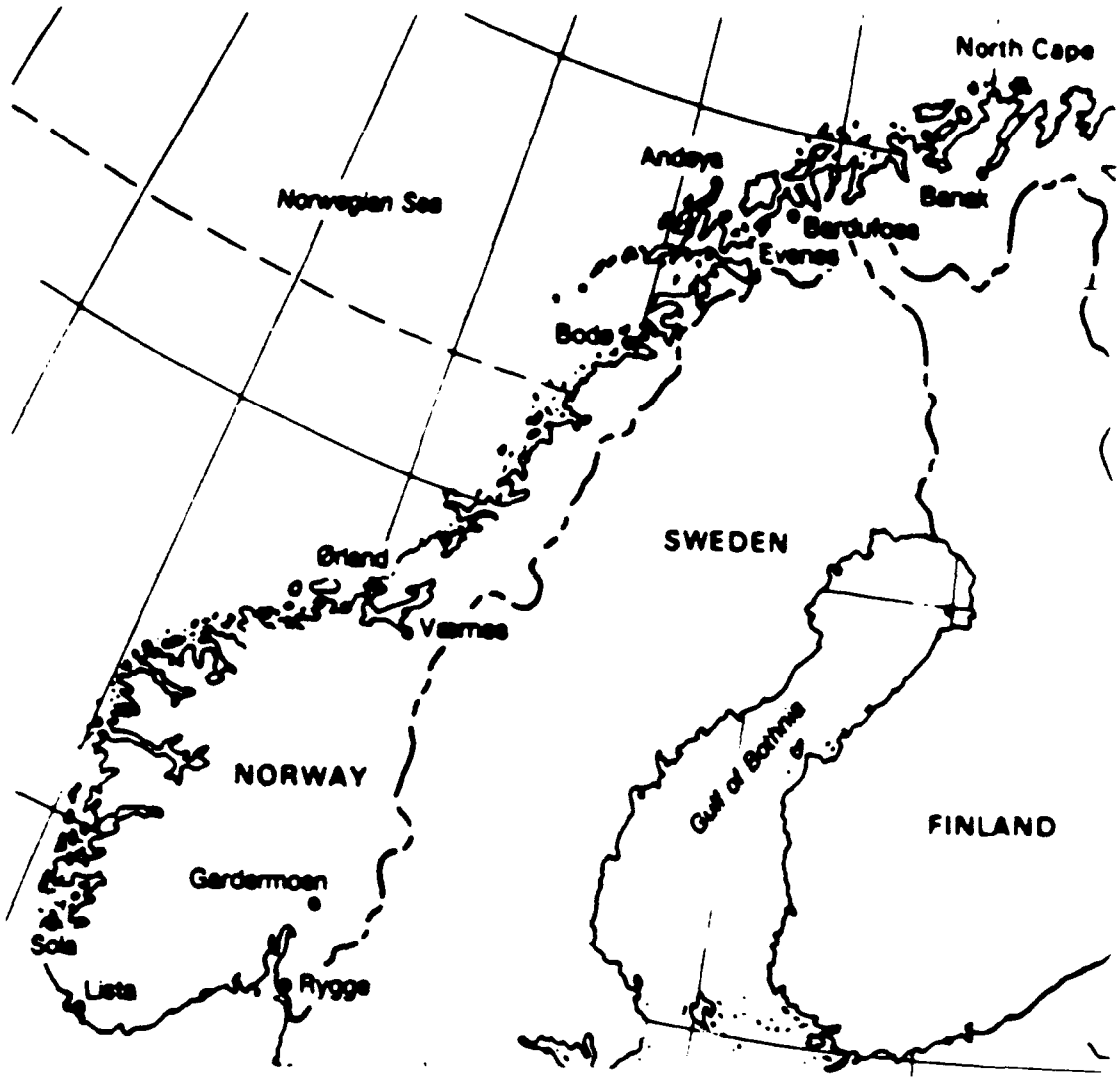
third layers of defense. Available RNoAF assets are summarized in Table III and the most significance Norwegian air bases are depicted in Figure 4. It is important to note that "the main purpose of the initial air defense is to secure air bases and harbors for the reception of allied reinforcements."[22]

