

# NORTH EUROPEAN OIL: IMPLICATIONS FOR NATO NATIONS

by

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**T**he Middle East crisis of 1973 clearly demonstrated West European vulnerability to Arab use of oil as a political weapon. The oil which has begun to flow from fields in the North Sea and which will before long flow from sources in more northern waters will have far reaching implications for Western Europe and NATO. It is expected to solve many pressing economic problems, particularly for the United Kingdom, and generally bring a level of prosperity to Norway and the United Kingdom which would have been thought impossible a decade ago. By 1985 North European oil can significantly reduce the susceptibility of Western Europe to international blackmail with respect to energy and may thereby alleviate a major problem for US foreign policy. These oil resources have altered the strategic importance of this area of the world and have presented the individual nations and NATO with challenging political and security problems.

**T**he first major oil discovery in the North Sea was made in 1969 when a consortium led by the American Phillips Petroleum Company found the huge Ekofisk field off Southwestern Norway. This discovery set off the largest offshore drilling operations in history. Since this initial discovery, new finds have been made every year and some of the most optimistic hopes have been realized.

Exploration to date has thoroughly

evaluated only about one-third of the areas in the British and Norwegian sectors south of 62° north parallel. The fields so far discovered contain proven reserves of some 3.2 billion tons of oil and about 4.3 trillion cubic meters of gas.<sup>1</sup> About two-thirds of this is located in the United Kingdom sector and one-third in the Norwegian sector. There are petroleum industry estimates of total recoverable oil reserves in the North Sea as a whole, however, which range widely from 5 to 13 billion tons.<sup>2</sup>

Preparations are also being made to drill for oil and gas in the Channel, the Celtic Sea, the Irish Sea, off the west coast of Greenland, and on the Norwegian shelf north of 62° north parallel. Sedimentary formations to the west of the Shetlands also offer promises of oil.

Soviet scientists argue that at least half of the world's entire oil reserves are located in Arctic areas,<sup>3</sup> and western geologists agree that the Arctic Basin consists of rock formations that normally contain large quantities of hydrocarbon deposits. Several oil discoveries have been made in the Arctic in the past decade, the largest being at Prudhoe Bay, Alaska. Although most of the Arctic gas and oil discoveries have been on land, experts agree that the greatest resources are located under the adjacent continental shelves.

As indicated, exploration on the northern Norwegian shelf is scheduled to start next year, but geological information is already sufficient to allow broad reserve estimates. These estimates have less credibility than

those for the North Sea, where considerable evidence has been gained from drilling operations. Nevertheless, it would appear from a number of studies that the general consensus of the oil industry is that the oil reserves within Norway's economic zone north of 62° north parallel will prove to be considerably larger than the resources in the entire North Sea. Indeed, overall unofficial estimates of total Norwegian oil in place, north and south of 62° north parallel, already exceed 13.5 billion tons.<sup>4</sup>

**T**here are differences between the development policies of the United Kingdom and Norway which can be traced mainly to the differences in their economic health. The British economy needs every barrel of North Sea oil it can get to generate revenue and provide the foundation for an improved economic position. Norway, with a small population and ample hydroelectric resources, is far less dependent on North Sea oil for its economic welfare, and hence its exploitation policies tend to be more slowly paced.

Scottish nationalism appears to be the main issue which could affect future British oil development policy. Many observers tend to underestimate the seriousness of Scottish separatist feelings. What is often overlooked is the fact that Scotland has a long history of independence and that even after union with England in 1707, the Scots retained a separate state church, a separate legal system, and a separate educational system.

