OLD AND NEW PROBLEMS OF WESTERN SECURITY

Fred Hoffman
The Rand Corporation
1700 Main Street
Santa Monica, California 90406

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| This document was prepared in 1981 as the result of a review of the changing strategic context for national security policy and posture as it affects the cooperative arrangements between the U.S. and our principal allies. Western cohesion and the effectiveness of Western policies have been affected by the broad as well as the specific choices made as a result of the interplay of technology, budgets and bureaucratic or economic interests. The future cooperation to secure the freedom and independence of the
countries of Western Europe and Japan is now in serious question. Problems have developed as a consequence of the shift in the actual and perceived balance of military power between the Soviet Union and the United States. Two of these problems which raise fundamental questions about the continued usefulness of a Western country's alliance with the U.S. in dealing with the threat posed by the Soviet Union are discussed. The first problem is diminished confidence by Western countries in the guarantee that the United States would respond with its full range of forces, including nuclear weapons if necessary, to Soviet attack on Western Europe or Japan. The second is the growth of the threat to vital Western interests in continued access to oil supplies from the Persian Gulf region, a threat beyond the scope of formal Western security treaties.
SUMMARY

Cooperation to secure the freedom and independence of the countries of Western Europe and Japan has been a central element of U.S. foreign policy since World War II. The future vitality of that cooperation is now in serious question. Two problems raise fundamental questions about the continued usefulness of a Western country's alliance with the United States in dealing with the threat posed by the Soviet Union against the security of Western countries. The first is diminished confidence by Western countries in the guarantee that the United States would respond with its full range of forces, including nuclear weapons if necessary, to Soviet attack on Western Europe or Japan. The second is the growth of the threat to vital Western interests in continued access to oil supplies from the Persian Gulf region, a threat beyond the scope of formal Western security treaties.

These problems are in large part a consequence of the shift in the actual and perceived balance of military power between the Soviet Union and the United States. That shift has diminished the benefits of alliance with the United States and increased its perceived risks to many of our allies. At the same time, Soviet policies of detente have created expectations among Western countries that increase the apparent costs of a firm policy of containment based on Western cooperation. The results have been a decline in the net benefits of Western Alliance to its members. A continuation of the trends of the last ten to fifteen years will accentuate the decline; if the process is not reversed soon, the prospects of continued cooperation for Western security are poor. In the absence of such cooperation, Soviet influence, based on unopposed military power, will probably increase both in less-developed countries and in the industrialized democracies.

The controversy in Europe over the long range theater nuclear force (LRTNF) modernization program, which would replace existing nuclear forces by nuclear missiles capable of reaching the Soviet Union, is symptomatic of the loss of confidence in the U.S. guarantee to allied
countries against the threat of Soviet aggression. That loss of confidence is epitomized by the view that the U.S. strategic nuclear forces have been "neutralized," implying that these forces would never be used except in retaliation against Soviet attack on U.S. cities, and that it is no longer satisfactory to rely on them for response to Soviet attack on Europe. The sources of this loss of confidence are to be found in the changing military balance between the Soviet Union and the United States; but attribution of the problem entirely to any mechanical evaluation of nuclear forces on both sides would be misleading as a basis for policy.

The lack of confidence in the U.S. nuclear guarantee and the suggestion for a remedy by creating a specifically European-related force have both appeared before. In the early 1960s, General de Gaulle and others questioned the reliability of the U.S. nuclear guarantee and proposed several solutions, including the development of national nuclear forces (which the French chose to do) and the creation of a multilateral nuclear force (which the Germans and others finally agreed was unnecessary). The resolution of this earlier crisis of confidence in favor of continued reliance on the U.S. nuclear guarantee occurred at a time when the balance of nuclear forces was considerably more favorable for the United States than at present. It would be a misreading of the situation in the sixties or even earlier, however, to suppose that the general belief was that the United States could reliably expect to escape disastrous damage in the event of nuclear war. Both highly classified and public information and analyses indicated that the Soviets could, if they chose to, inflict "crippling" damage on the United States, even when circumstances of outbreak were favorable to the United States. U.S. inability to guarantee itself against unprecedented damage is not a recent development, nor can the present crisis of confidence be entirely attributed to the changing balance of forces.

A contributing factor has been the explicit and official U.S. adoption of the doctrine of mutual assured destruction during the sixties, followed by that of allied countries. This doctrine held that if strategic nuclear forces were used, their inevitable and proper application was to attack cities, and that the attempt to develop the
capability to attack military targets was destabilizing and wasteful. Because such exchanges would constitute suicide for both the United States and the Soviet Union, its corollary is that a condition of (absolute) mutual deterrence existed and that strategic forces were "neutralized" as far as responding to any attacks other than all-out attacks against the homelands of the two principal nuclear powers. These doctrines have been closely associated with the SALT process.

To the extent that this condition persists, the proposed LRTNF modernization is unlikely to restore confidence in the eroded U.S. nuclear guarantee. Control over the nuclear missiles based in Europe will remain with the United States; serious doubts about U.S. response with strategic forces cannot be isolated from the reliability of response with the theater-based forces. To restore allied confidence, it is necessary to change the strategic concepts guiding U.S. policy on nuclear forces as well as the force balance for both nuclear and conventional capabilities.

The vulnerability of the West to interruptions of oil supplies from the Persian Gulf has been demonstrated three times within the past eight years. The dependence of the West on oil imports from the Persian Gulf can be expected to diminish slowly but to remain at levels high enough to cause continued concern for the remainder of this century. Large indigenous U.S. energy resources are likely to cause U.S. dependence on Persian Gulf oil imports, already below average, to decline faster than that of other OECD countries. If Saudi Arabia and other key OPEC countries reverse recent policies and restrict production more sharply than they have so far, or if repeated outbreaks of instability in the region cause further supply disruptions. Western economic response and public policy might diminish more rapidly.

So long as dependence remains high, Western countries will continue to be vulnerable to major disruptions. Large emergency stocks are a major element of preparations to deal with disruptions, but these are not likely to be maintained at levels sufficient to avoid sharp GNP losses and energy price increases in the event of a deep and sustained supply interruption. Because of the importance of market expectations, uncertainty may be enough to trigger damaging market responses. Such uncertainty can be reduced if the West can stabilize the region and
restore production in the event of disruption, through political influence or military power.

Threats to Western access to the Persian Gulf arise from several sources:

- Soviet military incursion into the Persian Gulf region to acquire control of the Persian Gulf oil production.
- Use by the Organization of Arab Oil Exporting Countries (OAPEC) of the "oil weapon" to influence the West (particularly the United States) in the Arab-Israeli conflict.
- Turbulence among or within Islamic countries of the region.

Control over Persian Gulf oil production would confer great economic and political benefits on the Soviet Union. If the Soviets acquired such control, they would attempt to use it to influence the foreign policies of Western countries and to disrupt their cooperative security relations with the United States. The prospect of blatant and unambiguous Soviet aggression in isolation from other events in the region, although extremely threatening to the West, is not as likely as other threats to continued access to Persian Gulf oil. Moreover it might be a unifying event for the West. The threat of the use of the oil weapon depends on the latent market power of the OAPEC producers and on their degree of political unity. The long term future prospect is uncertain, but neither appears to be high in the near term. Turbulence among or within the Islamic countries of the region is the most likely threat to oil supply and brings with it the threat of Soviet incursion. It also poses extremely difficult problems for coordination of Western policy.

The Western requirement to avoid prolonged and deep interruption of oil flows might force consideration of U.S. military intervention to end an interruption due to regional turbulence. The Soviet Union is unlikely to remain passive in such a situation. On the contrary, it would almost certainly attempt to deter intervention. The United States and other Western countries would consequently face the need to act if the Soviet Union attempted deterrence. In the absence of Western strength and cooperation, the Soviets would have an unparalleled
opportunity to demonstrate the West's inability to assure its vital interests and to make clear Western dependence on Soviet good will.

Greater Western military strength is necessary to restore and maintain Western cohesion. The divergent patterns of Soviet and U.S. military expenditures over the past 15 years suggest that the Soviets have amassed an investment in military assets too great to be overtaken by any probable levels of U.S. spending for military investment—if we merely attempt to match the Soviet military forces. To restore a military balance consistent with the continued viability of the Western alliance system, the United States will have to exploit asymmetries with the Soviet Union. A particularly important one is our advantage in many of the newer and most rapidly advancing areas of technology. These opportunities for military application can increase Western military force usefulness and avoid some of the dilemmas for Western cohesion that have resulted from reliance on suicidal threats. The military application of new technology also promises to increase the effective rate of obsolescence of the massive Soviet military investment and can therefore help to restore the balance of feasible U.S. military budget levels.

The Soviet Union has demonstrated its concern over the prospect of such Western efforts and has sought to foreclose them through arms control negotiations. This can be expected to remain a high priority Soviet objective. Many of our allies are politically committed to negotiations, so the United States will face a conflict between short term alliance harmony and the long term basis for alliance cohesion. If the conflict is resolved with the usual emphasis on short term objectives, the long term outlook for Western cohesion will be poor.
This Note is the result of a review of the changing strategic context for national security policy and posture, particularly as it affects the cooperative arrangements between the United States and our principal allies. It is not an analysis of specific program alternatives and reaches no conclusions on such issues. Instead it reviews the factors governing the broad strategic choices that provide the framework for decisions on programs, deployments, and force employment doctrines. It reflects a view that strategy has been and will continue to be more than the sum of many autonomous decisions on narrow and specific issues of program, driven entirely by the interplay of technology, budgets, and bureaucratic or economic interests. Although each of these plays a part, and they collectively influence strategy, the relationship is not completely one-sided. For better or worse, Western cohesion and the effectiveness of Western policies have been affected by the broad as well as the specific choices we have made.

The scope of the issues covered makes it impossible to avoid condensing the history of recent strategic issues, sometimes in an arbitrary way. Justification is to be found in the validity of the insights that result from such a review. But in any event, the Note is not intended as a contribution to historical research.

This Note was prepared in 1981 as part of the Strategic Policy Program of The Rand Corporation. The research was supported by the Defense Nuclear Agency.

Among those who were particularly helpful in suggesting sources for some of the topics covered were Malcolm Hoag, Barbara Quint, Arthur Steiner, and Roberta Wohlstetter. Conversations with Charles Wolf, Jr., have been helpful in formulating some of the issues. My intellectual debt to Albert Wohlstetter is both deep and extensive.
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Almost 20 years ago, Henry Kissinger observed:

In the decade ahead, we must face the fact that our mere enunciation of a policy no longer guarantees that it will be accepted. . . . At the same time . . . if [our allies] merely show petulance, while refraining from suggesting constructive alternatives, they will drain the alliance of dynamism.[1]

In 1962, as Kissinger wrote of the need for changed relations between the United States and our NATO allies, we were approaching the peak of effective American strategic nuclear strength relative to the Soviet Union. Secretary McNamara had just enunciated the advantages of that strength in his Ann Arbor address.[2] By the end of the decade that followed, Kissinger as President Nixon's National Security Advisor was seeking withdrawal without dishonor from Viet Nam, the "nuclear arms race" that saw declining U.S. investment accompanied by steady and large Soviet increases was well under way,[3] the precursors of the cataclysmic OPEC price rises were occurring, the United States stood on the verge of Watergate, and the post-Viet Nam inflation had already originated in the attempt to fight a war, start a Great Society, and avoid tax increases. So much for the good old days and the vagaries of policy and fortune. The "problems" referred to in Kissinger's 1962 article included the roles of nuclear and conventional forces in defending NATO as well as some troublesome issues regarding nuclear forces for the defense of the NATO alliance. Alternatives then under

[3] Albert Wohlstetter, "Is There a Strategic Arms Race?" Foreign Policy, No. 15, Summer 1974, pp. 3-20; and also by the same author, "Rivals, But No 'Race,'" Foreign Policy, No. 16, Fall 1974, pp. 48-81; and "Racing Forward? Or Ambling Back?" Survey, No. 3/4 (100/101), Summer/Autumn 1976, pp. 163-217.
consideration for long range nuclear strike forces included the Multilateral NATO Force, mobile medium range ballistic missiles (MMRBM) stationed in Europe and committed to NATO, U.S. Polaris missiles committed to NATO, the coordination of national nuclear forces (including the existing U.K. force and the future French force), and continued reliance on the U.S. guarantee, based on U.S. strategic nuclear force, supplemented by strengthened procedures for consultation on nuclear policy and planning with NATO allies. The debate was to go on for another three years, against a backdrop of a large and active, though hardly decisive, campaign against nuclear weapons conducted by a spectrum of groups including pacifists, unilateral nuclear disarmers, and opponents of "American imperialism."

There are obvious similarities to the current issues of long range theater nuclear force (LRTNF) modernization. In this case, however, the observation "plus ça change . . ." is far from accurate. Much has changed; the LRTNF issue will be resolved in very different circumstances than the earlier debate; and it is by no means clear that the effect on the future of the alliance will be the same. A key question is whether alliance problems originate in American arrogance or unreliability, in European "petulance" as feared by Kissinger, or in a general failure to elevate common interests in security above particular national or factional interests. Or is alliance unity eroding because the alliance is failing to provide as effectively as formerly for the common security?

At the root of much seeming "petulance" by Europeans lies a mixture of security, hope, and fear. The long peace in Western Europe permits many to assume that, however great their military force may be, the Soviets have no intention or desire to use it against the West. The economic and social benefits of detente lead to hope for their continuation and expansion. And finally, the growth in Soviet military power leads many to worry that if military power becomes relevant, the Alliance cannot, or will not, secure their safety, that it may abandon them at a critical moment, or that it may involve them in wars not of their choosing, fought in ways that will destroy them whatever the outcome. [4] Such fears, never entirely absent, have increased sharply

until they have become a major policy concern. Chancellor Schmidt is quoted as being surprised "by the passionate vehemence with which fear is expressed and spreads in the peace movement, which exists only in Western Europe and not in Eastern Europe and by the way it often endangers rationality."[5]

Any alliance, even one among equals, involves a degree of dependence by members on decisions taken by their partners in pursuit of their own interests as they perceive them. But NATO is not an alliance among equals. Whatever view is taken of the British and French nuclear forces, the nonnuclear members of NATO have from the outset relied for their defense on the U.S. guarantee that U.S. nuclear forces would be used if necessary to sustain their independence and integrity. The reliability of that guarantee has been seriously debated at least since it was questioned by General de Gaulle at the end of the 1950s. Nevertheless, the structure of alliance military defense has continued to rest on the foundation of U.S. nuclear forces. The resolution of current alliance issues and the future of the alliance depends on how changes in the military balance, together with developments in the political and economic context, are expected to affect the fundamental strategy of the alliance. The issues include not only the credibility of the threat to use U.S. nuclear forces in defense of the alliance, but the risks associated with relying on it, the political and economic costs of doing so, and the alternatives perceived. These issues must be resolved in the context of both a changed military balance between the United States and the Soviet Union and declared changes in U.S. strategy that evolved in parallel with the arms control negotiations.