Although the strength of available Norwegian forces in war must not be underestimated, they will be no match for the Soviet forces and must depend on NATO reinforcements. "Since Norwegian political authorities do not want to depend on deployment of NATO reinforcements before hostilities begin, they have stressed the need to defend Norway long enough for reinforcements to arrive."[23] According to Defense Minister Holst "Norway has not structured her defense strictly in accordance with the principles of forward defense, having chosen instead to concentrate her force deployments in the county of Troms in order to exploit the configuration of terrain to maximum benefit and deny the would be attacker the strategic benefit of access and control over the SLOC's . . . Finnmark will have only a trip wire made up of two battalion groups."[24] Therefore, Troms not Finnmark will contain the heaviest concentration of ground forces for initial defense and Kirkenes will not be one of six major bases defended by the NOAH system. Norway, then, intends to trade "space for time" and depend upon NATO reinforcement.

Norway's "space for time" strategy in war is dependent upon the available NATO reinforcements Norway may expect in crisis and the length of time required for those reinforcements to reach Norway. Within NATO, Norway falls under the command of Allied Forces Northern Europe (AFNORTH) headquartered at Kolsas and three subordinate commands of North Norway (NON), South Norway (SONOR) and Baltic Approaches (BALTAP).

FIGURE 4

NORWEGIAN AIR BASES



In peacetime, AFNORTH's forces in Norway consist entirely of Norwegian units in accordance with Norway's Base Policy. In wartime, Norway can be expected, as depicted in Table II, to be reinforced with the following ground forces:

- Allied Mobile Force (AMF)/(3 multinational brigades and 4 multinational fighter squadrons);
- NATO Composite Force (NCF);
- 4 Marine Expeditionary Brigade (MEB) (1 large, capable USMC MEB to be stationed near Trondelag with POMCUS in central Norway);
- 3 Commando Brigade (Dutch and United Kingdom Royal Marines from SACLANT).

Additionally, as summarized in Table IV, north Norway can expect USAF reinforcement at eight Colocated Operating Bases (COBs) each capable of receiving one USAF squadron and limited NATO Airborne Early Warning (NAEW) support. As evident in Tables II and IV, external reinforcements (not including NATO carrier battle groups (CVBGs) which could remain at sea or NATO MPA assets which could stage from Iceland) compromise more than half of the ground forces and probably more than 200-300 aircraft to be deployed into north Norway.[25]

This dependence on NATO reinforcements becomes particularly important if the Soviets could exploit Norwegian delays in preventing these forces from deploying. If NATO reinforcements have not arrived before fighting begins, the RNoAF alone would have to provide air defense of north Norway. Air commanders would be faced with the difficult decision of how to use the limited number of aircraft available. The fighter-interceptor attack role of the Norwegian F-16's does not include ground support missions, but is limited to air defense and a special air interdiction mission (interdicting amphibious ships in fjords). Failure

to defend arriving ground reinforcements would mean fewer NATO ground forces would be available, higher NATO attrition rates would occur and lower Soviet attrition rates would result. Failure to interdict amphibious invasion fleets would mean losing the opportunity to attack when Soviet defensive flanks would be more exposed and vulnerable. Failure to conduct air defense and intercept missions would allow the Soviets to gain air superiority and prevent the arrival of ground reinforcements through attacks on airfields and ports. Air power would, therefore, play a critical role in determining victory on the ground in north Norway. Trading "space for time" assumes linear, sequential battles. If the Soviets encounter limited air resistance, they may choose to fight in a non-linear manner with several distinct battles simultaneously (Soviet amphibious forces could be used to outflank NATO defenses) to achieve their strategic objectives in the northern region.

