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Rationalizing NATO's Defense Posture (U)

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"NATIONAL SECURITY INFORMATION"

"Unauthorized Disclosure Subject to Criminal Sanctions"

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PREFACE

This study is a sequel to Rand Report R-1231, *Restructuring NATO Forces to Compensate for MBFR*, November 1973, and OASD/PA&E's study, *NATO: Rationalization Potential*, May 1974, to which we contributed. The purpose of this latest study is to assess further the possibilities for large-scale rationalization of NATO's defense posture and to suggest practical ways of going about it. Given the fact that such rationalization is being pushed by our Department of Defense and is now under active discussion in NATO, this study should be of value to all DOD agencies and other agencies of the U.S. Government concerned with NATO policies and programs. Suitably modified, it should be useful as an input to discussions in NATO as well.

A key premise underlying this study is that the severe defense budget and manpower constraints confronting the NATO allies make more rational use of NATO's defense resource inputs essential, if a credible deterrent/defense posture is to be preserved at acceptable cost. A second key premise is that collective NATO programs will achieve more toward this end than wholly separate national programs.

We focus mostly on the Center Region, which is the core and most cohesive part of NATO, because the possibilities for rationalization (especially multilateral) are greater in the Center than in the geographically separated flank countries, which nevertheless are not ignored (see Chapter VIII).

We also focus primarily on NATO's conventional posture. This is not to neglect either the continued need for nuclear deterrence, or the possibilities for rationalization of NATO's nuclear posture. But conventional forces absorb the great bulk of NATO defense budgets and are the area where NATO is relatively worse off than the Warsaw Pact. Moreover, numerous studies are already in train on rationalizing theater nuclear postures.

We are quite conscious of the paucity of cost data in this preliminary study. Comparative costing is an essential element in any detailed analysis of rationalization measures, especially of trade-off options.

But such data are hard to come by, especially on European allied postures, and to generate them would have driven up the cost of this study far beyond the funding available. However, we hope that the case we make for rationalization will stimulate the development of a NATO cost base.

We received numerous informal ideas and critiques in the course of our study effort from a wide range of allied civil and military sources, European as well as American. In many respects this study is a synthesis of proposals that were advanced previously or are being currently examined. This is deliberate, since our intent is to pull together all the options available under the rubric of rationalization to show the full range of possibilities.

On the other hand, this study should be treated as frankly exploratory. Its primary aim is to point out promising directions and to offer specific options worth more detailed analysis. On further review, many of these may turn out to be infeasible or insufficiently productive to be worth pursuing at this time. But the important thing, as we see it, is to show how a sufficiently broad program of rationalization could be the means of enabling NATO to preserve a credible deterrent/defense posture at acceptable cost in an environment of severe constraints. This we believe we have done.

This study was jointly sponsored by the Defense Advanced Research Projects Agency, the Office of the Assistant Secretary of Defense (International Security Affairs), and the Office of the Assistant Secretary of Defense (Program Analysis and Evaluation).

SUMMARY

1. Rationalization is a concept whose time has come in NATO. It is probably the only viable answer to the increasingly painful defense resource bind created by the rising cost of modern forces at a time when rampant inflation, the energy crunch, détente, and other pressures are severely constraining defense budgets. These pressures make it much more difficult for NATO forces to keep abreast of the steady improvement in Warsaw Pact capabilities. Nevertheless, NATO will almost surely still have -- if it would only use them more wisely -- enough defense resources to field a credible deterrent/defense posture at acceptable cost. Even if defense budgets declined in real terms, large-scale rationalization could free sufficient resources to achieve such a posture.

2. This is because the weaknesses in NATO's posture are attributable as much to the fact that it is simply not organized to use available resources efficiently as to any constraints on the availability of such resources per se. The problem is one of outputs as much as inputs. NATO forces remain weaker than they should, because NATO is only a loose coalition of independent national forces, more or less linked together by a supranational command structure, but lacking common doctrine and tactics, communications, logistics, and other capabilities that would permit them to fight effectively together as a multinational force. According to one estimate, NATO is already wasting over $11 billion annually by failing to consolidate R&D, procurement, and support (see p. 21). General Goodpaster has opined that "we are losing at least 30 percent and in some areas 50 percent of our capability due to lack of standardization." OSD has estimated that roughly $5.6 billion could readily be saved and shifted into force improvements in the Center Region alone.