Nationalism in Scotland today, however, is based more on political economics than on cultural revival. It has been the general predicament of the British economy over the past decade and the steady industrial decline of Scotland which has fueled the separatist movement.<sup>5</sup> The prospect that an independent Scotland would control about \$300 billion in natural resources is primarily responsible for the rekindled Scottish independence movement and for the dramatic increase (from 2.4 to 30.4 percent) in the votes cast for the Scottish Nationalist Party (SNP) over the past few years.<sup>6</sup> The SNP argument that North Sea oil can reverse the

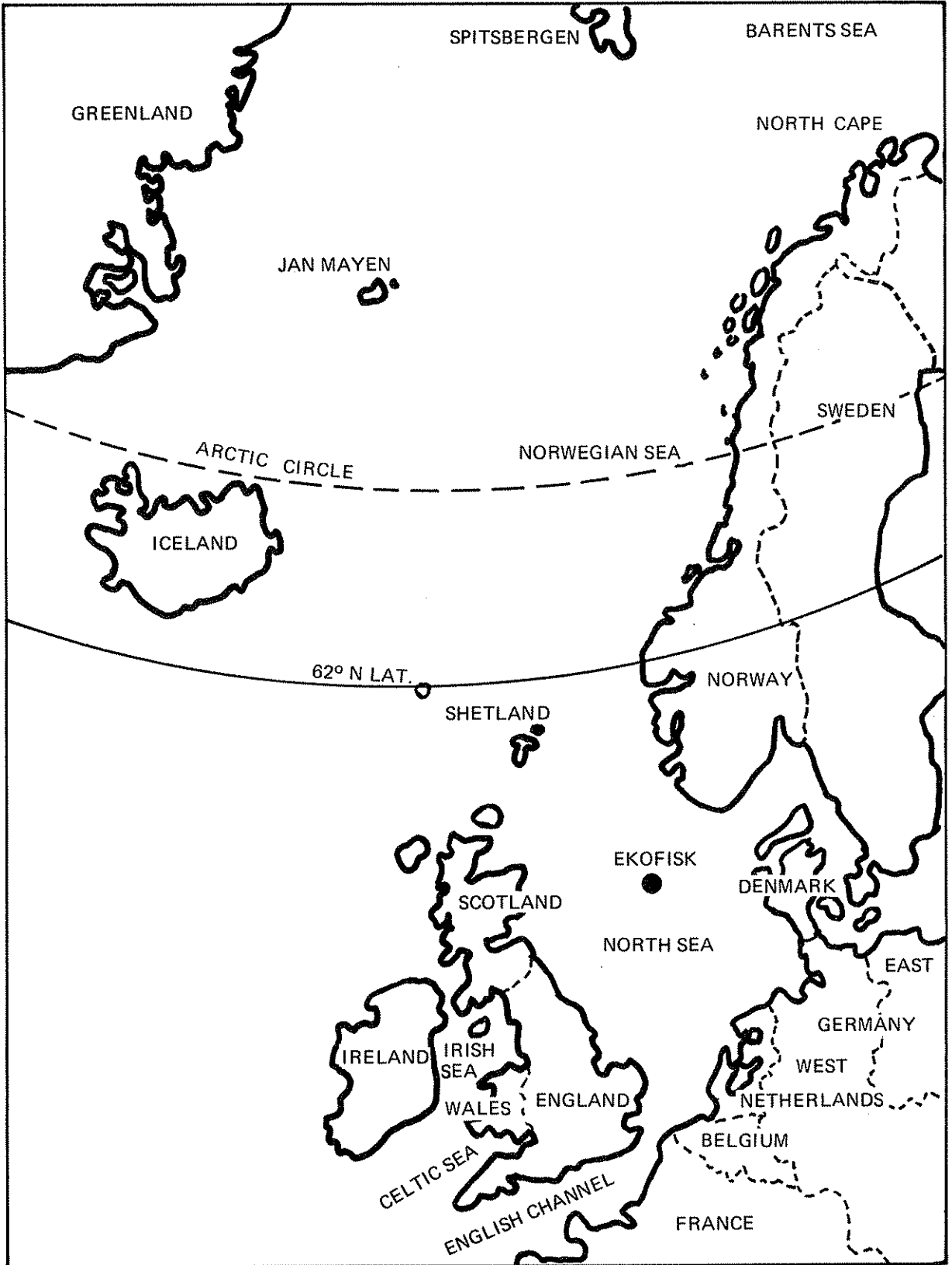
process of industrial decline and bring real prosperity draws to its ranks many who do not necessarily want outright independence. However, the desire by many Scots for some form of autonomy from London is obvious, and there is open talk of independence by 1980. Recent polls show that over a fifth of the Scots want total independence and another third want more power over their own affairs than London is prepared to grant.<sup>7</sup>