While the older issues of alliance policy were developing in the changing context of East-West relations, problems beyond the formal geographic scope of U.S. security treaties with Europe and Japan were assuming vital importance. Increasingly, developments in the Persian Gulf have intruded into consideration of NATO policy. Western Europe and Japan have vital national interests in continued access to the region's oil, but they are exposed to the threat of both regional

instability and the expansion of Soviet power, which raises questions about the limits of security cooperation among Western countries. Can NATO strategy and the definition of NATO's objectives be limited to deterrence of a Soviet invasion of Western Europe? Can U.S.-Japanese security cooperation ignore Japan's interests in oil imports?

In sum, the structure of mutual security arrangements in the West faces two threats to its internal coherence. The first is symptomized by the issue of LRTNF modernization and the antinuclear, neutralist response to it in Europe. The specific issue arises from the character of U.S. relations with our allies, Japanese as well as European, and from the effect on those relations of recent and expected future developments. The second threat arises from the exposure of vital Western interests in the Persian Gulf region and the lack of Western ability to assure continued access to the region's oil. Its capacity to undermine alliance relations has been impressively demonstrated, although the threat has been largely latent so far. Both issues offer opportunities to the Soviet Union to achieve its major foreign policy objective, the destruction of the Western mutual security arrangements that have impeded the "laws of history" as viewed in Soviet doctrine.[6]

The nature of these threats to Western unity and the issues they pose for U.S. policy form the subject of this analysis. It begins with a review of the benefits, burdens, and risks whose interplay has provided the incentives for cooperation among Western countries in pursuing their security and governs the degree of cohesion in their alliance relations. The major changes in the context for alliance relations that affect the reliability of the U.S. nuclear guarantee and the security of Western oil supplies are next considered as a basis for assessing the threats they pose to Western security. Finally, there follows an analysis of the implications of the patterns of U.S. and Soviet Union military spending for Western strategic choices in dealing with these threats.

The discussion is intended to deal with issues of mutual security cooperation between the United States and the other major Western countries associated with us. Specifically, the intent is to cover,

where relevant, issues affecting Japan as well as the NATO countries. The term "alliance" should therefore be interpreted to include Japan wherever it is not clearly inappropriate in context. Recently expressed Japanese reservations at the use of this term to describe relations between the two countries are symptomatic of the depth of the problems posed by the expanding requirements for security cooperation between them. Further, the major industrialized countries associated with the United States in cooperative security arrangements (the members of NATO and Japan) are referred to as "the West," despite the geographic imprecision.
II. THE BURDENS, RISKS, AND BENEFITS OF ALLIANCE

Countries form alliances to seek security more effectively than they can achieve it alone. As in all forms of cooperative action, alliances must determine how burdens, risks, and benefits are to be distributed and how their response to events should resolve conflicts among the objectives of individual members. Such questions are the stuff alliance debates are made of; and they create persistent temptations to defect, at least temporarily, from alliance policies that conflict with national objectives. Because the particular interests are often clear and urgent while the common interests tend to be cloudier and remote, continual assertion of solidarity among the members is politically necessary. The need is greatest when the conflicts are most intense.

Planning and policy development, however, requires diagnosis of the factors that strengthen or weaken an alliance and that determine its prospects for surviving and functioning effectively. Diagnosis, in turn, requires identification of the burdens, risks, and benefits of alliance, how they are related to one another, and how they respond to changing circumstances. This section briefly sketches such an analysis of Western arrangements for security cooperation.

There has not been a time in the history of the NATO Alliance when even "responsible" commentators on both sides of the Atlantic could not be cited to demonstrate that the alliance faced unprecedented and crucial problems. Perhaps the alliance has, in fact, experienced continual crises throughout its existence, each one threatening future alliance existence and effectiveness. Another view is that there is a constant (and high) level of complaint[1] not necessarily related to the seriousness of the issues, but rather testifying to unavoidable irritations occurring in the course of resolving differences among those linked by overriding common interests. Judgment between these views of NATO history, and, more important, assessment of the current state of

ominous portents about the future of the alliance and the Western security arrangements based upon it, require an analysis of its role in serving the current and future interests of its members and the factors that have diminished or augmented its utility. That utility is a necessary although not a sufficient condition for the continued vitality of Western security cooperation.

Any assessment of the status and prospects for NATO or our security arrangements with Japan must come to grips with the question of how these arrangements affect the interests of the parties. Only then is it possible to predict the response of the parties to changes in the burdens, risks, and benefits conferred by the agreements. Such responses include attempts to enhance the benefits and to reduce the burdens and risks. Efforts to increase the net benefits of association for mutual security may take the form of renegotiating relations among participants or changing the status of the association relative to the rest of the world. From time to time, the reassessment may also include a more radical weighing of the net balance of effects to determine whether continuation of association remains desirable.

Whether the current difficulties in relations with our allies signify crisis or normal complaint, and whether their consequences will be incremental adaptation and change or radical reassessment, depend on both objective changes in the situation and the ways in which such changes are perceived and extrapolated by politicians and public in Western countries. Changes in values either autonomously or in response to changes in the structure of international relations may also change the outlook for future mutual security arrangements. The task of dealing with perceptions, expectations, and changes in values is largely beyond the scope of this effort, although it cannot be excluded entirely. This analysis is principally concerned with how the interests of Western countries are affected by objective circumstances, possible changes in them, and uncertainties about the character of those changes.
EARLY BENEFITS

Without U.S. involvement in the economic restoration and military security of Western Europe, Soviet political and military pressure, perhaps not requiring overt invasion, would have resulted in a vastly different pattern of European development after World War II. Apart from their economic exhaustion, West European countries and Japan were politically disunited and almost totally without military forces. Germany and Japan were still suspect as recent enemies, and both were still occupied countries. Indeed, in Europe, one of the principal issues during the early period was Germany’s role in the defense of Western Europe, and a principal concern was the danger to peace in the division of that country. Even the most optimistic Europeans had to recognize that political integration of Western Europe as a basis for European security was unlikely to occur quickly. The failure of the European Defence Community soon confirmed the difficulty.

The quick postwar demobilization of the United States left the Soviet Union with an overwhelming preponderance of ground forces and little early prospect of a defense effort sufficiently large to eliminate the imbalance. Instead, the U.S. lead in nuclear weapons and the long range bombers for their delivery was perceived as offering the underlying military basis for deterring Soviet attack and for neutralizing Soviet coercive pressures (although the actual capability lagged well behind the public image). A principal contribution of NATO’s formalization of the U.S. guarantee was the confidence it provided to the allies that the U.S. involvement was not merely transitory. The international military structure set up by the Treaty also provided a basis, acceptable to the other Europeans, for providing for West German (Federal Republic of Germany--FRG) security and permitting rearmament as a contribution to West European security while avoiding the problems that would have been associated with German acquisition of nuclear weapons.

The casual progress toward meeting the NATO force goals set at Lisbon in February 1952 showed that the reliance on the U.S. nuclear guarantee would not soon be displaced by conventional weapons capable of meeting the Soviet Union on approximately equal terms. The difficulty
was compounded by the FRG requirement for a forward defense strategy rather than one that contemplated trading space for mobilization time with subsequent reconquest of the lost (FRG) territory.

The sword and shield doctrine that had evolved by 1956 for a time avoided serious disputes over strategy among the allies. Reliance on strategic nuclear weapons as the foundation for deterrence was unquestioned. The allies did differ over whether the requirement for conventional forces went beyond the provision of a tripwire for nuclear response to a capability to force Soviet aggressors to "pause" for reflection before they used nuclear weapons. The allies also differed over whether nuclear weapons in Europe were required for more than showing resolve or whether they should be given the role of inexpensively redressing the balance in conventional forces (as far as needed).

Between the tacit interment of the Lisbon force goals by 1956 and the adoption of the flexible response strategy by the Kennedy administration, however, none of the member states had seriously proposed matching Soviet strength in Europe in terms of conventional combat capability. The flexible response strategy and subsequent developments raised a number of questions about the unity of views and purposes among the allies and the distribution of burdens and risks among them. But throughout the 1950s, the benefits of the alliance to its European members were not seriously challenged. They derived essentially from the U.S. guarantee backed by nuclear weapons, the concomitant U.S. participation in the economic restoration of the non-communist world, and the U.S. role in the political stabilization of the FRG and Japan as independent democratic states.

The primary motivation of the United States for this uncharacteristic involvement in foreign entanglements after World War II was equally clear. The United States initially demobilized and preoccupied itself with the domestic problems of making the transition to a peacetime society, but Soviet behavior and evidence of widespread international instability produced an effective American consensus for action to prevent the internal collapse or external domination of the major industrial countries of the West. Ties of sympathy and common values as well as the lessons of the Thirties and Forties convinced the
American public and their political representatives that our own security depended on preventing domination of the major industrial democracies by the Soviet Union. The events leading to World War II, the changes in military technology during and after it, and the geopolitical situation existing at its close all indicated that intermittent American withdrawal from involvement in the affairs of Europe and Asia would be even less satisfactory in the future than in the past and would subject the United States as well as the rest of the world to serious risks of vastly more destructive conflicts than any we had formerly experienced. These conclusions were intensified by the experience of the Korean conflict, which provided the impetus for the major U.S. rearmament of the 1950s.

BURDENS, RISKS, AND DISSENSION

Alliance disagreements have concerned differences over strategy, over perceptions of the threat, over the sharing of the burdens of defense, and over divergent interests on matters not directly related to the military defense of Europe or Japan against the Soviet threat. As the keystone of Western security arrangements, the United States has most often been involved in such differences with other members. To the extent that they represent conflicts that cannot be resolved without major sacrifices in the interests of one or another of the members, such differences reduce the value of the alliance.

Strategic Issues

The most persistent differences over strategy have been related, not surprisingly, to the varying geopolitical situations of the members of the alliance. European anxieties about the United States have been described as falling into three classes: fear of U.S. involvement in conflicts that are not vital to Europe, fear of abandonment by the United States, and fear that Europe will become a free-fire zone (for either conventional or nuclear warfare).[2] These anxieties are reflected in many of the arguments over alliance policy but in none more persistently than the proper roles of deterrence and warfighting capability in Western strategy.

Contiguity to the Iron Curtain is an obvious starting place in identifying the source of differences in outlook on this issue. From the point of view of those whose territory would be the battlefield in a conventional war, the link between the ability to wage such a war successfully and the strength of deterrence is a misfortune and a danger. Sometimes the response has been to deny the reality of the link; at others, its implications have been reluctantly acted upon in terms of forces and budgets. The character of the reaction has depended on the state of the military balance, the budgetary problems created, the perceptions of the threat, and the intensity of pressure from the United States. The United States, however, has seen dangers to political cohesion and risks of nuclear war in strategies that offer few alternatives to the large scale use of nuclear weapons to stop aggression.

In conjunction with U.S. control over the preponderance of nuclear weapons, this difference in strategic outlook has been the most persistent source of dispute over strategy within the alliance. It is related to the European anxiety over abandonment by the United States or its reverse, being defended against aggression by a nuclear war limited to its territory.

Not all alliance disputes over strategy center on the United States, of course. The degree of emphasis on forward defense and the allocation of effort between the defense of NATO's flanks and its center find European members of the alliance differing considerably among themselves. The swing strategy for U.S. naval forces in the Pacific under which they were committed to NATO in the event of war raised analogous issues of conflict between Japanese and European security interests.

Strategic differences have also arisen between the United States and Japan. Differences over perception of the threat have been a principal factor. Here again contiguity may have played a part. Many Japanese question the reality of the Soviet military threat to Japan. A Socialist member of Japan's House of Representatives noted in a presentation to an American audience, "A prerequisite to invasion is some conflict between the parties." He asked, "What kind of serious
conflict can we foresee between the USSR and Japan?" The implied answer, apart from the dispute over the Northern Territories, which "can only be resolved through persistent diplomatic negotiations," is none. He argues, "It is not foreseeable that military confrontation will take place," because of the absence of "intricate borderlines, where different nationalities mingle in a mosaic-like pattern, because of religious claims to land or because of ideological differences. . . . There is no element within Japan that wishes to introduce Soviet influence."[3]

Some of the reasons for Japanese rejection of the threat are undoubtedly similar to those currently affecting many in the Federal Republic of Germany; denial is a familiar way to deal with an uncomfortable perception. Explicit avowal of a serious threat by the Japanese might involve them in much more substantial military efforts than they have cared to undertake so far. However, it is much more difficult in the FRG than it is in Japan to argue that there is no reason to fear Soviet attack.

Strategic differences within the alliance are symptoms of problems that detract from the benefits of the alliance or contribute to its risks and burdens. But differences over dealing with the Soviet military threat are not the only factors. NATO recognized the importance of nonmilitary cooperation in adopting the Report of the Committee of Three in December 1956.[4] The effect of economic issues on alliance cohesion has assumed increased importance as the detente of the 1970s has led to expectations of large increases in East-West trade. But difficult policy issues arising beyond the formal scope of the security treaties linking Western countries continually have affected their relations.

Alliance Issues Beyond the Scope of the Treaties

Political and military events apart from those directly related to the Soviet Union have created problems for alliance cohesion over its entire history. Since 1946, American security concerns have never been narrowly limited to defense of Western Europe and Japan. Containment of the Soviet Union, often identified with preventing the spread of Communism, led us into major commitments to support Greece and Turkey, opposition to the Peoples Republic of China (PRC), and conflict in Korea and Viet Nam. We pursued our policy of containing Soviet expansion in the Middle East simultaneously with support of Israel. European and Japanese responses to these American undertakings ranged from sympathy and cooperation through suspicion and recalcitrance to outright disapproval and occasional efforts to separate themselves from the U.S. position. Nevertheless, over the long term, the United States has subordinated divergent interests beyond the scope of our principal alliance relationships to our central commitment to the defense of Europe and Japan.

This commitment has been called into question from time to time. The Suez and the 1964 Cyprus crises each left questions about the applicability of the NATO security guarantee as a result of unilateral U.S. determinations that the behavior of an ally was inconsistent with the purposes of NATO. In each of them, U.S. policy contributed to the historical basis for limiting the scope of alliance cooperation, a precedent that increases the difficulty of dealing with the defense of Western interests in the Persian Gulf today.

Suez and the NATO Guarantee. Much has been written about the origins and nature of the Suez crisis, and like most debacles, it offers a wide choice of culprits and few heroes. Vacillating political leadership in England and France was to some extent a reflection of the absence of firm national purpose to maintain rights and privileges that were being threatened--arbitrarily in terms of the prevailing standards of the time. (Treaty violations and expropriations without compensation have only more recently become an accepted--if not altogether acceptable--mode of international behavior.) This irresolution was duly communicated to the objectives, style, and execution of military
operations. America for its part demonstrated the unwisdom of confronting this country with difficult international issues during a national election. Lingering anticolonialism, a history of rivalry in the development of Middle East oil, possibly even a tinge of hopefulness about gratitude from Nasser and his supporters, and almost certainly immediate concerns about the Presidential election[5] appear to have governed American policy, first toward the refusal of assistance funds for the Aswan Dam, and later toward the English and French invasion. Disapproval went well beyond recrimination. U.S. refusal to allow International Monetary Fund (IMF) action to relieve pressure on the pound appears to have been decisive in forcing Britain to accept the UN proposal for terminating military action. Then to drive home the moral, in a speech at the North Atlantic Council on December 11, 1956, Secretary Dulles observed that the use of force (as the British and French had just done), even to redressing injustice, was inconsistent with the UN Charter and Article I of the North Atlantic Treaty.[6] This, in the wake of what have been described as brutal Soviet threats to intervene, up to and including the use of nuclear weapons on Paris and London,[7] could not fail to raise a question about the content of the NATO guarantee against nuclear attack by the Soviet Union. Secretary Dulles went on to generalize the point. In what is described as a "detailed summary" of Secretary Dulles' remarks at a closed session of the North Atlantic Council on December 11, 1956, the following passage appears:

Under present world conditions, we could not accept the concept of each nation that is subject to injustice attempting to remedy that injustice by force. That would set loose forces which would almost surely lead to World War III, particularly given the present predicament and power of the Soviet rulers.