3. This is not to say that NATO has ignored the possibilities of collective defense; many measures have been tried since NATO's founding -- some quite successfully. But the overall record is unimpressive. For 25 years, the advantages of collective defense have been unable to

overcome the strong centripetal pull of nationalism, parochialism, traditionalism, and institutional inertia. As a result *the whole of NATO's defense posture is less than the sum of its parts.*

4. Despite the indisputable fact that all NATO nations — including the U.S. — are already dependent on one another for the conventional defense of Europe, parochial national interests, rather than common NATO needs, dominate national defense programming and handicap efforts to develop common research, development, and procurement programs. Balanced national, rather than balanced collective, forces are still the order of the day. Paradoxically, it is the U.S. that has been both the strongest voice for collective defense in NATO and the worst offender in terms of "going it alone." But our European allies have been slower than we to recognize that the change in the strategic balance between the U.S. and the USSR makes the conventional component of flexible response an increasingly important part of the NATO triad.

5. Nor has NATO faced up to the need for tough priorities to distribute scarce resources optimally. Instead, its military authorities include "something for everybody" in their force proposals to avoid divisive arguments and to be sure each nation gets credit for some improvement, even if it is of marginal value to NATO's overall defense.

6. But the growing defense resource bind may prove the catalyst needed to overcome these obstacles to a more rational allocation of collective resources. Another catalyst may be prospective MBFR or unilateral force cuts. In effect, as NATO becomes poorer it must become more efficient. Above all, NATO must prevent the still rising costs of manpower and maintenance from absorbing so high a proportion of available defense budgets as to prevent adequate stock levels and acquisition of sufficient modern equipment.

7. *What is rationalization?* We use it broadly as an umbrella term that covers anything more rational than what NATO is doing now. Such a rubric permits including measures undertaken on a NATO-wide, multicountry, bilateral, or even purely national basis. It comprehends specialization, standardization, compatibility, interoperability, common procurement, and force restructuring. On the other hand, rationalization does not necessarily mean integration. One of its great advantages is its flexibility in application.

8. Moreover, several recent developments indicate that rationalization thus broadly construed is acquiring momentum in NATO. They include the FRG force restructuring program, the Dutch specialization initiative, creation of a Center Region air headquarters to employ air power more rationally, and the Nunn Amendment conversions of U.S. forces in Europe to more teeth and less tail.

9. But for rationalization to achieve its full potential, much more is needed: first and foremost, a basic change in attitude. All allies, above all the U.S., must start thinking primarily in terms of partnership rather than in terms of national programs. Only this will breathe life into the following essential guidelines: (a) NATO must squarely face the fact that the growing resource bind dictates emphasis on first things first -- tough priorities must be established; (b) first priority must be given to initial ground/air defense against a WP blitzkrieg; (c) marginal and low-priority national forces and overhead must be ruthlessly pruned to free up resources in trade-off; (d) NATO forces must be restructured and streamlined to reduce manpower costs and free funds for greater readiness and modern equipment; (e) given high manpower costs, greater reliance must be placed on well trained and quickly mobilizable reserve forces;* (f) NATO's air assets must be pulled together via improved C^3 to take full advantage of airpower's flexibility; (g) interoperability and compatibility of forces and doctrine must be stressed and programs to consolidate training, procurement, and maintenance undertaken; (h) the outmoded doctrine that logistics is a national responsibility must be progressively superseded by common logistic programs; and (i) national civil and military communications systems need to be integrated into a NATO communication network.