Alarmed at the rise of the SNP, the Labor Party, with its majority in Parliament threatened, decided to counter by pledging Scotland a measure of home rule. In a White Paper dealing with devolution for Scotland and Wales, issued on 27 November 1975, the British Government proposed that a regional assembly, which the Scots would elect, take over most local governmental functions.

The White Paper was resented by both those who favor and those who oppose devolution. The opponents believe that the proposals contained in the White Paper will create an appetite in Scotland for even more power, a process which will eventually lead to the breakup of the United Kingdom. They are fearful that the Scottish nationalists may gain control of the regional assembly in Edinburgh and use it as a sounding board for total independence. This is not an imaginary fear. The SNP is already the most powerful political unit in Scotland. Opinion polls taken in December 1975, one month after the

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issuance of the White Paper, gave the SNP 37 percent of the electorate's support as opposed to only 30 percent to the Labor Party.<sup>8</sup>

The Scots were angered by the fact that the proposals in the White Paper would retain for London authority over vital economic matters. The SNP demands—that Scotland get all the revenue and royalties from the oil, that a Scottish state oil company be established with a right to a half share in every successful discovery, and that annual oil production be limited to 70-100 million tons—were ignored.

A situation may now exist—contributed to by the issuance of the White Paper—in which the minimum acceptable to Scotland is far more than will be passed by Parliament. The debate over this issue is expected to reach a climax in Parliament later this year, and proponents of devolution are likely to win. The dilemma for the British is how to allow the North Sea oil to bail them out of their economic difficulties while keeping the separatist movement at a manageable level.

Even if devolution does not turn out to be the first step to Scottish independence, it will result in a more decentralized governmental structure in the United Kingdom. Devolution could well lead to acceptance of the Scottish demand for conservation of oil resources after self-sufficiency has been achieved. This would cause serious concerns among the United Kingdom's EEC partners and leave Europe and NATO in a weaker position in the energy area. The separatist issue may well prove to be the most serious problem faced by the British since World War II.

In addition to posing actual and possible domestic problems for the United Kingdom, North European oil may even serve to foster regionalism within Europe. British (and Norwegian) development policies which did not take into account the needs of their European neighbors could lead to antagonism and weaken European cooperation. It could lead to a polarization between the richer north and the poorer south.

**T**he Norwegian Government has established an annual limit of 90 million tons on oil production—against a considerably larger potential. This

government policy was established in a White Paper presented to the Storting, the Norwegian Parliament, in February 1974. It was the view of the government at the time that the limit represented a tempo of exploitation which would allow use of the revenues in domestic consumption without seriously disturbing the orderly evolution of the Norwegian economy.

A change in thinking is beginning to appear in Norway. It has turned out that some of the large fields straddle the median line with the United Kingdom, and it has therefore become necessary to speed up production plans in order to prevent the British from emptying the reservoirs. However, there are other more basic reasons. The earlier perceived dangers to the Norwegian economy from oil industry activities and increased revenues are now viewed with less alarm.

The international recession has not been without its effects in Norway. Although the country managed to maintain real output on an upward trend during 1975, there was a marked deterioration in the economic situation. Record high unemployment in 1975 and an exceptionally high external deficit caused alarm both in the powerful Norwegian employers' association and in the trade union federation. Norway will emerge as a net oil exporter this year, but it may take until 1980 before the accumulated deficit has been paid off.<sup>9</sup> Two years ago, when the 90 million ton limit was established, it was expected that Norway would be a net exporter of capital by 1977.

Those who would like to see more rapid exploration and production by Norway argue that the country should get the oil out now while it still has a high value. They raise the fears that the oil and gas from the North Sea will have played out its role in this century due to its high cost and the growing use of alternate energy sources. Although these conditions are not likely to materialize, the arguments are receiving increased attention.