The Soviets could also exploit a delay in deployment by preventing NATO reinforcements from arriving. The most efficient means of preventing reinforcement would be to destroy the runways or air bases in northern Norway. Despite recent prepositioning programs, air reinforcements still need to bring extensive amounts of material and personnel to Norway. For example, the 4th MEB is estimated to need 250-350 strategic airlift sorties, two Norwegian brigades 50-100 small civilian aircraft sorties, and the UK/Dutch Commandos 100-150 strategic airlift sorties. The entire effort to reinforce Norway with ground and air forces would require 600-800 sorties.[26] Table V estimates the airlift capability at Norwegian bases and indicates reinforcement would take at least 2-3 days assuming good weather, no counter-air and an unrestricted number of airlift aircraft. (Banak and Kirkenes would

probably not be usable in war since they are not protected by M/SAM, closer to Soviet air bases than other Norwegian air bases and vulnerable to Norway's "space for time" strategy.) If efforts were constrained by off-landing delays and a strategic airlift commitment of 50-1000 aircraft, reinforcement could take more than a week.[27] By comparing the distances from Soviet to Norwegian air bases found in Table VI, it can be estimated that Andoya, Bardufoss and Evenes are within range of SU-17 and MIG-27 range while Bodo, Orland and Trondheim are within SU-24 and TU-16 range. Each of these Norwegian air bases could be susceptible to runway cratering operations or other fighter-bomber missions. While closing all northern Norwegian air bases to tactical aviation would require a large number of Soviet attack aircraft and a willingness to accept losses, the Soviets could easily complicate NATO reinforcement by denying base access to strategic airlifters.

Tonne Huitfeldt, a former AF North Commander, has stated that the effects of reinforcement delay would be greatly magnified by Soviet air base attacks in north Norway.[28] If reinforcements are delayed politically and reinforcements cannot arrive until after the Soviets have attacked, and some bases are closed or captured, then the remaining bases could become overwhelmed quickly. Once NATO reinforcements did arrive, the bases that remained open would be overcrowded and vulnerable. Delayed strategic airlifters, Norwegian and NATO air defense squadrons, Norwegian and NATO MPA on extended missions, AMF and MEB aircraft, and bingo aircraft from NATO carriers operating in the Norwegian Sea would compete for limited runway space.

Delayed deployment of NATO reinforcement could have four negative effects on Norwegian Military Forces. First, Norwegian strategic

objectives will not be realized if NATO reinforcement has not arrived before fighting commences, Norwegian forces may not be able to provide adequate air defense alone. Air defense would be vital during initial mobilization to keep airfields and ports as forces moved from south Norway to meet pre-positioned equipment in north Norway. Second, since these forces in turn would be essential for ground and sea defense of northern air bases and ports, defense would continue to be limited as mobilization progressed. Third, deployment delays could cause the Norwegians to sacrifice "too much space for time" before reinforcements arrive. Finally, deployment delays would make northern air bases more vulnerable to attack and place strategic airlift and critical cargo at risk. This is the most significant effect. If Norway were to delay in permitting reinforcement until war begins, the Soviets could prevent the timely deployment of future reinforcements by attacking air bases in northern Norway.

CHAPTER IV

NORWEGIAN ALTERNATIVE APPROACHES FOR DEALING WITH SOVIET EFFORTS TO PREVENT DEPLOYMENT OF NATO REINFORCEMENTS

> For political reasons, Norway has certain self-imposed restrictions on foreign bases and troops on its soil. There are no indications that these restrictions will be reconsidered in order to make a more permanent allied presence in this region possible. A solution to defense of north Norway will therefore have to be found within the framework of these restrictions.[29]
>
> Major General Arne Solli
> Inspector General
> Royal Norwegian Army

One approach to dealing with Soviet efforts to prevent deployment of NATO reinforcements is to consider alternative means of deploying those forces. Three military options include:

- holding at home base;
- diverting to an open base; and
- staging with more tactical airlift and maritime transport.