[5] An Eisenhower landslide, as it turned out. It may be even harder to determine how much is enough in political campaigns than it is in military budgets.
Heretofore, the concept of the "just war" has been deeply rooted, even in religious belief. But there is a growing tendency to doubt that modern war can, in fact, eliminate more injustices than the war itself inevitably inflicts. Both morality and expediency now reject the deliberate resort to war as an instrument of national policy.[8]

The speech was particularly remarkable as an expression by the U.S. Secretary of State before the North Atlantic Council. If there were no just wars the role of NATO remained somewhat unclear. But presumably the abolition of just wars applied only outside Europe. In any case, Prime Minister Wilson’s government might well have quoted Secretary Dulles as it explained British military withdrawal East of Suez (and from the Persian Gulf in particular) during the 1960s. Under the Dulles doctrine, there was no role for such forces. And we may still be hearing echoes of this view in the recalcitrant response to U.S. exhortation for participation by our allies in the stabilization of the Persian Gulf.

Cyprus and the NATO Guarantee. The American threat during the Cyprus crisis was in some respects an even more damaging precedent, though probably viewed here as less important because it was directed at a "flank" country rather than at the "central" members of the Alliance. An apparently gratuitous threat to reconsider the U.S. commitment to the NATO guarantee in the event a Greek-Turkish dispute led to a Soviet involvement elicited the following response from Premier Inonu:

Any aggression against a member of NATO will naturally call from the aggressor an effort of justification. If NATO’s structure is so weak as to give credit to the aggressor’s allegations, then it means this defect of NATO needs to be remedied. Our understanding is that the North Atlantic Treaty imposes upon all member states their obligation to come forthwith to the assistance of any member victim of an aggression. The only point left to the discretion of the member states is the nature and scale of this assistance. If NATO members should start discussing the right and wrong of the situation of their fellow-member victim of a Soviet aggression, whether this aggression was provoked or not and if the decision on whether they have an obligation to assist the members should be made to depend on this issue of such a

discussion, the very foundations of the Alliance would be shaken and it would lose its meaning.[9]

This stance is still a factor in Turkish attitudes toward alliance cooperation. Like the Suez crisis, it has increased the difficulty faced by the United States in seeking cooperation in meeting current security problems in the Persian Gulf region. Like the Suez crisis, it may still be a factor in causing difficulties to the developed at a cooperative strategy for defending Western access to Persian Gulf oil.

Both crises offer instances of American use of its power within the alliance to achieve unilaterally determined objectives at the expense of other alliance members. In each, there was an implicit or explicit U.S. threat to reconsider the basic NATO guarantee against attack by the Soviet Union. Moreover, each of these issues arose in disputes with our allies that involved no vital U.S. interest. The manner in which U.S. influence was exercised was bound to raise questions about the content of the NATO guarantee if serious threats to U.S. interests attended its exercise.

Burdens and Benefits of Alliance Leadership

The scope of U.S. influence far exceeded military issues. In combination with U.S. economic power and its technical leadership, the United States had, at least until its involvement in Viet Nam, unequalled opportunities to pursue its social and economic as well as political and military objectives on the world scene. The linkage between military power and influence over the other types of policy and national interest may have been attenuated after World War II compared with previous eras, but it would be difficult to argue that it was non-existent or unexercised. A more difficult question is whether U.S. power was uniformly exercised in the long term interests of the United States, to say nothing of more broadly defined Western interests. An equivocal example of the exercise of this influence is the steady and rapid growth in foreign holdings of U.S. dollar obligations. The willingness of the commercial and central banking institutions of the

[9] "Correspondence between President Johnson and Prime Minister Inonu, June 1964, as released by the White House, January 15, 1966."
industrialized countries to finance continuing U.S. payments deficits can be explained to a degree by the need for the international liquidity provided by the dollar as a reserve currency. But from the beginning of the process, and with increasing concern, this growth was also viewed as exporting inflation, especially after U.S. expenditures on Viet Nam and the Great Society programs of the Johnson administration coincided to increase U.S. deficits at home and abroad.

If the alliance structure contributed to and ratified U.S. status as a superpower abroad, with ostensible but sometimes questionable benefits, it has also played a clear and important role in providing a domestic basis for an American foreign policy of continuing intervention abroad. The formal NATO and Japanese security treaties have constituted an effective line of defense against resurgence of U.S. isolationism. The central role of the United States, the intricate involvement of American military and civilian officials in the formal machinery of NATO, and the crucial importance of U.S. military presence in assuring Western security greatly increase the difficulty of efforts at gradual withdrawal. So far they have defeated such efforts as the Mansfield amendments, calling for troop withdrawals, that might serve as first steps in that direction. Perhaps the United States could maintain an involvement in foreign affairs adequate to preserve international stability in the absence of formal treaty commitments, but that would represent an experiment with a highly uncertain outcome. The uncertainties would affect American domestic support for foreign policy; but they would also call into question the ability of our allies to plan on continuing U.S. involvement.

The future of the alliance is far from clear at this time; it is abundantly clear that it will not secure the full range of interests shared by the United States and other countries of the West. Nevertheless, whether recent changes and those in prospect suggest that it will be merely a shell of an effective alliance, whether it can remain a vital association among its members, or whether reality will fall somewhere in between, we would do well to consider the alternatives available before writing it off. Before any attempt to prescribe for the future of our mutual security arrangements, however, it is necessary to assess the problems facing the alliance as a result of past and prospective changes in the context for security cooperation.
CHANGES IN ALLIANCE BURDENS AND BENEFITS

By the end of the 1960s, several major, largely unpredicted changes in the structure of international relations had occurred. Their effect on the net benefits of the U.S. alliance structure form a point of departure for analysis of the issues now affecting alliance relations. The changes include:

- A partial U.S. withdrawal from a policy of active leadership in international affairs, governed by public suspicion of government power and military strength.
- Unilateral limitation by the United States of growth in its strategic nuclear forces (with some qualitative improvement in offensive forces) and explicit abandonment of the objective of limiting damage in nuclear war by dismantling air defense forces, ignoring civil defense, agreeing to forgo ballistic missile defense in SALT I, and adopting the doctrine of mutual assured destruction as the governing policy for strategic nuclear forces.
- Large and growing investment by the Soviet Union in R&D on military technology and in the procurement of increasing numbers of sophisticated military forces in all categories.
- Revision of NATO strategy to emphasize a buildup in conventional forces that achieved some increase in the capabilities of NATO but that was largely aborted by U.S. involvement in Viet Nam and the consequent demands on defense resources.
- Increasing pursuit of the benefits of detente by the West including arms control, the increase of social contacts between Eastern and Western Europe, and pursuit of trade between East and West.
- Western recognition of the depth of animosity between the PRC and the Soviet Union and normalization of Western relations with the PRC.
Political and military withdrawal by the West from the Middle East and the Persian Gulf.

Growth in spending by Western governments for social programs and inflation.

The current issues of alliance relations arise largely from these secular changes of the 1960s together with several new factors that emerged during the 1970s. Not until the 1970s, with the effects of Watergate added to the full effects of the Viet Nam debacle, was the swing toward reducing the share and amount of national resources for military strength and retrenching foreign commitments completed. This was followed by a recent reversal whose ultimate form and extent remain to be determined.

Major economic changes also intervened. By 1970, it was clear that the oil reserves of the industrialized countries were not keeping pace with their growing demand for oil. This had resulted in a precipitous increase in the demand for oil from the OPEC countries, and from the countries of the Persian Gulf region in particular. With the withdrawal of Western military power from the region, these countries were free to pursue their economic self-interest through the exercise of the substantial market power provided by the high concentration of petroleum reserves in their territories. This they did, cautiously at first, but with increasing confidence bred by success. Political objectives may or may not have influenced their oil market policies; in any case, the political influence of the major oil producing states were clearly increased by the vast resources that flowed to them after the price increases of the early 1970s. In the case of the Shah of Iran, for a time they supported his forced-draft modernization of the Iranian economy and his aspirations to replace Western political and military influence with Iranian hegemony over the Persian Gulf. The new wealth of the Arab oil producers reinforced them in their conflict with Israel, in their resistance to Western influence and control, and in their disputes with their Islamic neighbors and rivals.
U.S. economic difficulties preceded the major oil market price shocks; the devaluation of the dollar and other economic "shocks" administered to the world economy by the Nixon administration in 1971 testified to the growing unmanageability of inflation and persistent balance of payments problems. The heritage of the economic problems of the 1960s were, however, overtaken by and reinforced by the oil shocks of the 1970s, which not only affected the weak economies, but slowed world economic growth generally. Real GNP growth in the non-Communist world slowed from a rate of about 5 percent in the 1960s to about 2-1/2 percent in the 1970s.

The changing context for international relations has affected the mutual security policies of the West in many and complicated ways. Most fundamental of these effects, however, have been the changing significance of the U.S. nuclear guarantee to our allies and the problems of concerting policies with them to defend vital Western interests, notably in the Persian Gulf region, that are not formally covered by our security treaties.
III. EROSION OF THE U.S. NUCLEAR GUARANTEE

The confidence of our Allies that the United States would, if necessary, respond to Soviet aggression by nuclear attacks on the Soviet Union is a matter for conjecture. It has presumably varied in response to changes in American leadership, policy declarations, behavior, public attitudes, and circumstances. The interest of our allies in the credibility of American nuclear threats is derived from their desire for deterrence rather than being able to "win" a war that actually occurred, so the most important question for them has been the issue of what the Soviets believed about American response to conflict with the Soviet Union. From the point of view of many in Europe, the connection between the ability to wage war and the strength of deterrence has been a misfortune and danger. Much effort has gone into the attempt to design strategies that would separate the two.[1] The reasons for this were summarized in the preceding section; they come down to the view that conflict with the Soviet Union means at best that Europe would once again become a battlefield and at worst that it would be destroyed by large scale nuclear attack incidentally in the course of a general nuclear war between the United States and the Soviet Union, or that it would become the "theater" for theater nuclear exchanges. From the European point of view, there is little difference between these two in terms of consequences. The latter possibility may have been the more disturbing, however, because it is viewed as more likely and, perhaps, as less equitable.

How have changes in the strategic situation affected this European view? Virtually every change in the military balance as well as the changes in declared Western strategy since the early 1960s has increased

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[1] See, for example, Desmond Ball's passing reference to the possible "salutary effects" of "small, carefully conducted [nuclear] attacks designed to demonstrate political resolve"--an aside in the course of an extended analysis concluding that controlled nuclear conflict is infeasible. The essay also concludes with another aside calling for "greater attention to the conditions of conventional deterrence." Can Nuclear War Be Controlled? Adelphi Papers #169, The International Institute for Strategic Studies, London, 1981, pp. 2, 38.
the risk perceived by the Europeans that the Soviets were becoming less and less deterred from pressure, confrontation, and aggression by potential Western military response. At the same time, the flowering of detente appeared to offer an alternative to the risks of a policy of containment through military strength. Soviet acceptance of the status quo in Europe was a vastly more comfortable basis for coexistence than a policy of matching or overmatching Soviet strength. Qualms over reliance on Soviet forbearance were ignored, offset against qualms about the stability of the Americans or soothed by the assumption that Soviet objectives were restricted to achieving security against attack from the West—which had no aggressive intent against the Soviets. Thus, many Europeans, like the Japanese, exorcised the threat by denial. Moreover, detente also offered economic benefits, both the avoidance of larger defense costs and the attraction of potential new avenues for investment and trade, benefits that grew increasingly attractive as economic performance deteriorated during the 1970s. Divided Germany also saw some relaxation in the barriers to social intercourse between East and West.

By 1980, however, the increasingly ominous Soviet military buildup, instability outside the geographic scope of the principal U.S. alliances, and disturbing Soviet behavior had combined to undermine confidence in detente as a substitute for defense. To clarify the factors involved and their implications for alliance policy, it is necessary to consider the roots of the present situation in slightly greater detail and to consider the effects of possible future developments in the strategic context and policy choices.

EARLY CONFIDENCE IN THE NUCLEAR GUARANTEE: A DELUSION?

Was there a golden age of deterrence in which U.S. supremacy was so great that no one doubted U.S. response to Soviet aggression? Questions about the willingness of the United States to respond to Soviet aggression against Europe or Japan with nuclear attacks against the Soviet Union long antedate the Soviet Union’s achievement of nuclear forces even remotely approaching those of the United States in terms of numbers, range, speed of response, operational effectiveness, and ability to survive initial attack. Korea revealed that not all
conflicts with communist powers could be deterred by nuclear threats and that some were worth fighting by nonnuclear means. From the beginning, NATO strategy recognized the insufficiency of the threat of long range nuclear attack as a basis for either deterrence or defense even in Europe. General Norstad's shield and sword strategy was clearly intended to serve both as a test for Soviet intentions and a commitment for U.S. response. The necessity for such a commitment was evident when the United States lost its short lived nuclear monopoly and its freedom from the threat of Soviet nuclear attack. A brief recapitulation of some of the history of the U.S. risks of nuclear destruction is useful in clarifying the nature of the nuclear guarantee.

As early as 1956, only three years after the first Soviet H-bomb test, President Eisenhower was presented highly sensitive analyses showing that hypothetical nuclear exchanges with the Soviet Union in the near future might result in enormous damage to the United States. In June 1956, the National Security Council staff concluded, on the basis of intelligence information, that the Soviet Union might develop a "net capability to strike a crippling blow on the U.S. even earlier than some time in 1958."[2] The NSC concluded in March 1956 that the United States would achieve in 1956 and retain until some time in 1958 a marked net superiority over the Soviet Union. Although the Soviet Union might then have the capability to inflict a "crippling blow" on the United States, the United States would have the capability to inflict a "decisive blow" on the Soviet Union.[3]

In 1957, the National Security Council is said to have received reports that U.S. fatalities in hypothetical nuclear exchanges occurring in 1959 were estimated at about 60 million people in an attack preceded

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[3] NSC 5606 defines the terms as follows: "For the purposes of this estimate, 'decisive' means damage such that either (1) the ability to strike back is essentially eliminated, or (2) civil, political, and cultural life is reduced to a condition of chaos. 'Strike' means an action carried to completion within hours or days, as compared to an 'offensive' which is of longer duration. A crippling blow would be loss of life that, while not decisive, would raise serious question as to the ability of the United States to recover and regain its status as a great industrial nation for a considerable period of years."
by strategic warning, and 90 million in an attack with only tactical warning.\[4\] Simultaneously, during the Presidential campaign of 1956 and subsequently in 1957, there were numerous public statements about the vast damage that would ensue in the event of a nuclear war, some of them released by administration officials urging an increase in civil defense efforts. Thus, in the form of both highly sensitive and classified estimates and in widespread public statements during this period the view of the effect of nuclear war on the United States was hardly sanguine.