These developments have caused pressures by the oil industry, the business community, and labor groups for increased levels of production and for a step-up in exploration. There is also a growing number of

Norwegians, particularly in the academic community, who note that Norway has a responsibility to the rest of Europe regardless of the possible damage living up to this responsibility may pose for the Norwegian way of life.<sup>10</sup> Finally, the conservative bourgeois parties, which are more receptive to arguments favoring increased oil production, made impressive gains in the local election of September 1975. This election indicated a marked swing to the right in Norwegian politics, and it has been calculated that the conservative parties would have had a majority of about seven seats if it had been a parliamentary election.<sup>11</sup> It is therefore likely that the Norwegians will quietly remove the 90 million ton annual limitation on production in the near future.

It is difficult to predict future production levels in the North Sea. The oil companies are working at the edge of technology in one of the world's most treacherous and storm-swept seas. Political uncertainties about taxation and state participation, labor strikes, accidents, and failures to meet construction schedules have contributed to delays in production.

Although British and Norwegian oil taxes and state participation have played a definite role in a deteriorating economic outlook for the oil companies, many of the discoveries, which would be considered highly attractive if onshore, are marginal or completely uneconomical strictly from the phenomenal cost of offshore exploration and production in the North Sea. Compared to an average Middle East oil field capital investment figure of about \$200 per barrel a day, the cost in new North Sea fields is running at about \$4,500.<sup>12</sup> The result is that a field which is estimated to contain less than 70 million tons of reserves is presently considered uneconomical to exploit. There are indications that cost growth is slowing, but it will continue to impact on future plans. Over \$10 billion in investments had been committed to North Sea operations through the summer of 1975, and it is estimated that another \$65 billion will be required in order to reach full production.

The following table gives the estimated production from the North Sea. These estimates are subject to some uncertainty and are intended to serve only as a rough indication of how production may progress. It has been assumed that the Norwegian Government will remove the 90 million ton restriction on oil production in the near future. It is further assumed that production in fields now in development will be maximized. Existing legislation does not give the Norwegian Government the means to restrict the flow of oil from the fields which were discovered on leases awarded prior to 1974, and oil companies have stated that they will try to maximize production.<sup>13</sup>

**ESTIMATED ANNUAL PRODUCTION  
FROM THE NORTH SEA  
(in millions of tons)**

	UK	Norway	Total
1976	20.6	26.5	47.1
1977	60.2	50.5	110.7
1978	91.5	60.3	151.8
1979	138.4	76.8	215.2
1980	159.0	90.0	249.0
1981	172.0	100.0	272.0
1982	180.0	110.0	290.0
1983	180.0	130.0	310.0
1984	180.0	140.0	320.0
1985	180.0	140.0	320.0

The estimates in the above table are higher than official estimates, particularly in the case of Norway, where the government estimate of 90 million tons for 1980 includes the oil equivalent of gas. This is obviously an example of an extremely conservative estimate since the Ekofisk complex and Statfjord field (a huge finding some 300 miles further north) are alone expected to eventually produce in excess of 90 million tons.<sup>14</sup>

The history of annual increases in reserve estimates and the production schedules for the individual fields warrant the upward revision of official forecasts. The estimates of proven reserves in the North Sea increased by 10.1 percent for the British sector and 22.2

percent for the Norwegian sector between 1973 and 1974.<sup>15</sup> It is logical that there will be future increases and that new fields will continue to be brought into production during the next decade. However, it is unlikely that this will alter the production forecasts before 1981 since about five years are required from the time a field is discovered until it is in production.

Many observers would consider the production forecasts in the table on the low side. Several oil industry people believe that peak North Sea production may exceed 400 million tons per year.<sup>16</sup> Sy Orlofsky has written that an increase in the exploitation rate could result in an annual production of over 320 million tons in the Norwegian sector alone by 1985.<sup>17</sup>

**T**he oil discoveries in Northern Europe will not solve all of Western Europe's energy problems. Not even under the most optimistic conditions will the oil discoveries release Western Europe from its dependence on outside sources. They will, however, provide insurance against political blackmail such as was practiced after the October 1973 War by significantly reducing dependence on the Middle East, particularly if the Europeans continue to press on with the development of alternate sources of energy.