Since the Soviets could close bases in north Norway to strategic airlift for at least a short duration, one response would be to hold assets at safe home bases, (U.S. or United Kingdom) during the initial stages of mobilization until the bases reopened. This approach has the advantage of greater safety for strategic airlifters, deploying aircraft and squadron personnel, but the disadvantage of limiting air defense of northern bases to Norwegian F-16's alone. Opposed by fewer NATO ground support and air defense aircraft, the Soviets could advance more quickly with fewer losses on the ground and have a better chance to gain air superiority to prevent future reinforcements.[30]

Another option would be to divert the deploying squadron to an open air base elsewhere in northern Norway if the deployment base is closed. This option has the advantage of increasing the probability that the aircraft could deploy; but reduces effectiveness and sortie generation capability because shelters, prepositioned ammunition fuel and supplies at the planned deployment base are no longer available, including those from the COB program which is designed to provide seven days of sustained warfighting capability.[31] Since additional strategic airlift sorties, which may not be available during mobilization, would be required to move equipment from the home base, this option is also limited.

The increased use of tactical airlift, from a secure rear area in the United Kingdom or southern Norway could provide a third option. This option could greatly increase the chance of early deployment of critical assets to north Norway since closing the four northern Norway air bases of Bardufoss, Evenes, Andoya and Bodo to C-130's for 12 hours would require 93 Soviet Flogger Fitter sorties compared with 15 for closure to strategic airlift (assuming a usable minimum operating surface (MOS) of 3500 x 50 feet for tactical and 5000 x 100 feet for strategic aircraft).[32] Although this option is the most viable presented thus far in overcoming the effects of reinforcement delays, it suffers from the disadvantage of requiring additional C-130s. For example, to shuttle air forces to north Norway would require 26 additional C-130's per squadron. Therefore, to deploy four squadrons to north Norway in one day would require 104 C-130's (assuming 15 tons of support gear per aircraft for 24 squadron aircraft).[33]

Since three of four major air bases in north Norway are located near a port (Andenes for Andoya, Bogen Bay for Evenes and the port at Bodo),

sealift could be used to overcome reinforcement delays. Strategic airlift could be unloaded at secure air bases in southern Norway (Bergen or Stavanger) and transported by coastal sealift to northern Norway. Although this option would place more demands on Norwegian naval assets/coastal shipping and would add several days to the deployment time of reinforcement equipment and personnel, this is a viable alternative since it would take advantage of Norway's intercoastal waterways and the mobilization strength of its maritime population.

A second approach to reducing vulnerabilities in reinforcing Norway is to consider changing the current basing structure. According to Major General Olar Aamoth, Inspector General of the Royal Norwegian Air Force, "the deployment of modern longer range Soviet combat aircraft on the Kola Peninsula means that Norway's rear bases in central Norway have become forward bases."[34] NATO could concentrate a larger portion of scheduled reinforcement in two central Norwegian bases, Orland and Trondheim, and use the north Norway bases as forward operating bases (FOB's) and dispersed based for the 4 MEB's AV-8B's. Disadvantages in overcrowding at central bases and in distance from north Norway, could be overcome by increased flexibility and reduced threat to air attack. For example, long-range ground and maritime support missions could stage from central Norway; tactical aircraft could be flown from Trondheim or Orland, striking in the north and refueling at an FOB before returning to homeplate; and Harriers could operate from dispersed sites. Reductions in sortie potential could be offset if the bases in central Norway had a higher probability of being open than those in north Norway. Maintenance facilities and personnel concentrated in central Norway would be more secure than if concentrated at FOB's. If Norwegian F-16's could maintain

a limited northern air defense against attacking aircraft, this approach would make it more difficult for the Soviets to conduct sustained air operations against central Norwegian bases. NATO would have a better chance of deploying to these bases without opposition and their location makes resupply easier during wartime. Although changes in basing may not provide the optimum defense and may stretch northern air defense to the limit, this option should be considered due to existing political constraints.