The inversion of the missile gap that figured heavily in the 1960 Presidential campaign resulted in a situation in which the United States came closer than at any earlier time to the ability to disarm the Soviet nuclear threat. When Secretary McNamara spoke at Ann Arbor in June 1962, he could foresee, within a year or two, a period in which the U.S. strategic forces would far outnumber the Soviet missile or bomber forces capable of reaching the United States; the U.S. forces would possess a high degree of readiness, operational effectiveness, and protection against Soviet attack with or without strategic warning; and the Soviet forces would be slow reacting, mostly unprotected, and hence vulnerable to a disarming blow. His conclusions were as follows:

A central military issue facing NATO today is the role of nuclear strategy. Four facts seem to us to dominate consideration of that role. All of them point in the direction of increased integration to achieve our common defense. First, the Alliance has over-all nuclear strength adequate to any challenge confronting it. Second, this strength not only minimizes the likelihood of major nuclear war, but makes possible a strategy designed to preserve the fabric of our societies if war should occur. Third, damage to the civil societies of the Alliance resulting from nuclear warfare could be very grave. Fourth, improved non-nuclear forces, well within Alliance resources, could enhance deterrence of any aggressive moves short of direct, all-out attack on Western Europe (p. 8).

The U.S. has come to the conclusion that to the extent feasible, basic military strategy in a possible general nuclear war should be approached in much the same way that more conventional military operations have been regarded in

\[4\] NSC 57-09, March 29, 1975 (formerly Top Secret, now unclassified).
the past. That is to say, principal military objectives, in
the event of a nuclear war stemming from a major attack on the
Alliance, should be the destruction of the enemy's military
forces, not of his civilian population (p. 9).

The very strength and nature of the Alliance forces make it
possible for us to retain, even in the face of a massive
surprise attack, sufficient reserve striking power to destroy
an enemy society if driven to it. In other words, we are
giving a possible opponent the strongest imaginable incentive
to refrain from striking our own cities (p. 10).

We shall continue to maintain powerful nuclear forces for the
Alliance as a whole. As the President has said, "Only through
such strength can we be certain of deterring a nuclear strike,
or an overwhelming ground attack, on our forces and allies"
(p. 12).

Even with what we might wistfully refer to today as unambiguous
nuclear superiority, he observed further:

But let us be quite clear about what we are saying and what we
would have to face if the deterrent should fail. This is the
almost certain prospect that, despite our nuclear strength,
all of us would suffer deeply in the event of major nuclear
war . . . the combination of our nuclear strength and a
strategy of controlled response gives us some hope of
minimizing damage if we have to fulfill our pledge (to the
Alliance) . . . we do not . . . believe that the Alliance
should depend solely on our nuclear power to deter actions not
involving a massive commitment of any hostile force (p. 12).

At the peak of U.S. counterforce capability, the ability to destroy
opposing Soviet strategic nuclear forces, the view of the responsible
U.S. official was that continuing deterrence of Soviet attacks on
civilian targets, even after the outset of a nuclear exchange, was an
essential aspect of limiting damage to the West; and prudence dictated
that reliance on strategic nuclear forces for deterrence not be extended
further than necessary. Nevertheless, all three elements of U.S.
strategy emerge as important in the Ann Arbor address. Not long
thereafter, however, a change appeared in Secretary McNamara's strategy.
In an interview in 1963, the following exchange occurred between Stewart
Alsop and Secretary McNamara:
Alsop: In other words, you have the option of adopting the so-called no-cities, or counterforce, response, which you discussed in your Ann Arbor speech.

McNamara: Yes, we would have that option. I think in some ways the press overplayed that part of the speech. I carefully qualified what I said, and I made it clear that this was only one of a series of options. I would want to be absolutely certain that we had the other options.[5]

The confusion between the ability to destroy Soviet nuclear forces and the ability to deter Soviet attacks on cities that arises from the use of the term "counterforce" to cover both makes McNamara's response unclear. The ensuing exchange, however, does make it clear that at least the former is being eschewed.

Alsop: Surely we must assume that the time will come when the other side will have a sure second-strike capability—solid fuel missiles, hardened bases and all the rest of it.

McNamara: Yes, and that raises an interesting point. I believe myself that a counterforce strategy is most likely to apply in circumstances in which both sides have the capability of surviving a first strike and retaliating selectively. This is a highly unpredictable business, of course. But today, following a surprise attack on us, we would still have the power to respond with overwhelming force, and they would not then have the capability of a further strike. In this situation, given the highly irrational act of an attempted first strike against us, such a strike seems most likely to take the form of an all-out attack on both military targets and population centers. This is why a nuclear exchange confined to military targets seems more possible, not less, when both sides have a sure second-strike capability. Then you might have a more stable "balance of terror." This may seem a rather subtle point, but from where I'm sitting it seems a point worth thinking about.[6]

The Cuban missile crisis intervened between the Ann Arbor speech and the enunciation of the doctrine of mutual deterrence in the Saturday Evening Post interview. In announcing the crisis President Kennedy was

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[6] Ibid.
quite explicit about the risks of nuclear war. After summarizing the situation, he stated:

But now further action is required—and it is under way; and these actions may only be the beginning. We will not prematurely or unnecessarily risk the costs of worldwide nuclear war in which even the fruits of victory would be ashes in our mouth—but neither will we shrink from that risk at any time it must be faced. . . . It shall be the policy of this nation to regard any nuclear missile launched from Cuba against any nation in the Western Hemisphere as an attack by the Soviet Union on the United States requiring a full nuclear retaliatory response upon the Soviet Union. [7]

What President Kennedy meant by "victory," and by a "full nuclear retaliatory response," must be a matter for conjecture, to some extent at least. He provided some further illumination eight months later when, after referring to the dangers of "the spiralling arms race," he said:

And three times during the last two years and a half I have been required to report to you as President that this Nation and the Soviet Union stood on the verge of direct military confrontation—in Laos, in Berlin, and in Cuba.

A war today or tomorrow, if it led to nuclear war, would not be like any war in history. A full scale nuclear exchange, lasting less than 60 minutes, with the weapons now in existence, could wipe out more than 300 million Americans, Europeans, and Russians, as well as untold numbers elsewhere. And the survivors, as Chairman Khrushchev warned the Communist Chinese, "the survivors would envy the dead." [8]

Collectively, these statements pose a number of questions. What did America’s leaders really believe about the risks and possible outcomes of nuclear war before, during, and after the Cuban missile crisis? Did President Kennedy believe that nuclear war was equivalent

to certain national suicide on October 22, 1962? If so, at what point in the chain of events he and his advisors were considering did it become certain that "the survivors would envy the dead?" Clearly, he did not believe that intercepting Soviet vessels sailing to Cuba would lead with certainty to the catastrophe he discussed in his later remarks, and accounts of the crisis suggest that much more violent acts were entertained as possible course of action. Did he believe that "a full nuclear retaliatory strike" would inevitably lead to more than 300 million deaths, and if so, was it reasonable to threaten as a response to "any missile launched from Cuba against any nation in the Western Hemisphere?" Was this pure bluff? And bluff or not, did he think that the credibility of the threat and the consequences if it were carried out depended on the difference between Soviet nuclear forces and our own?

One distinct possibility is that the experience of the Cuban missile crisis changed the views of nuclear war held by President Kennedy and Secretary McNamara. Certainly the timing of the various statements presented above suggests this as a tenable hypothesis. From this period on, the strategy of the Kennedy and subsequent administrations moved farther and farther from the view of the role of nuclear forces presented in the Ann Arbor address to and beyond those in the Saturday Evening Post interview, culminating in the extreme doctrine of mutual assured destruction--that it is dangerous and unacceptable to entertain any objective for U.S. strategic nuclear forces other than the destruction of Soviet cities, or to attempt to interfere with the Soviet capability to destroy Western cities through offensive or defensive action. The effect on alliance relations of the espousal of this doctrine, its embodiment in decisions about U.S. forces, and its formalization in the SALT process can be seen in the course of the current issue concerning LRTNF modernization.[9]

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THE ERODED NUCLEAR GUARANTEE AND THE THEATER NUCLEAR WEAPONS ISSUE

The term "theater nuclear weapons" includes both short range tactical weapons that would have to be closely integrated with the land battle and the weapons for attacking targets in the rear, ranging from targets immediately behind the combat zone to those extending into Soviet territory. When the arguments for the usefulness of tactical nuclear weapons were first made, their principal appeal lay in the asymmetry between U.S. and Soviet inventories of those weapons. They promised an offset to the greater mass of the Warsaw Pact conventional forces. (Their ability to deliver on that promise was always dubious, however, given the political uncertainties about prompt release of nuclear weapons for battlefield use.) As the asymmetry disappeared, accompanied unfortunately by the concurrent accentuation of the combat effectiveness of Soviet conventional forces and the disappearance (or, in some respects, reversal) of the asymmetry in long range nuclear capabilities, the role of tactical nuclear weapons changed.

If tactical nuclear weapons ever offered a substitute for conventional capabilities, either in the form of making it possible to defeat a Soviet attack in Europe or by serving as an escalatory link to increase Soviet expectations of a strategic nuclear response by the United States, those contributions have been substantially and probably permanently attenuated by changes in the balance between Soviet and Western forces at all levels. It has been recognized for some time that an important, perhaps primary role for them has been to deny the Soviets the advantage of initiating the use of tactical nuclear weapons. Given what we know about the Soviet emphasis on integrating all weapons in their operations planning,[10] this should be a high priority task for NATO force design and operational planning.

The longer range theater nuclear weapons have a distinct history of their own, especially the theater-based forces of sufficient range to reach targets in the Soviet Union. The public discussion of LRTNF modernization is generally traced back to Chancellor Schmidt's 1977 Alastair Buchan Memorial Lecture, in which he asserted:

SALT codifies the nuclear strategic balance between the Soviet Union and the United States... SALT neutralizes their strategic nuclear capabilities. In Europe, this magnifies the significance of disparities between East and West in nuclear tactical and conventional weapons.[11]

In the absence of arms control agreements to remove the disparities, he urged that the Alliance should "make available the means to support its present strategy," one of a "full range of deterrence."[12] As the issue has evolved, the focus has rested primarily on the need to balance the deployment of the Soviet SS-20 intermediate range ballistic missile, capable of attacking West European targets from deep within the Soviet Union, by a NATO deployment of Pershing II and cruise missiles, capable of reaching targets in the Soviet Union from Western Europe. In 1962, commenting on the need for national nuclear forces in Europe, Secretary McNamara said:

> Our own strategic retaliatory forces are prepared to respond against [forces targeted against our allies]... More specifically, the U.S. is as much concerned with that portion of Soviet nuclear striking power that can reach Western Europe as with that portion that also can reach the United States.[13]

The principal concerns at the time were the Soviet SS-4 medium range and the SS-5 intermediate range missiles, then in process of deployment.

Now that European anxiety has one again been increased by the replacement of the SS-4 and the SS-5 by the more capable SS-20, why has the United States not offered a similar response, would such a response satisfy the allies, and if not, why? A missile force based in Europe might be needed if it were the most efficient or only means for

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[12] Ibid.
satisfying important alliance military requirements. Alternatively, even if external forces were capable of efficiently satisfying the military requirements, lack of confidence in the nuclear guarantee provided by U.S. external forces would prompt European efforts to find supplements for the eroded guarantee.

The relevance of the proposed LRTNF modernization program to the restoration of confidence in the U.S. nuclear guarantee is the issue of primary concern in this discussion, and it has also dominated the public discussion of the issue. No concerted attempt has been made, for example, to demonstrate that the proposed Pershing II and ground launched cruise missile (GLCM) force based in Europe is militarily superior to alternative long range offensive forces that could be added to programmed U.S. nuclear forces. If the forces proposed for the LRTNF are uniquely capable of either meeting NATO's general requirements for nuclear weapons or specifically offsetting the threat posed by the SS-20 missiles, the case has not been made.

Pershing II and the GLCM offer yield and accuracy combinations better than those in the current U.S. strategic forces; but in the relevant time period, other sea-launched or air-launched cruise missiles, as well as intercontinental missiles, could offer comparable performance. Questions of command and control, response time, and survivability are complex and troublesome for all the Western alternatives, but the public discussions, at least, do not present convincing arguments that these considerations favor the proposed LRTNF alternatives on balance. Given the public opposition to these missiles in Europe, if they are deployed at all, it is far from reassuring to contemplate the problems that will be encountered in dispersing them during periods of tension to avoid presenting them as easy targets for a preemptive attack and to prepare them for quick response. The military advantages of the proposed European-based missile force do not appear to be overwhelming or irreplaceable.

What about the role of the LRTNF modernization in restoring confidence in the nuclear guarantee? Chancellor Schmidt's 1977 statement about the neutralization of the strategic capabilities of the United States and Soviet Union by SALT is a completely clear assertion of the loss of confidence in the guarantee provided by U.S. strategic
forces and of the relationship of that loss to the need for what he called "a full range of deterrence."[14] The role of the LRTNF modernization in filling that need rests on the proposition that the Euro-missiles would be used against targets on Soviet territory in some situations where the use of external forces would be deterred, or perhaps that the Soviets may be persuaded of this, whatever the actual situation.

Because there is no question of giving up a U.S. veto on the use of the proposed Pershing II and GLCM, this implies that a U.S. President would be considerably more willing to attack Soviet territory with nuclear weapons based in Europe than with sea-launched or intercontinental missiles. The logic of the argument is difficult to sustain under almost any view of nuclear strategy, and persuasive arguments on this point have been notably lacking in the discussion of the issue.

Those who dismiss the possibility of limited nuclear war hold that any use of nuclear weapons, especially their use against targets on the territory of one of the superpowers, is bound to culminate in an all-out nuclear exchange. A U.S. President of this persuasion would hardly see a distinction between attacking the Soviet Union with missiles based in Europe and those based elsewhere. A believer in the usefulness of limited nuclear response would, however, have to strain to find a significant distinction between an attack on Soviet targets delivered from U.S.-controlled forces based in Europe and attacks on the same targets by U.S.-controlled forces based elsewhere. The arguments are hardly robust enough to justify a deployment as politically troublesome as the LRTNF modernization program is proving to be.

The proposed deployment appears likely to unite two of the European fears discussed earlier: fear of being involved in nuclear war and fear of being abandoned by the United States. Europeans who doubt the reliability of the U.S. nuclear guarantee may see the European-based missiles with range sufficient to reach the Soviet Union as inviting Soviet preemptive attack—undeterred by the threat of retaliation by U.S. external forces. The LRTNF modernization may thus unite those who

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wish to be defended by a reliable deterrent but doubt the reliability of the United States, and the older members of the antinuclear and peace movements who regard it as dangerous or immoral to be defended by the U.S. deterrent, in part because they believe the United States to be aggressive or erratic. The proposed LRTNF modernization appears to be not the answer to the erosion of credibility in the U.S. guarantee, but part of the problem.

Public opinion polls in Europe, particularly in the FRG, do not yet reveal profound changes in attitudes related to the issues of European security, except perhaps with regard to the emphasis on the need for arms control negotiations.[15] Rather, the new element in the situation appears to be the growing conviction of political leadership in Europe that the antinuclear movement is a force to be reckoned with. In this sense, the often-predicted crisis of credibility of the U.S. nuclear guarantee of West European security has arrived in earnest. It is dividing West Europeans into those who feel the need to redress the doubts about American resolution through more "European" solutions (even when these are essentially veneers) and those who seek safety in eliminating Soviet incentives to attack—through unilateral disarmament, progressive distancing from the United States and, ultimately, accommodation on a schedule controlled by events and Soviet policies. As already suggested, these two groups may become one when the veneer becomes transparent. There will be no lack of analyses to point this out.