At the end of 1974, the EEC issued a plan which calls for a reduction in the growth of energy consumption to 3.5 percent per year. The plan also calls for a reduction in the share of oil in the total energy consumption from the present 57 percent to 40 percent. If this aim can be realized for all of Western Europe, oil requirements in 1985 could be less than 700 million tons. The EEC Plan may prove too ambitious, and political and economic factors could cause it to be revised, but it does establish goals.

West European oil consumption has declined since 1973.<sup>18</sup> Accurate information on 1975 consumption is still lacking, but every indicator points to much greater success in reducing energy consumption than anyone might have predicted two or three years ago. For example, imports of petroleum in the first six months of 1975 by France, West

Germany, and the United Kingdom were 23 percent less than in the first half of 1973. The British energy consumption for 1975 will be at 1969 levels, and that of West Germany will be 8 percent less than in 1973.<sup>19</sup> Using the production figures already discussed and assuming that the overall growth in energy demand will be held at 3.5 percent per year, but that the share of the oil sector will decrease only to 45 percent, North European oil will meet about 44 percent of West European oil requirements in 1985.

Thirty percent of West European oil imports in 1973 came from non-Arab countries, and there is no reason to believe that this will be reduced in the future. It is realistic to assume that, as in 1973, non-Arab oil producers will not participate in a future embargo brought about by events in the Middle East. The stoppage of Arab oil in the mid 1980's would therefore result in only a 25 percent reduction in supply. This increased European energy independence may make US policies outside Western Europe more acceptable to individual European countries and place less strain on US-West European relations.

Several additional factors could influence the rate of production of oil in Northern Europe. Coupled with oil discoveries in the Norwegian and Barents Seas, a Norwegian policy which allowed a significant production increase might make Western Europe virtually independent of Arab oil in the late 1980's.

**S**ince the North European oil installations will represent an important segment of Western Europe's basic strength in the future, we must assume that they would become targets of Warsaw Pact actions in times of tension or war. There is no doubt that these installations are vulnerable, and the vulnerability increases the further north they are located.

If the Soviet aim were a short war, there would seem to be little reason for them to attack the oil installations. First, they might want to capture these facilities intact for future use. Second, there is little reason to believe that the Soviets would dissipate their efforts by attacking installations which would

have no impact on the outcome of a short war.

If the Soviets perceived a war with NATO to be a drawnout affair (in excess of 90 days), there is every reason to believe that the oil producing platforms would be high on their target list. A major Soviet aim in a longer war scenario would be to isolate Western Europe by attacks on the sea lines of communications. It would make little sense for them to do so, particularly with respect to overseas oil supplies, if they did not at the same time try to achieve control over or destroy Western Europe's domestic production of oil.

**T**he North Sea littoral states view the peacetime protection of oil installations as the joint responsibility of the operators and the national authorities. Coordination between the various countries has already begun. An international working group of seven North Sea littoral states completed a study of the peacetime threat to the installations, and a second working group is meeting to review security procedures and to determine what joint actions should be taken to control access to oil installations. The decision to discuss the peacetime protection of the oil installations in a forum other than NATO may have been influenced by a desire not to antagonize the Soviets unduly.

The United Kingdom and Norway envisage the peacetime protective mission as a civil police responsibility, but it was obvious from the beginning that the police did not have the resources or capabilities to carry out this task effectively. Both countries have decided that military forces should be made available for this mission. The United Kingdom has assigned the task to the Royal Navy and the Royal Air Force, while Norway is expected to opt for the formation of a relatively large coast guard as part of the regular navy.

All North Sea littoral states agree that defense of the offshore installations in times of tension and war is beyond their capabilities. They look upon this as a matter for NATO. It is envisaged that NATO will assume responsibility for the area defense of

these installations, while the responsibility to defend individual installations will rest with the individual nations in whose areas they are located. The Commander-in-Chief, Channel Command (CINCHAN), has been designated as the overall NATO coordinator for the defense of the oil installations in the North Sea.