Improved air base defense systems could also help basing options. The Norwegian Adapted Hawk (NOAH) is a new fire unit design based on the widely improved Hawk missile system, combined with a 3-D acquisition radar and automated control system at six air bases in north and central Norway.[35] Since "there are insufficient assets to provide a credible SAM defense"[36] additional SAM systems and short range air defense systems could improve the air defense situation in north Norway without posing a threat to the Kola Peninsula. If ground-based air defense were accepted for deployment before hostilities began, NATO would have a much better chance of keeping air bases open and permitting post D-Day deployment of air reinforcements.

A final approach to dealing with Soviet efforts to prevent reinforcement is replacing Norwegian reliance on air power with more emphasis on sea power and ground forces. While the focus of this analysis is on Norwegian alternatives, it is important to note that the problems for NATO in Norway are derived in large part from the vulnerability of air bases and that NATO could shift more of the burden of achieving northern region military objectives to sea-based weapon systems.[37] Carrier battle groups could sustain maritime operations in

the Norwegian Sea without air bases and ports; could improve the air situation in north Norway; and contribute to ground support, amphibious and interdiction missions. A NATO CVBG could not, however, replace Norwegian air bases and the need for added protection on their eastern flank. As General Sir Patrick Palmer, Commander in Chief, Allied Forces North reiterated recently in a Naval War College address, "Norway must still hold out until NATO reinforcements arrive . . . COMNOW's first priority remains to defend reinforcing ports and airfields."[38] Norwegian political delays in calling for reinforcement, reduced carrier availability, due to tighter budgets, revisions in the U.S. Forward Maritime Strategy, and regional conflicts elsewhere could delay the arrival of NATO carriers. While Norwegian reliance on NATO sea-based weapon systems, including U.S. CVBG's, may be the best option for dealing with the effects of delayed deployment, it cannot be the only option.

Since delayed reinforcement stems from Norwegian desire for crisis stability and reassurance, the most realistic approach in my opinion comes from finding more politically acceptable reinforcements earlier. Because "the reduction of forward deployed forces in Germany . . . means that NATO's future strategy will rely even more on rapid reinforcement in time of crisis,"[39] General Vigleik Eide, NATO's Military Committee Chairman recently endorsed the creation of a NATO Rapid Reaction Force as large as a corps with lead elements able to deploy within one week. This corps, within NATO, would consist of a corps headquarters, two or more divisions plus supporting units, and a force of more than 50000 personnel.[40] General Palmer has also stated that NATO "can provide the sort of rapid reaction capability which is necessary not only for war but for crisis management"[41] and has strongly advocated a NATO Rapid Reaction

Corps that would be multinational in nature, coordinate with the AMF, provide at least two viable light and two heavy divisions, deploy within 24 hour notification, have U.S. strategic air and sealift support, and maintain strong regional reinforcement potential.[42] This recommendation has many significant advantages: politically, its multinational nature is less provocative than an approach that depends heavily on U.S. forces; its success strengthens the cohesion of the NATO alliance; it ties U.S. to Europe for airlift and sealift support; and it identifies requirements before a crisis occurs. General Solli would also endorse the RRF since the solution "that seems to have the best chance of success would be to provide Norway with certain tactical capabilities, thus reducing certain deficiencies in its defense. Such capabilities could be fire support, long-range armor systems and mobility."[43] Because this option presents one of the most feasible approaches to overcoming Norwegian hesitation in preparing and accepting timely deployment of NATO reinforcement in crisis, it could be one of the most effective options.

CHAPTER V

CONCLUSIONS

Although Norway's reassurance policy is designed to prevent destabilization of the northern region with increased military forces, it is evident that this policy could affect adversely NATO efforts to reinforce Norway in war. Recently, Norwegian politicians have realized "that allied reinforcements in time of war should not be taken for granted"[44] and have expressed concern over the cancellation of NATO participation in Team Work 90, due to the Gulf War, and the replacement of USMC's 4th MEB participation in Exercise Battle Griffin in central Norway, with the 2nd MEB and no air components.[45] General Palmer, however, remains unconvinced and has stated that "his greatest difficulty [as Commander in Chief, Allied Forces North] has been in persuading the government to take steps in a timely manner."[46] With the perception of a reduced threat and longer warning time, General Palmer believes politicians may be less likely to act, since they will be reluctant to "shut-down" Norway with total mobilization, when they should act farther in advance. Sun Tzu's axiom should be the goal in reinforcing crisis areas. Norwegian leaders "should not assume the enemy will not come . . . but rely on readiness to meet him."[47]