It may appear that there is a third group seeking to deal with the problem through arms control negotiations. The course of those negotiations is likely to force this group to choose between the other two positions. The political benefits that accrue to the Soviets from the existence of this issue offers them strong incentives to maintain a hard line even if they thereby run some risk of having the deployment take place. Whatever additional military threat would be posed by the LRTNF modernization must be tempered by Soviet doubts that it can in fact be carried through; in the meantime, the political opportunities for the Soviets to sow discord among factions in Europe and between Europe and the United States must be highly welcome to them.

IS THE EROSION OF THE U.S. NUCLEAR GUARANTEE IRREVERSIBLE?

If Secretary Weinberger were today to make a statement similar to that of Secretary McNamara in 1962 and assert that U.S. strategic forces would cover all nuclear forces threatening our allies, how many West Europeans would agree today with a statement like that Alastair Buchan made in 1964: "The problem of the credibility of the American response has in any case been less in the forefront of European anxieties since the Cuban missile crisis of October 1962 and the end of the Soviet diplomatic offensive against Berlin."[16] He also observed, "One would have thought that the vindication of American firmness and decision in the Cuban missile crisis, and its beneficent effect on American prestige in Europe might have set the [multilateral force] question aside for a while."[17] The Buchan paper is primarily an analysis of the interplay between American Atlanticist ideology and intra-alliance politics that kept the issue alive anyhow.

As we have seen, however, the strategic situation at the time of Cuba and earlier was hardly free of risk of the most devastating damage to the United States in the event of nuclear war. No American president from Eisenhower forward gives the slightest appearance of unawareness of the risks; they appear to go out of their way to stress them. Yet there was, before some time during the 1960s, a nuclear guarantee against Soviet aggression that constituted a substantial basis for Western mutual security, and that basis has eroded. The reason is not to be found in an undermining of the "assured destruction capability" of U.S. nuclear forces that came to be the basis for Secretary McNamara's policies on strategic forces: Even when the window of vulnerability is open widest, U.S. strategic forces will have the ability to do much more damage to the Soviet Union than Secretary McNamara judged as unacceptable to them. The problem increasingly worrying our allies is their fear that the threat is not sufficient to deter Soviet aggression because they believe the Soviets are not convinced it would ever be used.

[17] Ibid., p. 6.
If there is an answer to the problem, it lies partly in the direction that Secretary McNamara urged; no prudent defense of the West is possible if the Soviets can have confidence of a quick conventional victory. But it is equally true that no credible defense of the West can be based on the doctrine that any use of U.S.-controlled nuclear weapons will inevitably lead to mutual suicide so long as our allies are subject to Soviet threats and we control the nuclear forces of the alliance. From the point of view of Western alliance relations, forces and doctrines that keep open the possibility of limited nuclear response are essential even if no high level of assurance is possible that nuclear war, if it occurred, would in fact remain limited.

The Soviets will undoubtedly deride the realism of such a strategy, as they have in the past. They recognize that the self-deterrence of a U.S. doctrine of mutual assured destruction undermines the basis for the Western alliance. Whatever their expectations or plans, they will find it politically useful to refuse explicitly to recognize the possibility of such exchanges.

The size and types of forces consistent with these objectives require analyses far beyond the scope of this Note. Even a superficial view of the problem suggests that, resource limitations apart, it is unlikely that the United States can achieve a reliable capability to prevent Soviet catastrophic attacks through destruction of Soviet weapons. A more feasible and useful objective is that of structuring our nuclear forces and doctrine so that they are able to provide continuing incentives for the Soviets to refrain from indiscriminate attacks on civilian targets even in the event of a nuclear exchange, while providing incentives to terminate the conflict. The role of attacks on Soviet military targets in such a strategy is a central issue in the design of such forces. Those analyses should take into account technological advances that may offer the possibility of effective attacks by nonnuclear weapons of extreme accuracy and with sophisticated warheads on nuclear forces.
International oil flows have been seriously interrupted three times within the past eight years by political or military events. Two of these were occasions for precipitous increases in oil prices with serious consequences for the prosperity of both the industrialized countries and the non-oil exporting less developed countries (NOLDCs) in the short term. The oil price shocks have also contributed to slowing long term economic growth of the West, reducing the resources available to provide for the security of the non-communist world, and increasing frictions within the alliance over economic policy. The first oil crisis, in October 1973, moreover, resulted in serious strains among the Western countries concerning policy toward the Arab-Israeli dispute, the management of the oil shortage, and the more general problem of coordinating policy with respect to events outside the formal scope of the security treaties.

This was not the first time alliance acrimony had originated in a part of the world outside the formal NATO treaty area. The unfortunate precedent set by the Suez crisis of 1956 has already been mentioned. The difficulty of coordinating policy in former areas of European empire or economic influence is deeply rooted. Until well after World War II, the prevailing American attitude toward the foreign activities of the European countries that are now our principal allies was one of anticolonialism. Apart from conflicts over European colonialism, narrowly defined, relations with our allies include a long record of disputes and suspicions over the use of political influence to support national economic interests in LDCs. The development of the oil industry in the Persian Gulf Region was a major instance of friction between American and European interests. From the events that led to the agreement admitting Exxon and Mobil (then Standard of New Jersey and Standard of New York, respectively) as partners in the Iraq Petroleum Company (albeit far from equal ones) in 1928, to the confirmation of exclusive American ownership of Aramco in the late 1940s, there was an alternation of rivalry and collusion in which governments were actively
involved. (A brief history drawing on the extensive documentation from the U.S. Senate Hearings on Multinational Oil Corporations and U.S. Foreign Policy is presented in the Report to the Committee on Foreign Relations, U.S. Senate, by the Subcommittee on Multinational Corporations, January 2, 1975, Washington, D.C., 1975.)

As the Europeans withdrew from their former colonies and the United States became increasingly involved in exercising influence in Africa and Asia, the attitudes were reversed, with the Europeans seeking to isolated themselves from American exercise of influence in less developed areas. In the case of the Persian Gulf region, however, the withdrawal of British presence in the 1960s was not followed by the entry of an offsetting American presence. We were, by that time, absorbed in Viet Nam and subsequently in the Viet Nam induced withdrawal from foreign commitments.[1]

The problems for alliance policy arising in the Persian Gulf region are a consequence of the likelihood that dependence of Western economies on Persian Gulf oil will continue at a high level for many years, the difficulty of reducing the vulnerabilities associated with a high level of dependence, and the threats to uninterrupted Western access to oil supply from that region.

THE PROSPECTS FOR CONTINUED DEPENDENCE ON PERSIAN GULF OIL

The difficulty of making long term predictions about world energy markets is compounded by the influence of governmental decisions in those markets. The familiar assertion that the price of oil is not market determined is based on the importance of government decisions in a small number of countries in the determination of that price. The statement is misleading, however, if it conveys that market forces are irrelevant to the decisions of Saudi Arabia, Kuwait, Iraq, or even Libya and Iran. Although market forces do not fully determine their choice of output levels, their behavior suggests that their appreciation of such forces constitutes an important element of the decision. The relative

weights of market and nonmarket considerations in the decisions of the crucial oil-exporting countries, especially Saudi Arabia, are important both in predicting the future course of the oil market and in determining policy toward such countries.

With respect to Saudi Arabia, which has recently demonstrated its influence within OPEC, the debate has been between those who believe the Saudis offer a policy of "price moderation" as a quid pro quo for limiting Western support of Israel and those who see Saudi policy on oil prices as dictated by Saudi economic interests.[2] Both groups admit Saudi concern with her own internal and external security as a central element in Saudi policy. Statements by Saudi leaders can be found to support either position. Saudi behavior in the oil market is consistent with pursuit of plausible Saudi economic objectives and there is no convincing evidence that the Saudi government has sacrificed those objectives to attain political objectives. Rather, Saudi pursuit of the political objectives of security of the regime, influence within the Arab and Islamic community, and support of Palestinian nationalism is carried on largely through subventions from oil revenues.

A principal element of Saudi economic objectives is presumably the maximization of the present value of her principal asset, her massive deposits of oil recoverable at low cost. Subject to the constraints imposed by this objective (or some approximation to it), other elements of her objectives include the level of current revenues and the value and security of her assets held abroad. Saudi Arabia faces the familiar problem familiar to any investor (if on a scale larger than usual) of deciding on an appropriate portfolio of assets. As a sovereign government, the distinction between assets within her own territory and assets held abroad is of particular concern, as is the noneconomic objective of security of the regime and the country.

Sheikh Yamani, the Saudi oil minister, has provided a particularly clear statement of the objective of maximizing the present value of Saudi oil in the ground and of its implications for Saudi policy and for her conflicts with other OPEC members.[3] Sheikh Yamani distinguishes

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Saudi interests from those of such countries as Algeria and Libya, whose reserves are falling and who will cease to be major oil exporters by the end of the decade. Such countries, he reasons, have a primary concern with achieving the highest price they can within the next ten years. Because the development of substitutes for OPEC oil or measures to reduce oil consumption take many years to have their full effect, low reserve countries can afford to ignore the effect of high prices in the near future on the demand for their oil. They can afford to pursue the primary objective of high short term revenues through high oil prices.

Sheikh Yamani contrasts the situation of Saudi Arabia with that of these other countries. Saudi Arabian resources are so large that she will be a major exporter of oil well into the next century. A policy that seeks to maximize the present value of the future stream of revenues from Saudi oil cannot ignore the long term effects of high oil prices on demand. Moreover, he recognizes that if high OPEC prices induce the development of substitutes for OPEC oil, subsequent reductions in the OPEC price are unlikely to cause abandonment of the resulting production capacity that will have been created. Rather future policies of the consuming countries protect the substitutes against competition from OPEC.

The general implications of a Saudi policy based on such views are clear. If such a policy is successfully pursued, the price of oil will remain low enough to make it economically inefficient for the consuming countries to seek large scale displacement of OPEC oil over the next 10 to 20 years. That is to say, an objective of Saudi policy will be to maintain a high level of dependency by the West on Persian Gulf oil.

Persian Gulf oil has a cost of production so much below the cost of alternatives that its production appears unlikely to be displaced in the absence of major political decisions to do so by importing country governments or major pricing errors by the principal Persian Gulf producers. Given present estimates of the size of the resource base in the region, and the costs and lead times associated with the alternatives, the large scale dependence on Persian Gulf oil will probably not diminish below a level of vulnerability much before the end of the century, except perhaps in the case of the United States.
The actual course of events is, however, subject to considerable uncertainty. The problems of security of supply that are to be discussed below might cause Western consumers of OPEC oil to follow policies that displace Persian Gulf oil even at considerable cost. There are many alternatives that rely on energy resources far more dispersed, or, in the case of the United States, within our own territory, and therefore less vulnerable to disruption than oil from the Persian Gulf. Western countries could encourage the development of such alternatives through subsidies, or, with greater efficiency, they could encourage both substitute fuels and conservation through a tariff on imports from insecure sources. On the basis of their past performance, importing countries are unlikely to pursue such policies sufficiently to eliminate their vulnerability over the next 20 years.

This is not to argue that dependence will remain at its current level. Even at present prices, a substantial displacement of dependence on imported oil has taken place, and the demand response to price increases, especially those since 1978, is far from complete.[4] The Saudis may have miscalculated the long term elasticity of demand for OPEC oil or they may have been unable to control the market in the 1978-79 crisis.

The probability of a reduction in import dependence is greatest in the United States, which is simultaneously moving away from regulatory policies that discouraged domestic energy production and subsidized consumption and which also has the largest domestic energy resource base among the major Western energy consuming countries. The current asymmetry between U.S. dependence on imported oil and that of other Western countries is likely to be accentuated over the remainder of this century, perhaps reaching the point at which the United States will completely eliminate dependence on imported fuel.

[4] The reduction in demand experienced since 1979, which has produced the current "oil glut," appears to be partly a result of the price elasticity of demand, a weak offsetting effect from the income elasticity as a result of poor economic performance in the world economy, and perhaps a considerable amount of withdrawal from the oil stocks built up in 1979. This last, of course, tends to increase vulnerability to any future disruption.
The remaining possibilities are that Saudi oil price policy will change, perhaps as a result of the displacement of the present Saudi regime by an authority that seeks to pursue other objectives, or that a succession of disruptions will make continued Western dependence on Persian Gulf oil intolerable. This might induce greater determination than that shown so far by Western governments to incur the costs of avoiding import dependence. At the present time, however, with the real price of oil likely to decline over the next few years in the absence of further shocks, the analysis of policy alternatives has to include the possibility of a continued high level of Western dependence.

WESTERN VULNERABILITY TO OIL IMPORT DISRUPTIONS

As of September 1981, about 35 percent of noncommunist world oil output originated in the Persian Gulf. Saudi Arabia alone, even after its production cutback, supplied over 20 percent. This represented a decline in the level of dependence from August 1980, just before the war between Iraq and Iran, when production in the Persian Gulf region had constituted over 40 percent of non-communist oil production. Even assuming that OPEC excess capacity in regions other than the Persian Gulf would come fully into production in the event of a severe crisis in the Persian Gulf region (a reasonable assumption), the loss of Persian Gulf oil would represent a reduction of about 28 percent of noncommunist world supplies.

An abrupt and prolonged loss of this magnitude would have economic consequences for the OECD countries and the LDCs similar to that of a large war. The United States would be considerably better insulated by our domestic energy resources than most of our allies. Oil constitutes only 43 percent of U.S. total energy consumption, and imported oil is only 35 percent of total U.S. oil consumption. Our import dependence therefore amounts to only 15 percent of our total energy consumption. We would neither lose as much physical output as other OECD countries nor would we be as severely affected by the precipitous increases in the world price of oil that would be associated with an oil supply disruption.

Anxiety over this vulnerability has been a major policy concern in Western countries since 1973. Several of remedies have been suggested. The idea of energy independence, which was an early reaction to the problem by President Nixon, has never appeared to be a practical alternative for our European allies, and it is totally out of the question for Japan. (It was never more than a rhetorical flourish as an early objective for the United States.) Nevertheless, if the result were a more dispersed source of energy imports for the Western countries, reductions in dependence on Persian Gulf oil would help to moderate, if not eliminate, the problem of oil supply security.

The accumulation of large emergency stocks of oil has also been a major policy emphasis in Western countries and the International Energy Agency. In the limit, the West could accumulate emergency stocks of oil sufficiently large to permit it to sustain a permanent loss of Persian Gulf supplies by making a transition to a new long term supply and demand balance. Given the long time and the scale of effort required for such adjustments, the stock levels required are unrealistic. It is by no means clear that the cost of such a program would be less than the cost of a program to reduce dependence on Persian Gulf oil in advance of a crisis. If Western countries will not undertake the one there is little reason to expect them to undertake the other.