10. To make rationalization work in practice on a sufficiently broad scale to realize its full potential dictates an overall *matrix* approach like that proposed by the U.S. This is indispensable to showing how numerous specific costs and savings to each country can be balanced

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*This is not to argue that active combat forces should be reduced; indeed, we would increase their strength by improving their teeth-to-tail ratio.

out overall to produce a much improved posture at no greater net cost. Rationalization must also get consistent high-level focus as a fixed item on the NATO ministerial agenda. We need to strengthen the role of NATO's multinational organs vis-à-vis national bureaucracies to develop tough-minded priorities that meet NATO's needs, rather than national traditions and parochial service views. Explicit trade-offs must be developed, either within national budgets or on a multilateral basis, and high-level attention is necessary to prevent such trade-offs from being buried in the bureaucracy or rejected on narrow grounds. But trade-offs must be assessed against priority objectives and ministers will have to insist via their ministerial guidance that force proposals be listed in descending orders of pirority. Everything cannot continue to be a number-one priority.

11. But to permit developing trade-offs, constructing a matrix, and assessing priorities, NATO needs to develop a viable data base and costing machinery; otherwise, rationalization proposals will bog down in interminable bickering over comparative costs involved. Hence, steps must be taken now to set up and staff a NATO costing capability. In the long run, some kind of common funding mechanism is also highly desirable to facilitate multinational rationalization programs.

RATIONALIZING NATO'S GROUND POSTURE

12. *Since the deficiencies in NATO's Center Region ground force posture are probably its most important, rectifying them should receive top priority -- something they have never had before.* Despite many improvements, Center Region ground forces are still far from optimized to meet the armor-heavy WP blitzkrieg threat. But the severe fiscal constraints we foresee will impact most heavily on ground forces as the most manpower-extensive; only by imposing tough priorities, financing modernization via trade-offs rather than add-ons, and melding their resources on a partnership basis can the allies rectify present deficiencies and modernize.

13. This will inevitably require considerable *restructuring* of NATO ground forces. The FRG's impressive force restructuring program to optimize its defensive posture vis-à-vis the blitzkrieg threat could

serve as a model for the rest of the European allies. Needed are such measures as: (a) streamlining unwieldy TO&E structures that are increasingly incompatible with high manpower costs to permit trading off the savings for higher manning levels, more long-service personnel, better equipment, and more WRM; (b) pruning large national overheads and training establishments; and (c) cutting marginal low-priority forces to permit shifting resources into higher-priority categories. For example, we question whether all the Center Region countries (France included) should be allocating so many national forces, including reserves, to local security missions at the expense of their contributions to the forward shield.

(U) 14. *Faster reinforcement schemes* are also important, especially to compensate for any MBFR or unilateral force cuts. A possible trade-off would be concrete U.S. steps to accelerate initial reinforcement, if our allies would provide the needed reception and deployment facilities.

(U) 15. The resource bind and possible MBFR and unilateral cuts make it more important than ever that *all European national forces be earmarked to NATO* and be properly configured and equipped to play an optimal role.

(U) 16. *Generating more quickly available reserve forces* is essential. NATO should rationalize its reserve structure by dividing reserves into two categories: (a) small but highly trained ready reserves to quickly flesh out the active force structure to help absorb the initial shock of enemy attack; and (b) much larger reserves at lower readiness.

(U) 17. NATO must also make its ground forces *more specifically antiarmor-oriented as their primary mission.* Each Center Region ally should provide a corps-level mobile antiarmor reserve, as the U.S. and FRG now plan to do. Allied AT weapon holdings need more beefing up with modern ATGMs and quickly deliverable AT mines. We propose the U.S. deploy an antiarmor-configured airmobile brigade to Europe as a highly flexible theater reserve. The FRG might specialize in preemplaced barrier construction for its allies.

(U) 18. *Standardization, compatibility, and interoperability* are essential to getting the most for NATO's money out of constrained resources. But the U.S. must treat this as a two-way street; this means in practice buying more European ground force equipment if we want our allies to buy those air and naval items in which we lead. Standardization on the FRG scatterable mine and rocket-launcher system is a good example.

(U) 19. *Consolidation of duplicatory training* would not only save money but promote common tactics and procedures and even common equipment. We suggest combined basic helicopter training in the U.S. and tactical AT helo training and forward air controller training in Europe.

(U) 20. Lastly, we suggest considering diversion of the U.S. Marine Corps' significant capabilities to enhance Center Region defense, instead of earmarking them primarily for less relevant and perhaps insufficiently timely reinforcement of the flanks.