Admiral James Hogg, U.S. Representative to the NATO Military Committee has stated that "political timing may be the ultimate determinant of a successful reinforcement."[48] Since it is likely that Norwegian leaders would delay in calling for reinforcement in crisis, reinforcement of Norway becomes more difficult because the Soviets will

have the initiative. Admiral Hogg also asserts that "in Europe, U.S. and NATO forces are almost totally dependent on host nation support to sustain their combat capability."[49] If Norway wishes to control crises in the strategic northern region and avoid the adverse military effects of delayed reinforcement, she must make the political and military decision to act before being challenged by the Soviets. "Political timing can set or regain the initiative."[50]

In summary, Norway's reassurance policy produces three factors that could lead to a delay in NATO reinforcement: (1) Norwegian commitment to a low-tension policy which may prevent a timely request for reinforcement; (2) Norwegian self-restraint and concern for destabilizing the Nordic Balance; and (3) Norwegian desire to delay mobilization and disruption from the Total Defense Concept. These delays could be exploited by the Soviets to prevent NATO reinforcement from deploying and arriving in north Norway. Delayed deployment of NATO reinforcement could have four detrimental effects on Norwegian military forces, the most significant being that the Soviets could prevent the timely deployment of future reinforcement by attacking air bases in northern Norway. Norwegian military planners could mitigate the effects of delayed reinforcement by examining alternative approaches for dealing with Soviet efforts to prevent deployment including: (1) alternate means of deploying forces by holding them at home bases, diverting to open bases or staging with more tactical airlift and maritime transport; (2) changes to the current basing structure through increased use of central Norway bases, forward operating bases and dispersal sites in addition to improved base defense systems; and (3) replacement using NATO Carrier Battle Groups, more politically acceptable reinforcements, and a NATO

Rapid Reaction Force capable of regional reinforcement. While all these approaches have strengths and weaknesses, the most feasible option to minimize the adverse effects of Norwegian national security policy on NATO efforts to reinforce Norway in war is use of the Rapid Reaction Force endorsed by General Palmer and Norwegian military leaders. This approach would allow Norwegian government leaders to maintain their national security policy of deterrence and reassurance, take advantage of the strength and mobilization potential of the Norwegian military forces, tie the U.S. support to Europe without destabilizing the northern region, and promote regional reinforcement.

TABLE I

ROYAL NORWEGIAN NAVY FORCES

Number of Units	Class	Type
6	Ula (S-300)	Submarines (including 3 being built)
8	Kobben (S-318)	Submarines
5	Oslo	Missile Frigates
2	Sleiper Hawk	ASW Corvettes
38	Snogg Storm	Missile FAC
2	Vidar	Minelayers
8	MSC-60	Coastal Minewsweepers

26 coastal artillery installations
(15 in north Norway with majority near Troms, Lygenfjord, Vest Fjorden, Ofotfjord).

Personnel	
8000	includes 2000 in Coastal Artillery includes 5000 conscripts
33000	mobilized forces

Major Naval Bases
Haakonsvern (Bergen)
Ramsund
Olavsvern (Tromso)
Horten

Source: "World Defence Almanac," Military Technology, January 1991, pp. 118-122.