A high degree of cooperation and coordination between the individual countries and NATO concerning implementation of defense measures is required. To divide wartime defense responsibilities and to compartmentalize security into peacetime and wartime periods can lead to the danger of developing policies and systems which are not compatible with each other. To be effective, wartime defense measures for individual installations would have to be developed and initiated in peacetime. No such measures have been taken, and it will be difficult to persuade oil companies and national authorities to accept the provision of military defense measures for commercial enterprises in peacetime.

The discovery of oil and gas in the North Sea has increased the strategic importance of Northern Europe. The problems posed by the requirement to defend a large number of vulnerable installations scattered over a wide area are enormous and present NATO with a role to which it has not been accustomed. Both NATO and national authorities have much work to do in this area, and the tasks become more difficult as offshore activities increase. Many of the problems are driven by political and economic considerations and must be agreed to on the highest level. There seems little doubt, however, that these problems can and must be solved.

**T**he problems faced by NATO and the littoral states in the North Sea are small compared to the security, political, and strategic problems posed by oil discoveries in the Norwegian and Barents Seas. Norway and NATO must also quickly come to grips with these problems. Failure to do so could lead to a further weakening of NATO or possible confrontations with the Soviets as a result of a miscalculation of NATO resolve.

Negotiations between the USSR and Norway over the the division of the Barents Sea have been in progress for some time. The area contested consists of approximately 58,000 square miles of ocean. Indications are that the negotiations will be protracted and difficult. Not only do they involve the division of an area that is believed to contain vast amounts of oil, but they impact directly on Soviet security. The Soviets carried out missile tests last fall into an area of the Barents Sea which the Norwegians claim to be within their jurisdiction. Most western observers viewed these tests—the first major tests to be held outside the northern or central Pacific Ocean—as a strong-arm tactic designed to influence the negotiations.

Another issue in the far north poses a threat of confrontation. The Spitsbergen Archipelago was awarded to Norway by the Svalbard Treaty of 1920. All 41 signatory powers have the right to exploit natural resources on these islands, but only Norway and the USSR have so far taken advantage of this provision. There have been recurring reports that the Soviets are applying pressure on Norway to make the islands a bilateral USSR-Norwegian affair.<sup>20</sup>

The situation is complicated by the possibilities of offshore oil. The Norwegians claim that the islands are situated on the Norwegian continental shelf and that the provision in the treaty which awards 41 nations the right to exploit natural resources applies only to the islands and the adjoining seas within the territorial limit. The Soviets claim that the islands have a shelf of their own within which the provisions of the 1920 treaty apply. They are not likely to push this claim as it could lead to the involvement of the other signatories, but the Soviets will undoubtedly continue to pressure Norway to use her administrative powers over the islands to prevent the presence of western nations.

**F**rom strategically-located Norway, NATO can obviously prevent the free egress of the Soviet fleet to the Atlantic, where the Soviets could interdict NATO's vital ocean lines of communication. Even as late as 1968, one respected Norwegian writer on

strategy wrote that "Norway is of little value as an economic objective in any future conflict."<sup>21</sup> The discovery of large quantities of oil in the North Sea and the probability of even larger discoveries in the Norwegian and Barents Seas have now given the area great economic and political significance as well.

Norwegian security has traditionally depended on a balance of power in Europe. This balance, which she tried to assure by membership in NATO, is now in danger of being upset by the great quantitative and qualitative growth of Soviet military power on NATO's northern flank. Over half of the Soviet naval capability is located in North European waters, and most of it is to be found in the Northern Fleet operating out of the Kola Peninsula. Nowhere has the discrepancy between the growth in Soviet military capabilities and professed intentions become more apparent than on NATO's northern flank.