This is not to argue against a program of more modest but still substantial increases in emergency stock levels. On the contrary, it is an urgent objective for Western countries because of its usefulness in preventing sharp price increases and large economic losses in response to short-lived crises or even false alarms that result in no significant loss of oil production at all. The importance of large emergency oil stocks in dealing with the uncertainty that accompanies any oil supply disruption is well illustrated by the difference in response to the oil crisis of 1978/79 associated with the Iranian revolution and that of 1980/81 associated with the war between Iraq and Iran.

The production loss in Iran between the average rate for 1978 and the first quarter of 1979, after the Iranian revolution had occurred, amounted to 4.1 million barrels per day (MBD).[8] This had a drastic

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effect on the oil market; spot prices rose by about 50 percent in the first quarter of 1979 and by 100-180 percent (depending on the grade of crude) by the fourth quarter of 1979. The official OPEC price lagged the spot price substantially, finally rising by about 140 percent between the 1978 average and June 1980. The most startling aspect of this experience was that total OPEC production was almost constant during this period, and non-communist world production actually increased slightly because of offsetting increases by other OPEC and non-OPEC producers.

In comparison, the war between Iraq and Iran reduced Iraqi production by about 2.7MBD between August 1980, before the outbreak, and the first quarter of 1981. Iranian production, which was low before the attack, remained roughly constant. On this occasion, other producers did not fully offset the Iraqi reduction, so that the OPEC total fell by about 1.9MBD, and total non-communist world production fell by about 1.7MBD. This time, however, there was no significant effect on price.

The sharp price increase in 1979 is generally attributed to panic buying to increase inventories, and its absence in 1980-81 to the existence of large inventories of oil. Although complete data on inventories are unavailable, data on primary stocks within IEA countries suggest a substantial increase during 1979. By the time of the Iraqi attack on Iran, stocks had risen to high levels and there was widespread expectation of an oil glut. The previous rise in prices, the high level of stocks held by importing countries, and perhaps the absence of large unused storage capacity for increasing stocks prevented another wave of panic buying in the fall of 1980; instead, the soft oil market of 1981 developed.

The effects of a disruption, it appears, depend on much more than the volume of production shut down. The level of stocks and expectations about price movements before the crisis are both factors in the response. So, of course, are judgments about the duration of the disruption, which can never be known with certainty. Such expectations depend on the nature of the events precipitating the crisis as well as the policy responses available to the importing countries.

THREATS TO PERSIAN GULF OIL SUPPLIES

The three oil crises we have experienced since 1973 have provided an interesting if incomplete menu of threats. In order of occurrence their origins were the Arab-Israeli conflict, internal instability in a major oil producing country, and war among two Islamic states of the region. We have yet to experience the threat that is regarded as central by the current administration, that of a Soviet military incursion into the oil-producing region of the Persian Gulf. To generalize, types of threats categorized in terms of their consequences for the West include:

- Direct Soviet military incursion into the Persian Gulf region to establish Soviet control, direct or indirect, over the oil production of the region.
- Denial by Arab oil-producing states of oil exports to influence the policy of Western countries, especially the United States, toward the Arab-Israeli conflict.
- Internal or external turbulence among the Islamic states of the Persian Gulf region.

Soviet Incursion

For whatever reason such an event might be initiated, a successful Soviet military incursion in the Persian Gulf region would offer the Soviets a variety of benefits. To the extent that the influence could be translated into preferential Soviet access to Persian Gulf oil, there would be economic benefits to the Soviet Union in terms of hard currency earnings (at the margin).

Of probably greater importance to the Soviets would be the opportunity to influence Western policy through control over Persian Gulf production. Preferential terms for access to the oil could be offered to reward political cooperation or as an inducement to disrupt alliance cohesion. The ability to penalize recalcitrance of particular consuming countries, however, would be limited by the operation of the oil market.
The Soviets might use the threat of a production cutback in the Persian Gulf to force accommodation by Western countries in a confrontation. Soviet leverage over Western countries would be strengthened to the extent that Soviet oil and gas exports had been incorporated in Western energy supplies before Soviet acquisition of control over Persian Gulf supplies. Proponents of Western cooperation in Soviet energy resource development argue, among other things, that it represents a source of diversity for the West to hedge against the insecurity of Middle East oil. This assumes that the Soviets would be disinterested observers and reliable suppliers in the event of disruptions arising from regional instability in the Persian Gulf, a doubtful assumption. Such projects as the Yamal pipeline would hardly be a hedge against disruption of Persian Gulf supplies in the event that the Soviets controlled both supply sources.

The possibility of Soviet incursion is in some ways the most threatening to the West, and in military terms Soviet involvement clearly poses the largest requirements for forces to deter or meet it. It is also the most unifying of the threats. It is not, however, the most likely threat unless considered in conjunction with the possibility of regional turbulence.

Arab-Israeli Conflict

The 1973 OAPEC embargo and the subsequent history of divergence between the United States and other Western countries illustrates the potential for divisiveness within the Western alliance over the Arab-Israeli conflict. The source of the supply disruption then and in probable future contingencies arising from this source is unlikely to be destruction of oil production, processing, or transportation facilities, but rather an OAPEC decision to withhold oil supplies so as to induce a change in U.S. support for Israel. In 1973, the OAPEC effort included both a selective embargo and a general production cutback. The latter was presumably necessary because the oil market would have nullified the selective embargo alone; the cutback, however, was a convenient occasion to increase prices to a magnitude that would have been unthinkable earlier while putting pressure on the United States indirectly through the economic damage to U.S. allies.
The threat posed by the Arab-Israeli conflict as the source of a future disruption depends primarily on the latent market power of the Arab members of OPEC. In retrospect, the long term increase in world oil prices after 1973 shows that their latent market power was very high at the time. They have expanded their production capacity much more slowly than they were expected to do before 1973 and much more slowly than many observers believe they might have, had they chosen to. The situation in 1981 was different, however. In September 1981, OPEC had excess capacity of about 14MBD, over 40 percent of total OPEC capacity.[10] About 4MBD of the excess capacity is in non-Arab members of OPEC who might welcome the opportunity to increase their production. No data are easily available on excess capacity outside of OPEC, but there may also be a considerable amount because of the currently soft market.

The persistence of these conditions depends on an uncertain diagnosis of the future prospects for the oil market. The long term price and income elasticities of demand, the lag in adjustments to oil prices, the rate of economic growth, and the supply and demand changes for fuels that are close substitutes for oil, notably natural gas, will jointly determine the market conditions facing OAPEC. Another factor in projecting future market conditions is an understanding of the extent to which demand for OPEC oil during recent months has been depressed by withdrawals from high inventories accumulated during 1979/1980. The analysis of these factors is beyond the scope of this study and is unlikely to produce precise and reliable conclusions on the course of the oil market. Nevertheless, the behavior of excess capacity over the next five to ten years will be one index of the limits of OAPEC ability to use the "oil weapon" in the Arab-Israeli conflict.

Perhaps more important, if harder to assess reliably, are the political requirements for the effective use of the oil weapon. The recent past gives very little reason for expecting a high degree of Arab unity in confronting Israel. Moreover, most of the Arab states will have economic interests that conflict with the use of the oil weapon, to a degree determined by the state of the oil market. In the case of

Saudi Arabia, if her long term interests are important and construed as discussed earlier, a second exercise of the oil weapon might be quite costly. Finally, however, the attractiveness of the oil weapon to OAPEC depends in part on the members' assessment of the state of cohesion of the principal Western countries. To the extent that Western oil-importing countries can avoid policies that will interfere with necessary reallocations of oil supplies in the event of a disruption, and can agree on policies that will avoid unnecessary price increases, the perceived political benefits to OAPEC will be reduced.

Turbulence Within and Among Islamic States of the Region

This class of disruption threats presents a rich, varied, and largely undepleted menu of possibilities. Several characteristics are important:

- Negotiations (tacit or explicit) with Western oil-importing countries may be irrelevant. The West is unlikely to be the direct or primary target.
- Violence or its threat and physical destruction of oil facilities will probably be important elements. In the Iranian revolution, strikes at the oil facilities were viewed as a principal means of undermining the power of the Shah. The war between Iraq and Iran showed that mutual restraint in the face of symmetric vulnerabilities is not inevitable in the Middle East. Oil is such an important source of power in the Middle East that it almost certain to be a principal target for attack.
- Oil production losses do not have to be large to cause great economic and political damage to the West. Indeed damage may occur with no production loss at all if expectations about the disruption are sufficient to stimulate panic buying for inventory as in 1979.

The uncertainty inherent in the prospect of insurrections and wars is sufficient to trigger expectations that will result in sharp demand increases unless stabilizing influences on the market exist. Among
these influences are substantial excess oil production capacity, large oil stocks available for use in emergency, flexibility in fuel shifting, and cooperation among oil-importing countries in allowing market reallocation of available supplies and in restraining demand. An important additional influence is an evident ability to limit the extent or duration of such disruptions. Western political influence and the ability to project military power into the Persian Gulf region can play an important role in the stabilization of oil market expectations during a regional crisis.

ALLIANCE ISSUES POSED BY THE THREATS

An experienced and responsible participant in NATO affairs has observed, "As serious as the security situation of the direct East-West confrontation may be, the greater danger to Western security emanates from regions far away from the Alliance area." The previous discussion suggests that this judgment is essentially correct, although the characterization of the Persian Gulf region as being "far away from the Alliance area" betrays the Centro-centric view of NATO that has characterized much of the analysis of its affairs both in this country and in Europe. The borders of Turkey are close indeed to the Persian Gulf region.

Vital alliance interests outside the formal treaty boundaries have been recognized also in the Final Communique of the Defence Planning Committee at its spring meeting in 1980:

5. Ministers further agreed that the stability of regions outside NATO boundaries, particularly in the South West Asia area, and the secure supply of essential commodities from this area are of crucial importance. Therefore, the current situation has serious implications for the security of member countries. The altered strategic situation in South West Asia warrants full solidarity and the strengthening of Allied cohesion as a response to the new challenges. Ministers recognised that maintenance of the special relationships of Allies with the regional countries are in the interests of the West as well as of the countries of the region.

6. It is in the interests of members of the Alliance that countries which are in a position to do so should use their best efforts to help achieve peace and stability in South West Asia, taking into consideration the interests of the regional
countries and the value of their political co-operation. The burden, particularly in so far as defence measures are concerned, falls largely upon the United States, which has already taken steps to enhance its effectiveness. Ministers noted that this commitment, which in certain circumstances might substantially increase, could place additional responsibilities on all Allies for maintaining levels and standards of forces necessary for defence and deterrence in the NATO area. Ministers agreed on the need for ensuring that at the same time as the United States carries out the efforts to strengthen defence capabilities for South West Asia described above, Allied capabilities to deter aggression and to defend NATO Europe are also maintained and strengthened.[11]

Although there is widespread recognition of the stakes of the West in the Persian Gulf region, there is little inclination to try to extend formal treaty arrangements to cover this region. Such an attempt would almost certainly fail with harmful consequences to the cohesion of the alliance and worsened prospects for cooperation in protecting the joint interests of Western countries.

Nevertheless, a blatant Soviet military invasion of the Persian Gulf region would probably produce a NATO military response, especially if it involved simultaneous military operations against Turkey to secure the flanks of the Soviet operation. In this case, the fundamental NATO guarantee, "an attack on one is an attack on all," would come into play. It would hardly be prudent, however, to assume that even in the case of Soviet incursion, the issue would be this clear-cut, if only because the Soviets would have abundant incentives to seek to make it ambiguous. If Soviet intrusion occurs in the Persian Gulf region, it is almost certain to occur against a backdrop of regional instability and to be justified in terms of the need to prevent that instability from threatening "world peace."[12]

As an alternative to NATO assumption of responsibility for stability in the Persian Gulf region, the Defense Planning Committee Communiqué offers the so-called "division of labor" in which the United States assumes responsibility for that role, while NATO allies make

[12] "Correspondence between President Johnson and Prime Minister Inonu, June 1964, as released by the White House, January 15, 1966."
increased efforts within the NATO treaty area. Depending on its interpretation, this "division of labor" may be a reasonable rationalization of short term political necessities, but its problems include issues of military feasibility and political realism.

U.S. ability to deal with a Soviet incursion exclusively through reliance on mobile contingency forces has been widely questioned. The prospects would be much better if it were possible to count on forces in the Southern NATO flank as well. But Turkey will become involved in such operations only if she can do so as part of a NATO effort. At present there is no established basis even for conducting joint NATO planning for cooperation in dealing with a Persian Gulf contingency that does not also involve an explicit Soviet attack on a NATO member within the NATO treaty area. The NATO response to Soviet attacks on the aircraft and ships of the United States involved in contingency force operations resisting a Soviet invasion of Iran is far from clear enough to permit U.S. commanders to plan on any but unilateral operations.

In the longer term, the "division of labor" solution also has a political liability. As already indicated, the United States will probably reduce dependence on Persian Gulf oil more rapidly than the OECD as a whole. It is important to consider the implications for U.S. domestic political support of alliance cooperation when the United States is expected to assume the sole responsibility for securing Western access to Persian Gulf oil, U.S. oil companies no longer have major equity interests in Persian Gulf oil production, and the United States is no longer a major consumer of imported oil. The prospects will hardly reassure Japan and those countries of Western Europe that will continue to be highly dependent on Persian Gulf oil.

Oil crises that arise out of instability in the Persian Gulf without direct Soviet involvement are more likely and pose alliance problems that are, in some ways, more difficult to handle. The prospect of an indefinite interruption of a large part of Persian Gulf oil flows would force consideration of military means for restoring the flows, if no other solution could be found. If, for example, Iraq or Iran had seen fit to assert belligerent right to close the Persian Gulf to oil traffic, an intolerable situation would have been created. In this case, moreover, it is clear that the United States could bring to bear the military power to deal with the situation.
A decision to bring armed force to bear would immediately raise a question of Soviet involvement. A situation such as this one would present the Soviets with a crisis in the Chinese sense: a threat and an opportunity. The Soviet Union would undoubtedly view U.S. military action in the Persian Gulf as changing the status quo in a way that threatened Soviet interests in a highly sensitive area contiguous to the Soviet Union.

The asymmetrical relationship of Western and Soviet interests in the region creates an unequalled opportunity for exploitation of Western vulnerability. The West must maintain continuity of oil flow from the Persian Gulf; the Soviets need not. The Persian Gulf poses the inverse of the strategic problem familiar to the West—that of deterring Soviet aggression. The interruption of oil flows may pose a need for Western military initiative in the face of Soviet deterrent threats. How might the Soviets exploit this situation?

Their least likely course is complete passivity. We might expect their declaratory policy, probably supported by increases in the readiness of selective forces, to suggest that Western action, particularly if it were unilateral U.S. action, might require Soviet response. They might choose statements and actions that generalize the threat of conflict, perhaps including mobilization of Warsaw Pact forces. If they succeeded in deterring U.S. action, they would have demonstrated convincingly to the Western Europeans and the Japanese that U.S. influence, power, and resolve were insufficient to secure vital Western interests—a substantial accomplishment.