TABLE II

NATO GROUND FORCES LIKELY TO BE COMMITTED TO NORTH NORWAY

Unit	Status	Available (days)
	Norwegian	
Finnmark Infantry Regiment	Local/Semi-active	0-1
Brigade North	Active	0-1
Brigade 14	Locally mobilized	1-2
Brigade 15	Locally mobilized	1-2
Brigade 5	Mobilized/airlifted	2-7
Brigade 6	Mobilized/airlifted	2-7
	NATO	
AMF/NATO Composite Force	Airlift/Sealift	2-6
UK/Dutch Royal Marines	Airlift/Sealift	7
4 MEB	Airlift/Sealift	8-12
4 MEB	Deployed by ship from U.S.	24-26

Norwegian Personnel

9500	including 4800 conscripts
37000	mobilized forces

Norwegian Organization

13	Brigades (3 armored, 4 mechanized, 6 infantry)
28	Independent Infantry Battalions
7	Independent Artillery Battalions
50-60	Independent Infantry Companies

Total Defense Concept

4000	Active Forces including 26000 conscripts
500	Home Guard in peace
80000	Home Guard mobilized within 2-6 hours
820000	Available manpower
32000	Full mobilization including 115,000 in Civil Defense

Sources: "World Defence Almanac," Military Technology, January 1991, pp. 118-122, and

John Lund, Don't Rock the Boat (Santa Monica, CA: The Rand Corporation, 1989), p. 66.

TABLE III

ROYAL NORWEGIAN AIR FORCES

Number of Aircraft	Aircraft Type	Squadron Location
61	F-16 A/B	332 at Rygge (south) 338 at Orland (central) 301 at Bodo (north) 334 at Bodo (north)
29	F-5 A/B	Operational Conversion Unit
4	P-3 C	333 at Andoya
2	P-3 N	Coast Guard use
6	C-130 H	Composite Squadron
3	Falcon-20 C	
4	DHC-6 Twin Otter	

Personnel

9500	including 4800 conscripts
37000	mobilized forces

Major Air Bases

Andoya
Bardufoss
Bodo
Stavanger

Other

6	NOAH	located at 6 air bases in central and north
5	Air Force Stations	radar stations

TABLE IV

NATO AIR FORCES LIKELY TO BE COMMITTED TO NORTH NORWAY

Source	Squadrons/Type	Number	Role
		North Norway	
RNoAf	2 F-16	32	Fighter interceptor attack
USAF	3 F-16	72	Fighter bomber attack
USAF	1 F-15	24	All weather air defense
USAF	1 RF-4	24	Recon
AMF (US)	1 F-16	24	Fighter bomber attack
AMF (RMN)	1 F-16	16	Fighter bomber attack
AMF (UK)	1 Jaquar	16	Fighter bomber attack
MEB 2	2 F-18	48	Fighter bomber attack (all weather)
	2 AV-8B	40	Ground support
	1 RF-4B	4	Recon
	1 EA-6B	4	EW
	1 KC-13D	6	Tanker
		Central Norway	
RNoAF	1 F-16	16	Fighter interceptor attack
JSAF	1 F-16	24	Fighter bomber attack

Source: "World Defence Almanac," Military Technology, January 1991, pp. 118-122.

TABLE V

ESTIMATED AIRLIFT CAPABILITY AT NORWEGIAN AIR BASES

Base	Estimated Daily Airlift Sortie Capability
Bardufoss	48
Andoya	48
Evenes	24
Bodo	120
Subtotal	240
Orland	48
Trondheim	48
Total	336

Source: John Lund, Don't Rock the Boat (Santa Monica, CA: The Rand Corporation, 1989), p. 81.

TABLE VI

DISTANCES FROM SOVIET TO NORWEGIAN AIR BASES (NM)

Norwegian Air Base	Soviet Air Base[a,b]		
	Pechanga	Murmansk	Alakurti
Bardufoss	266	312	298
Evenes	316	363	348
Andoya	316	363	348
Bodo	403	450	435
Orland	645	692	677
Trondheim	639	686	671

[a]distances assume overflight of Finnish territory

[b]distances assume Swedish airspace is not violated

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10. Ibid.

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39. Ian Kemp, "Rapid Reaction Force Endorsed," Jane's Defense Weekly, 20 April 1991, p. 623.

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43. Solli, p. 36.

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44. "Nordic Appraisal, Politics of Change," Jane's Defence Weekly, 30 March 1991, p. 485.

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