British Prime Minister Heath, while in office, sounded an early warning in the House of Commons as to the political-military implications behind this massive Soviet buildup:

The Soviet Union seems to have hopes that the obvious differences in military strength will leave Western Europe in the end without a convincing strategy. Suitably applied political pressure, supported by the threat from a clearly superior military force, can oblige some of the more vulnerable members of the alliance to glide over to neutral status. Then the process of dissolution can begin which in turn can lead to the ultimate fact; a gradual widening of Russia's sphere of influence to countries that are now members of NATO.<sup>22</sup>

The Director of Research of the Norwegian Institute of Foreign Affairs, Mr. Johan J. Holst, has described the Soviet buildup in the following terms:

It is the intention of the Soviets to push their Naval defence line outwards to Iceland and the Faroes. If this is a likely



development, then it indicates that the Russians would to an increasing degree, come to regard the Norwegian Sea as a Soviet lake, behind which, of course, Norway would lie.<sup>23</sup>

A feeling by some that Norway has already fallen behind the Soviet defense lines is illustrated by the following excerpt from an article which appeared in a conservative and influential Norwegian newspaper:

The Soviet's intense build-up of naval power has given the East Bloc a significant lead in the race for military supremacy on NATO's northern flank. The almost continuous Soviet maneuvers in the North Sea show that the Russians have built a mobile iron ring around Scandinavia. In reality, Norway, Denmark, and Sweden now lie inside Soviet defense lines and outside those of the USA.<sup>24</sup>

This sentiment has been reinforced in the writings of strategic thinkers and in statements by military leaders, and has led some Norwegians to question the defensibility of their country.

The Soviets may take a dim view of Norwegian oil installations in the Barents Sea astride the egress route of their fleet between Spitsbergen and the North Cape or on their egress route in the Norwegian Sea between the island of Jan Mayen and Norway. Oil platforms in these sensitive areas might invite strong Soviet reactions. It is partially out of consideration for Soviet concerns that the Norwegian Government has stated that exploration and production north of 62° north parallel would be carried out by Statoil, the government-owned oil company, rather than by private oil companies. Discussions in western newspapers and periodicals about possible NATO involvement in protective measures for oil installations have drawn sharp comments from the Soviet press. They have characterized these plans as a pretext for NATO to strengthen its control of the Norwegian Sea and as a flagrant violation of detente. There can be no doubt that Soviet naval strategists will view growing NATO

attention to the Norwegian and Barents Seas as a threat to their aim of bringing these areas under their firm control. This challenge to Soviet strategic control of what they consider a vital security area is bound to lead to confrontations and possible explosive situations.

To insure that Norway does not loosen its ties with NATO, the willingness of the Alliance to defend this region must be made more credible. The simultaneous increase in Soviet power and the discovery of enormous natural resources in the area increase the urgency of this requirement. The oil from these areas will provide much of Western Europe's needs within the next decade. It would therefore seem that this aspect would receive high priority in defense considerations. If the area does not receive the attention it deserves, it will reinforce the arguments of those who claim that Norway has fallen behind the defense lines of the Soviet Union and that a policy of neutrality is therefore appropriate. Bilateral arrangements between the Soviet Union and Norway regarding the political-military status of Northern Norway, Spitsbergen, and the adjoining seas would be sure to follow. It is obvious how this would jeopardize the future of NATO.

The resources which are now available to defend the northern flank of NATO are inadequate. Although the bulk of Norway's peacetime army is deployed in the north, it could not fight much more than a delaying action against a determined Soviet land and amphibious attack. NATO defense planning relies heavily on strategic warning which would allow the Allied Command Europe Mobile Force (ACE Mobile Force) to deploy to northern Norway. This force is also inadequate to the task that confronts it, and its value is primarily deterrence, as the early involvement of this force would demonstrate NATO resolve.<sup>25</sup> The NATO Standing Naval Force Atlantic (STANAVFORLANT) is also available, but it is generally agreed that it could offer little more than token resistance to an attack which would be supported by the full weight of the Soviet Northern Fleet.<sup>26</sup>

**W**e have already examined the economic, political, and security implications of the oil and gas findings in the North Sea. As mentioned earlier, Norwegian exploration on the northern shelf is scheduled to begin next year. If these legitimate activities should then result in confrontations with the Soviets, Norway certainly should receive adequate support from its allies. It is the author's opinion that the Soviet Union's legitimate security concerns in the Norwegian and Barents Seas must be recognized, but here, too, NATO must stand firm in insisting that it also has security and economic interests in this area, interests which it will protect. The perception that the Barents and Norwegian Seas are Soviet lakes must not be allowed to take root.