Recognizing that inaction would be intolerable to countries dependent on Persian Gulf oil, the Soviets might further pursue a line suggested by Nikolay Portugalov, on February 29, 1980, which, referring to a Brezhnev speech containing a discussion of "oil supply routes," went on to suggest that they might become the "point of departure for all-European initiatives of global significance, which would be a beneficial alternative to the dangerous development of events in this area which has been provoked by Washington."[13] The Soviets might well

suggest that joint action by peace-loving countries to guarantee, "first within an all-European framework and later in the United Nations," "the territorial integrity and independence" of the oil producing countries, while assuring the "equal and free access to oil" as an "alternative to the adventurist and hegemonist policy of the United States in the Persian Gulf region."[14] If necessary a UN peacekeeping force might enter the area to restore stability. Perhaps the Soviet Union might offer, given the proximity of her forces, to act as executive agent for the UN.

It would be foolish to predict the response of Western countries, including the United States, in the hypothesized circumstances. The consequences of the situation for the alliance are less speculative. If this were to happen in the near future, many and powerful voices in the West would urge acceptance of such a Soviet offer and perhaps a larger segment would urge negotiations based on it. If such a crisis were resolved by a demonstration of the inability of the West to protect its vital interests without Soviet assent, and even more if the resolution resulted in the establishment of the Soviet Union as an arbiter of disputes in the Persian Gulf by invitation of the West, the future and purpose of Western mutual security arrangements would be fundamentally changed.

[14] Ibid.
V. CATCHING UP WITH SOVIET MILITARY POWER

Developments in international relations and in the domestic situations of the Western countries and the Soviet Union have resulted in important changes in the burdens, risks, and benefits of Western alliances over the past 20 years. These have created two major problems for the future of Western mutual security: a decline in Western confidence in the U.S. nuclear guarantee and the exposure of vital Western interests to forces that are not adequately dealt with in the present structure of alliance relations. The military balance has changed substantially since 1960. The prospects for redressing this change must be considered in the analysis of policy alternatives to deal with these problems.

SOVIET MILITARY SPENDING

The Soviet Union has continued to combine disappointing and troublesome economic performance with sustained growth in military expenditures. In 1967, Secretary McNamara noted the concern of Soviet leadership over declining rates of growth in Soviet GNP. From an average annual rate of growth of 6-1/2 percent in the 1950s, he said it had slowed to about 4-1/2 percent in the 1960s. He noted "a rising demand among prominent members of Soviet political and intellectual life for substantial improvements in food supplies, housing, selection and quality of manufactured consumer articles and services. This issue concerns not only the U.S.S.R.'s domestic policy but also its international standing."[1] Noting the problems of financing imports, dealing with East European economic problems and meeting demands for foreign assistance, Secretary McNamara concluded, "These competing demands on the Soviet budget are still serving as a restraint on the size of the military forces."[2] Nevertheless, Soviet explicit defense

[1] Statement of Secretary of Defense Robert S. McNamara Before the House Subcommittee on Department of Defense Appropriations on the Fiscal Year 1967-71 Defense Program and 1967 Defense Budget, p. 16. (This and corresponding documents for subsequent years are referred to below as Posture Statements.)
[2] Ibid.
expenditures were expected to rise by 5 percent in 1966, and outlays on scientific research including much of the military R&D by 10 percent.

Soviet overall economic performance, we now know, was facing a long term decline, growth falling to 3.5 percent by 1975 (FY 1981 Posture Statement, p. 31), and growth rates recently have been projected to fall to about 2.0 percent in the early to mid 1980s.[3] Secretary Brown, reviewing the status and prospects for the Soviet economy and Soviet defense spending in 1980, also observed, "These developments face the Soviet leadership with severe problems in the allocation of national resources," but went on to note, "For at least the past 20 years, they have consistently favored guns over butter."[4] Again in 1981, he cautioned against assuming that the Soviets would be incapable of sustaining an increasing defense burden in the future.[5]

COMPARING U.S. AND SOVIET MILITARY EXPENDITURES

Soviet military spending meanwhile has risen steadily both absolutely and relative to GNP, while U.S. spending in real terms (constant dollars adjusted for inflation) declined from the Viet Nam peak in 1968 to a point in 1976 that was below the pre-Viet Nam level of FY 1965. Relative to GNP, U.S. military spending declined from 8.2 percent in FY 1964 to 5 percent in FY 1979,[6] while estimates of Soviet military spending ranged from 11 to 15 percent of GNP.[7]

The conceptual and data problems in comparing military expenditures of different countries are very great as many analysts have noted.[8] Most discussions by economists have focused on the importance of expenditure patterns as a measure of the economic burden of defense.

Other treatments including official statements have often, implicitly or explicitly, interpreted differences in expenditures as reflecting, however imprecisely, differences in military capabilities.

Among the difficulties in comparing the burden of defense spending in the United States and the Soviet Union are: the so-called index number problem involved in comparing complex aggregates either at different times or between different nations; the difficulties in comparing aggregates in a centrally planned economy with those in a predominantly market economy (including large differences in pay since the United States extended the market mechanism to the acquisition of military manpower in the All Volunteer Force); and limitations in the availability of data on the components of Soviet military inputs and their costs.

There are numerous additional difficulties in the way of inferring differences in military capabilities, threat to the United States, and implications for U.S. policy on the basis of comparisons between U.S. and Soviet military spending. They begin with the nature of national security objectives. In principle, not every Soviet national security objective is the negative of some U.S. objective. Soviet spending to reduce the likelihood of unintended use of nuclear weapons is clearly not an unalloyed threat to the United States. Very often, however, Soviet military capabilities that may not be aimed at the United States interact with U.S. objectives in complex fashions. Soviet spending to increase their military capabilities against China, for example, do not appear to be a direct threat against either the United States or Western Europe; but existing military forces can move in less time than it takes to create new ones, and the effect of an increase in the Soviet threat to China is not a matter of indifference.

Another complicating factor in comparisons is the adoption of different approaches by the Soviets and the United States in dealing with similar military objectives. Differences in geopolitical situation; in social systems; in military style, organization, history, and doctrine; and in the relative abundance and efficiency of the elements that constitute military capability (including technology) all lead to different approaches to such objectives as assuring the survival of long range nuclear forces against surprise attack. The Soviets face
adversaries on the periphery of their vast, largely landlocked territory; they operate on interior lines of communication primarily from bases in territory they govern with little regard for public opinion, but they face a transportation system with some serious constraints. The United States has no geographically contiguous military adversaries of any size; we are a traditionally maritime nation with large bodies of our troops stationed abroad on the territory of independent and often recalcitrant allies; increasingly, public opinion in this country and abroad is becoming an active element in dictating the detailed nature of our force structure choices (LRTNF, M-X, ELF). Efficient responses to given military problems are almost certain to take different forms in the two countries. Finally, however, there is also the possibility of pervasive differences in efficiency that would bias any attempt to compare military capability on the basis of military expenditures.

Data limitations on the details of the ruble costs of Soviet military forces have led the CIA to emphasize military expenditure comparisons in terms of U.S. dollar estimates. That is to say, the costs in U.S. prices of acquiring and maintaining forces physically similar to those of the Russians are calculated and compared with actual or projected U.S. military expenditures. As a measure of the relative burden of military expenditures, such a comparison is biased toward overestimating the Soviet burden relative to that of the United States because of the index number problem. In the absence of identifiable offsetting biases, statements such as that by Secretary Brown in January 1980, that Soviet military spending had been running at levels 50 percent greater than American, are to be regarded as an upper bound to the comparison of burdens.[9] Secretary Brown also presents a comparison in ruble costs showing the Soviet spending as 30 percent greater than American, which should, apart from questions of data quality, constitute a matching lower bound.[10] More to the point regarding trends in Soviet and U.S. military strength are comparisons of force changes on both sides presented in exhaustive detail by Secretary Brown and by members of the current administration.

[10] Ibid.
HOW FAR AHEAD IS THE SOVIET UNION?

If it is clear in both expenditure and physical terms that trends in military force development have been divergent, what, if anything, can be inferred with regard to the effort required by the United States and its allies to catch up? There is little prospect of reaching useful conclusions on this issue based on analysis of military expenditures--with one important exception. Estimates of Soviet spending evaluated at U.S. prices might be judged almost completely worthless as a measure of a "gap" in military capabilities on the basis of the difficulties summarized above. The more U.S. strategies take paths dictated by asymmetrical capabilities, objectives, and constraints instead of simply trying to catch up by matching the Soviet efforts, the less the relevance of expenditure comparisons.

The reverse implication is also true, however. The closer we adhere, in terms of specific weapons characteristics, emphases on categories of weapons, or general force structure strategies to the patterns of Soviet forces, the greater the applicability of expenditure comparisons in dollar terms to estimating the effort required by the United States to catch up with the Soviets. This is no mere strawman in terms of current policy issues. There is a pervasive tendency, especially in public discussion, to meet the Soviet threat on its own terms by matching specific Soviet capabilities and sometimes specific Soviet weapons systems. It is therefore of some interest to estimate the U.S. level of effort required to catch up in terms of Soviet force structure patterns.

Such an estimate requires cumulation of U.S. and Soviet expenditures over time. The CIA estimated in 1980 that total military spending over the period 1970-79 had been $1260 billions for the Soviet Union and $995 billions for the United States, both measured in constant 1979 U.S. dollars.\[11\] Not all of these totals are relevant to the estimation of the cost to the United States of catching up with the Soviets, however.

We must distinguish spending on investment, which results in an enduring change in military capabilities, and on operating costs, which maintain a given level of capability. (Capabilities here are to be considered in the sense of "gross" capabilities rather than "net" of the effects of changes in an adversary's posture.) More than half of both totals are spent on operating costs, which include personnel pay and allowances, and the resource costs to operate and maintain equipment and facilities. These are best thought of as mainly producing military readiness, a service that is consumed concurrently with the expenditures and is therefore irrelevant to the measurement we seek. The difference in cumulative operating costs may be viewed as a measure of the risk of military inferiority accepted in the past; but for all the reasons discussed earlier, its relevance and interpretation are highly ambiguous. To the extent that operating costs result in an increase in the proficiency level of the forces involved rather than their maintenance at a constant level, they include an increment to military capability and belong in the category of investment.

For present purposes, the expenditure categories designated as investment in military forces are of principal concern. These include expenditures on research, development, test, and engineering (RDT&E) to incorporate new technology into novel equipment, the procurement of new equipment, military construction, and the additional training efforts required to incorporate novel equipment into the military forces. The CIA has published estimates of the cumulative costs of equipment procurement and military construction for the United States and Soviet Union over the period 1970-79, both estimated in constant 1979 dollars. These amount to $430 billions for the Soviet Union and $280 billions for the United States.[12]

Estimates are also provided in Secretary Brown's FY 1982 Posture Statement, including RDT&E. He estimates the difference between the Soviet Union and the United States over the period 1968-79 in constant FY82 dollars at about $270 billions.[13] No data are available to the

[12] Ibid., estimated by author from graphs.
author to estimate that part of O&M costs related to the incorporation of novel equipment. (The resulting totals may represent an underestimate of the excess of Soviet over U.S. investment costs because the Soviets were presumably introducing more novel equipment during the period.)

The difference of $270 billions is still not satisfactory as a measure of the U.S. cost of catching up with the Soviet Union because it ignores the effect of obsolescence and the need to replace equipment affected by wear and tear (the decline in the military value of the equipment). Because the excess of Soviet over American investment expenditures has been growing, the larger the assumed decline rate, the greater will be the excess of the military value of Soviet equipment over U.S. equipment at the end of the period, and vice versa. The estimation of the decline rate is largely a matter of conjecture. It depends on the rate of advance of technology, the rate of attrition to military equipment in peacetime, and the choices made by adversaries. Casual observation suggests that the relevant rate for military equipment is higher than for the civilian capital stock; a rate of 10 percent per year is used in the calculations that follow.

In addition, the United States and the Soviet Union did not start even in 1968; in the earlier postwar period, the United States had substantially outspent the Soviet Union on military investment. Using data from the FY 1982 Posture Statement (estimated from Chart C-13), and assuming that the United States had outspent the Soviet Union by $30 billion per year (in constant FY 1982 dollars) in the period 1950-59, the present value of the Soviet investment at the end of FY 1981 would exceed that of the U.S. investment by about $210 billions in constant FY 1982 U.S. dollars.[14]

An adjustment should also be made for U.S. spending on the conflict in Viet Nam. If it is assumed that U.S. investment spending attributed to Southeast Asia during the period 1965-1975 in the FY 1981 Posture Statement (p. 35) was precisely equal to the investment consumed in that conflict, then the difference in the present value of Soviet and U.S.

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military investment at the end of 1981 would increase to about $240 billions.

COMPARISONS BETWEEN THE OPPOSING ALLIANCES

No assessment of the U.S.-Soviet balance can ignore the existence of allies on both sides. The FY 1982 Posture Statement presents a comparison of NATO and Warsaw Pact defense costs, distinguishing non-U.S. and non-Soviet spending in each (p. C-12). The comparison is presented in constant FY 1982 U.S. dollars, on the same general conceptual basis as that discussed earlier with respect to U.S.-Soviet comparisons. It shows NATO spending exceeding Warsaw Pact spending continuously over the period 1965-80, even after omitting U.S. expenditures attributable to Viet Nam. The difference shown, which is about $125 billion per year in CY 1965, diminishes rapidly to a minimum of less than $10 billions in 1976 and rises again to about $20 billions in CY 1980. In CY 1980 total NATO spending is slightly under $300 billions, of which the non-U.S. allies contributed about 45 percent. In contrast, the Soviet Union's Warsaw Pact allies contributed only about 15 percent of the more than $270 billions of the Pact total in CY 1980.

Is the problem of the difference between U.S. and Soviet military spending a red herring in the light of the overall spending totals in the two alliances? Unfortunately, it cannot be dismissed for several reasons. Although the heavy contribution by the NATO allies is welcome from the point of view of U.S. and Western security (indeed, increasing allied contributions has been a major objective of U.S. alliance policy and an irritant in recent alliance relations) it does not replace U.S. spending dollar for dollar. The problems in coordinating alliance defense efforts are well known and are the subject of frequent mutual exhortations and programs to improve the efficiency with which the alliance as a whole allocates its resources. Second, France, a major member of NATO, no longer participates in NATO military planning or the NATO command structure, and the question of how to weigh its forces in the overall balance is far from clear. On the grounds of the military efficiency of resource use, therefore, the preponderance of the Soviets in Warsaw Pact military spending, as well as the greater influence of the Soviets on the manner in which their allies allocate their
resources, both suggest that total alliance spending gives a picture biased in favor of NATO.

The political dimension of alliance relations provides even stronger reasons for taking the U.S.-Soviet balance seriously. The West correctly derives some comfort from signs of political unrest in Eastern Europe. Unquestionably, such disaffection as we have observed in Poland and other East European countries must be a source of concern to Soviet political leaders and military planners, and when these concerns are at high levels they undoubtedly contribute to deterrence of Soviet aggression against the West.[15]

What about political solidarity on the Western side, either with respect to maintenance of a strong defense posture or in the face of the necessity to decide on military action? With regard to the incentives for maintenance of military strength, the earlier discussion of the cost and benefits of alliance attempted to show the importance of U.S. strength in maintaining alliance cohesion. The countries of Western Europe have come a long way in fostering mutual interests and minimizing both traditional and new sources of jealousy and discord. But the continuing problems within the EEC suggest that their substantial accomplishments in economic integration cannot be taken for granted; and they have made far less progress in political integration. The prospects for an alliance of equal transatlantic partners, whether or not it is an ultimate possibility, is not within the foreseeable future. In the circumstances, the essential element in alliance security is a strong and committed America.