#### NOTES

1. US Council of International Economic Policy, *International Economic Report of the President*, March 1975, p. 152. US Department of Interior, *International Petroleum Annual*, March 1975, p. 24.
2. Stanley Gray, "Oil from Troubled Waters: What's Next for the North Sea," *World Oil*, January 1976, p. 109. Richard C. Longworth, "The North Sea Oil Rush is On," *European Community*, No. 185, April 1975, p. 3.
3. John H. Roush, Jr., "Norway's Significance From a Military Point of View," *Military Review*, July 1975, p. 22. Atlantic Treaty Association, *Security of North Sea Oil and the Over-All Soviet Naval Threat*, p. 38.
4. "Norway," *World Oil*, 15 August 1975, p. 109.
5. "Oil and Trouble," *The Economist*, 9 March 1974, p. 32.
6. "Devolution or Disunity?" *New York Times*, 24 November 1975, p. 34.
7. Robert B. Semple, Jr., "Separatism Posing Challenges for Wilson," *New York Times*, 24 January 1976, p. 6.
8. Robert B. Semple, Jr., "A Scot Says London Offers Little Power," *New York Times*, 14 January 1976, p. 2.
9. Dick Leonard, "Norway: The Next Richest Nation. A Survey," *The Economist*, 15 November 1975, survey, p. 7.
10. Sy Orlofsky, "Why Norwegian Gas and Oil has International Importance," *World Oil*, March 1976, p. 92.
11. Leonard, survey, p. 12.
12. Robert J. Enright, "Soaring Costs, Taxes Slow Oil Development in North Sea," *Oil & Gas Journal*, 30 June 1975, p. 73.
13. Longworth, p. 5.
14. Production from the Ekofisk complex is scheduled to increase to 45 million tons per year and, if fully exploited, could reach 60 million tons a year. Statoil, the Norwegian government-owned company, has established an annual production goal of 45 million tons for the Statfjord field.
15. "Productive Capacity Grows as World Demand Falts," *World Oil*, 15 August 1975, p. 44.
16. Clive Callow, *Power From the Sea: The Search for North Sea Oil and Gas* (London: Gollancz, 1973), p. 18.
17. Orlofsky, p. 92.
18. "Productive Capacity Grows as World Demand Falts," p. 41.
19. Daniel Yergin, "European Energy: A Policy Evolves?" *European Community*, No. 192, January-February 1976, p. 32.
20. "Oslo Expects Soviet to Ask Joint Spitsbergen Rule," *New York Times*, 6 October 1974, p. 10. Drew Middleton, "Rifts and Soviet Pressure Worry NATO," *New York Times*, 9 September 1974, p. 3.
21. Tim Greve, *Norway and NATO* (Oslo: Royal Ministry of Foreign Affairs Press Dept., 1968), p. 20.
22. As quoted in Christer Fredholm, "The North Atlantic: The Norwegian Sea, A Scandinavian Security Problem," *Naval War College Review*, June 1972, p. 64.
23. As quoted in Eivind Berdal, "The Projection of Soviet Military Power in the North," *NATO's Fifteen Nations*, Vol. 19, No. 1, February-March 1974, pp. 59-60.
24. Article in the Oslo daily *Morgenbladet*, 8 October 1975, as quoted in an unpublished paper by Arthur E. Dewey, "What Became of the Nordic Balance?" p. 17.
25. Desmond Wettern, "Defense of the Northern Flank," *NATO's Fifteen Nations*, Vol. 20, No. 1, February-March 1975, p. 30.
26. *Ibid.*, p. 31.