The central statement in the NATO treaty is contained in Article V, "An attack against one or more of them in Europe or North America shall be considered as an attack against them all." How, in fact, is this commitment regarded by the members? How confident is Turkey that Greece will act on the proposition that an attack on Turkey is an attack on Greece? Cynicism is not necessary to conclude that allied expectations about the U.S. interpretation of the NATO commitment in the event of

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[15] Providing they do not reach a level at which the Soviets feel that military action is necessary to consolidate a deteriorating Soviet position in Europe. If the Soviets are driven to large scale military action by instability in Eastern Europe, the limits of that action are hard to predict.
aggression are central to the security they derive from the alliance. If for no other reason than U.S. control of the only alliance nuclear forces comparable in power to those of the Soviet Union, U.S. resolve is the keystone of alliance solidarity in the face of Soviet aggression. The crucial role of the United States goes beyond that as is indicated by the only remaining U.S. monopoly within the alliance, the post of SACEUR. The continuing U.S. tenancy of the NATO command position signifies more than the U.S. predominance in nuclear power; it also indicates allied recognition that the United States is the member with the most general concern for Western security. In fact, the operative meaning of Article V might be said to be, "An attack on one shall be regarded as an attack on the United States."

The role of the United States is central in meeting threats of aggression within the treaty boundaries of NATO and our treaty with Japan; but it is even greater with regard to threats to vital Western interests outside these boundaries. The earlier discussion of the problems of securing Western access to Persian Gulf oil concluded that it was probably hopeless and counterproductive to attempt to involve NATO formally in defending Western interests in this region, that cooperation with selected allies was essential to mounting an effective defense, and that the major burden for the foreseeable future would fall on the United States. Similar conclusions are applicable with even greater force to Western interests in East Asia and the Pacific region.

None of these U.S. contributions to Western security can be effectively provided if the United States is perceived by its allies or corps to perceive itself as militarily inferior to the Soviet Union. Allied forces cannot fully compensate in that event, and if the Allies come to doubt U.S. commitment, there might be no alliance.

Despite the preceding reasons for taking seriously the divergent trends in U.S. and Soviet military investment, it is worth seeing how far alliance contributions go to offsetting the gap. The validity of NATO Europe and non-Soviet Warsaw Pact comparisons of military investment expenditures is even more suspect than those between the United States and the Soviet Union. Nevertheless, the available data suggest that the situation regarding military investment is quite different from that presented in the FY 1982 Posture Statement for total

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military spending discussed above. The scanty available data suggest that the difference of $240 billions (FY 1982 U.S. dollars) between the present value of Soviet and American military investment would be reduced to about $110 billions for NATO as a whole compared with the Warsaw Pact as a whole. The Soviet advantage does not vanish because the non-U.S. members of NATO (and the non-Soviet members of the Warsaw Pact) spend substantially lower fractions of their total military outlays on investment than do the United States and the Soviet Union. The investment and expenditures of the Allies are insufficient to eliminate the differential.

PROSPECTS FOR CATCHING UP

The Reagan administration's revisions to the FY 1981 and FY 1982 defense budgets proposed large increases in military investment. Increases in budget authority for investment accounted for about 67 percent of the proposed $6.8 billion increase over the FY 1981 budget of the Carter administration and over 80 percent of the $25.8 billion increase over the proposed FY 1982 Carter budget. In addition, the Reagan administration's plans as released in March called for substantial real growth in total defense spending beyond FY 1982--over 7 percent per year in total obligational authority and over 9 percent per year in outlays between FY 1982 and FY 1986.[16]

No data have been publicly released on the allocation in the years after 1982 between spending on investment and other military spending. To estimate the effect of the changes in priorities introduced by the Reagan administration, I have assumed that the categories included in investment spending will rise from their historical relationship to total outlays, reflecting an emphasis on modernizing forces.[17] If, however, we assume that investment spending rises from about 33 percent of total outlays in FY 1982 to 40 percent of the substantially increased total outlays in FY 1986, the absolute amount of investment, measured in


[17] If the investment were simply to increase forces, O&M spending would rise with a lag, and the relationship would ultimately return to its normal state.
constant FY 1982 dollars, rises from about $57 to about $105 billion per year, a substantial increase.

Where does this leave us relative to the Soviet Union? Unfortunately, the answer is--by the measure of the discounted value of the capital stock--almost as far behind in FY 1986 as we were in FY 1982, assuming the Soviet rate of spending remains constant at its 1980 level, as estimated in the FY 1982 Posture Statement by Secretary Brown. On these assumptions, the discounted cumulative difference in 1986 would decline from the $240 billion presented earlier to about $220 billion.

It is hardly necessary to point out the optimism of this estimate. Recent developments in budget planning raise questions about the realism of the long term budget projections made by the administration in March 1981. And the historical trend of growth in Soviet military investment spending has yet to be changed, despite a considerably gloomier prognosis for the Soviet economy. If their investment spending were to continue to increase at a rate of 3-1/2 percent per year, as projected in the FY 1982 Posture Statement, the discounted value of the difference would rise to almost $300 billion by FY 1986 given the March projection for the United States.

Even if the spending of our allies is included, it appears unlikely that we will, even under optimistic assumptions, soon catch up with the Soviets in terms of the cumulative value of military investment as defined here. The implication of this for the necessary attempt to restore U.S. military strength relative to that of the Soviet Union is that it is infeasible as well as wasteful to chase the Soviets down the paths that they have chosen. If we are to accomplish the strategically necessary restoration of U.S. strength, we must take advantage of asymmetries to achieve our strategic objectives. Among these, we should assign high priority to attempting to increase the effective rate of obsolescence of the massive Soviet investment in military equipment through the application of technological advance.
VI. ALLIANCE POLICY AND PROSPECTS

The prospects for a continuation of Western cooperation for security in the form developed during the 1940s and 1950s are quite gloomy. They strengthen the usually powerful tendencies to deal with the short term problems that come up increasingly often by making the usual sorts of compromises among conflicting short term objectives, and to allow the long term direction of security policy to drift. Events may rescue us from the probable consequences of such an approach, but Micawber is not reassuring as our source of national security policy.

We must face the possibility that NATO unity is in a state of irreversible decline and that the Japanese will never move closer than they are at present to being security partners rather than dependents. The implications of deemphasizing our principal commitments to cooperation for security are complex and uncertain. Perhaps the hardest question of all to answer is whether such a change in U.S. foreign policy will lead us once more into isolationism in a world that is much less forgiving of such a policy than in the past.

The interests that led the United States to develop it present structure of cooperative security arrangements still exist, and the possibility of self-reliance for Western Europe and Japan in the absence of a U.S. commitment to their security is still problematic. The present analysis has attempted to clarify the factors that have been affecting the vitality of the Western alliance and the problems that will face it in the future. Failure to deal with those problems will result in a continuation of recent trends and will make a radical change in U.S. foreign policy inevitable. The uncertainties associated with such a change give us strong incentives to avoid the need for it.

To revitalize the Western alliance, it will be necessary to increase the net benefits it confers on its members. Not all of the factors that determine those benefits are under U.S. control; among those that are, some pose formidable problems for U.S. policy. The discussion implies a set of necessary conditions for reversing recent trends toward Western disunity.
Alliance benefits can outweigh the burdens and risks they impose only if the members perceive a threat and the alliance provides protection against it more effectively than they can do alone. Alliances can be dissolved by either an insufficiency or an excess of threat. If our allies become convinced that the Soviets will never, in any circumstances, use military force against them, they have no need for alliance. If they believe that the Soviets can be dissuaded from resort to force by behavior that imposes no great burden on the West, they may also find the burdens of alliance unnecessary. There are and always will be those in the West who hold such views, but Soviet behavior is likely to provide continual reminders that its power, internal and external, is based on coercion. Even when they are most eager for the benefits of detente, it will be hard for alliance members to put the Soviet military threat out of their minds. The more serious problem is that the Soviet threat will come to seem excessive to us and our allies, and we will drift into separate accommodation to Soviet power.

The answer to the threat of Soviet power is alliance strength, and the history of the alliance makes it clear that U.S. strength is the nucleus around which alliance strength must form. Moreover, the structure of the Western alliance—-independent countries defended by a military posture whose foundation consists of nuclear weapons under the control of the United States—makes it necessary that the U.S. nuclear forces be regarded as usable in the defense of our allies, and that they not be regarded as inferior to Soviet forces. This requirement poses a number of unsolved strategic problems. It is, however, not difficult to point out courses of policy that are inconsistent with this requirement.

One of these is U.S. and Western espousal of the doctrine of mutual assured destruction: the view that strategic nuclear weapons exist only to attack opposing long range nuclear weapons systems or to destroy an opponent's cities, and that any use of these systems will inevitably lead to their wholesale use against cities. Such a doctrine inevitably leads to the conclusion drawn by Chancellor Schmidt in 1977 that the strategic nuclear forces are "neutralized," and that U.S. strategic forces cannot be used to protect our allies. This is a view the Soviets
can afford not to contradict, since they do not rely on the assent of the Warsaw Pact participants.

Neither Soviet doctrine nor their incentives give reason to believe that their plans, in the event of war, call for widespread attacks on Western cities, unless by this means they can hope to forestall any response. Their plans primarily depend on destroying or neutralizing opposing military forces. Making Western forces usable in the event of war then means designing them to defeat these Soviet objectives and to provide an incentive for termination of the conflict by destroying or threatening Soviet military forces.

In seeking to increase the usable strength of our forces, nuclear or conventional, the comparison of U.S. and Soviet spending suggests that we would be ill-advised to attempt to outbuild the Soviets in terms of sheer mass, whether ICBMs, tanks, fighter aircraft, or artillery tubes. This does not mean that we can ignore differences in mass, but we are starting with too great a deficit and insufficient prospects of sufficiently large and sustained funding increases to redress the balance by straightforward matching, system for system. Such a course would be wasteful for us even if feasible.

Instead, our objective should be to render their massive military investment obsolete as quickly as we can by relying on the traditional area of Western and U.S. advantage, leadership in technological change. Despite Soviet gains in the last decade, this is still the primary area of Western advantage, and widely recognized as such. Moreover, the rate of advance of electronics and information processing with promising military application is still accelerating.

The first requirement in achieving usable nuclear forces is the ability to survive enemy attacks on them, at the outset and for as long as hostilities continue. The prospect that the Soviets will have large numbers of extremely accurate missile systems, many with multiple independent reentry vehicles, has so far defeated attempts to devise demonstrably effective means for accomplishing this without resorting to mobility and concealment. Although we have accomplished this in our submarine launched ballistic missile forces, they are expensive and hard to integrate into operations involving other forces or complex targeting plans because of the difficulty of communicating with them. They will
remain a major component of our forces but cannot become our exclusive means of long range nuclear attack without unacceptable risks that the Soviets will improve their antisubmarine warfare capabilities and that our long range attack forces will lack flexibility.

The advent of small cruise missiles with extreme accuracy at long ranges offers several possibilities that should be useful in solving this problem. Their size and reasonable cost make it possible to proliferate them in larger numbers than ballistic missiles and in a much wider range of basing modes, including systems that are land-mobile, submarine-based, air-launched, or surface ship-based. Moreover, if their cost can be kept low enough, the extreme accuracies that will be achievable with terminal homing guidance and the sophisticated high explosive warhead designs that will become available promise usefulness in applications that have been regarded as requiring nuclear weapons. Such developments offer major new opportunities in dealing with the problem of nuclear force survival and the termination of hostilities without indiscriminate destruction of cities.

The existence of a large force of cruise missiles with a dual capability to carry either high explosive or nuclear warheads provides an unequaled opportunity for proliferation of nuclear forces. In this "shell game" the shells are cruise missiles with a primary mission of carrying high explosive warheads and the "peas" are nuclear warheads for insertion in any of the large number of shells as required. Deployment modes for such systems offer unequaled flexibility. Such systems also offer the possibility of effective attacks on a variety of hard targets using high explosive warheads. The possibility of destroying a variety of high priority Soviet military targets without relying on large scale use of nuclear weapons would provide incentives to terminate hostilities without indiscriminate destruction of civilian targets.

This is not the place to undertake an analysis of the effect of new technology on military strategy and posture. That requires detailed, quantitative evaluations beyond the scope of the present effort. The suggestion presented above concerning the role of cruise missiles is essentially illustrative, but some points go beyond the purely military evaluation of weapon systems. In a variety of ways, including the positions they have offered in the SALT negotiations and their current
efforts to abort the LRTNF modernization program, the Soviets have shown their sensitivity to the possible large scale development and deployment by the West of cruise missiles. It is clear that they will attempt to use both SALT and the TNF arms control negotiations to limit Western application of this technology.

The United States may expect to continue to feel intense pressure from our allies as well as domestic groups to accept "reasonable" Soviet offers for reductions of nuclear arms, which will also sharply limit or eliminate these new technological opportunities. There is already a well-established tradition of opposition to technological change in military applications as inherently destabilizing and stimulative of the "arms race." In fact, selective use of technology offers an alternative to the mindless amassing of dangerous and destructive weapons without useful strategic purpose. In addition, in the present strategic context, the selective application of new technology offers the best chance of reversing the trend of the past 15 years, which must ultimately lead to the dissolution of the Western alliance if it continues.

The preservation of the cruise missile option is likely to involve us at some point in sharp disagreements with some of our allies, and to result in intense controversy at home. Like de Gaulle during the dark days following the fall of France in World War II, we have become too weak to compromise. Failure to compromise may jeopardize alliance relations in the near future. However, if the issues of arms control negotiations are resolved with the usual emphasis on avoidance of short run conflict at the cost of compromising long run objectives, the long run prognosis for the alliance is very poor.

Events may also face us with a choice between short run expediency and long term objectives with respect to Western strength in the Persian Gulf. There is no early prospect of attaining an explicit NATO involvement in the development of sufficient military power to deter or defeat a sizable Soviet incursion into the Persian Gulf region. For the reasons already discussed, such a capability is likely to prove necessary even to secure Western interests in the region against regional instability. The best strategic prospect available is to increase NATO's strength in the southern flank sufficiently to deter or
disrupt a large scale movement of Soviet military forces into the region. This means strengthening Turkey's forces, increasing the capabilities for combined NATO operations from Turkey, and strengthening Turkey's confidence in the reliability of the NATO guarantee if she is subject to coercive pressure by the Soviet Union.

At best, the time and resources required to achieve this would be relative to the available resources and strategic risks we run, but political differences within the alliance make the achievement of the objectives much more difficult and uncertain. Specifically, one outcome of the current negotiation over Greek conditions for remaining in NATO might be to stalemate efforts to strengthen Turkey and her relations with NATO. The loss of Greece would be a high price to pay for progress in strengthening the NATO position in Turkey if the purpose of Greek membership is cooperation in defense against the Soviet threat, but not if Greece's primary purpose in remaining is to neutralize Turkish strength.

The ability to resolve these and other alliance issues in ways that are conducive to the long term security of the West depends on the extent of U.S. influence and the skill with which it is used. There are no prescriptions for skill, but influence in a military alliance depends on strength; and increasing U.S. strength, real and perceived, relative to the Soviet Union is the necessary first step in revitalizing the structure of security that has kept the major Western countries independent and given them freedom from major wars for 35 years.
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