RATIONALIZING NATO AIR FORCES

(U) 21. NATO's biggest air problem continues to be that it cannot use the large air forces it now has with full effectiveness. Wide differences exist in doctrine and tactics and effective means are lacking to interface defensive and offensive air operations, to allocate resources between ATAFs and to coordinate the air and ground battle. There is a great imbalance in capabilities between the 2d and 4th ATAFs in the crucial Center Region. Hence rationalizing its air forces must be another high NATO priority. Moreover, the high cost of air technology dictates rationalization to free up resources for needed modernization. It is also needed to realize their potential as a gap-filler force against WP blitzkrieg attack.

(U) 22. Fortunately, the Center Region air forces as well ahead of the ground forces in moving toward rationalization. Creation of AAFCE is an important breakthrough, but hard work remains before it will have the authority and wherewithal to fight NATO's air forces effectively. The biggest obstacle to making AAFCE a viable command is probably national interpretations of NATO's MC 14/3 strategy and the doctrine and tactics

adopted to support those interpretations by national forces assigned or earmarked to NATO. British opposition will be particularly difficult to overcome.

(S) 23. AAFCE must be made a strong operational headquarters in *peacetime*. But this requires far better command, control, and communications (C^3) than are now available. The technological breakthrough that AWACS offers may be a powerful lever to weld the Center Region air forces into an operationally unified force, with common doctrine and tactics.

(S) 24. NATO also lacks the communications system to receive real-time intelligence and direct a coordinated response. It is unrealistic to expect that NICS or any other NATO-wide system can be developed in time to support AAFCE's needs in this decade. Hence AAFCE should build on what is currently available: the FRG's national network, fixed and mobile U.S. resources, and the FRG's CIP-67 network of fixed and mobile microwave stations now under construction.

(S) 25. We have to convince our allies that it makes little sense to maintain air forces on continuous alert unless the headquarters directing their operations is at that same level of readiness. USAFE forces should gear their operations to fit AAFCE's expanding role to prove that NATO's air forces do have the flexibility to meet a wide range of threats on a timely basis. For example, we should seek FRG agreement for occasional peacetime use of German bases in northern Germany to begin eroding the fence between the 2d and 4th ATAFs and demonstrate that USAFE forces can support NORTHAG as well as CENTAG.

(S) 26. *A concerted push is needed to complete colocated operating base arrangements*, because (a) COBs can help break down the 2/4 ATAF fence by providing better geographic distribution; (b) they provide survivability by dispersal, enhanced operational capability because of reduced density, and increased confidence on the part of our allies once squadrons are earmarked to a given base and firm reception plans are made; (c) until COB arrangements are completed, we cannot build shelters already authorized for our Rapid Reactor

squadrons; (d) COBs also can help link TAC with NATO by giving TAC squadrons earmarked to a particular COB firsthand familiarization visits; (e) COBs will reduce vulnerability of USAFE's conventional munitions.

(C) 27. NATO needs to expand the aircraft shelter program to include 100 percent of aircraft available by M+30. We suggest a joint U.S./U.K. approach requesting a SACEUR waiver to his requirement for active all-weather ground-to-air defenses in the U.K. in return for an increased air-to-air capability and the formation of U.K. territorial units for AAA and SAM defenses.

(C) 28. Rapid reinforcement is second only to survivability of in-position forces. To speed emergency deployment, we suggest augmenting each European-based squadron with four to six like aircraft from CONUS squadrons. The receiving squadron would have an increased capability almost as large as the percentage increase in UE aircraft. When remaining CONUS aircraft and supporting personnel arrived later, they would be joined by their advance unit. Tanker support for TAC and USAFE also needs careful review.

(C) 29. Since more airlift is needed for U.S. units deploying to Europe — particularly wide-bodied aircraft to carry outsized cargo — a European CRAF (especially of aircraft modified for outsize loads) could speed U.S. deployments. Such a European CRAF with wide-bodied aircraft could be a valuable EUROGROUP initiative. Also needed are more reception facilities for CONUS-based reinforcements. Current permanent APODs are too few and would be too congested under wartime conditions. Civil airfields are available, but a U.S. initiative is needed to end the debate generated by SACEUR's requirement that active air defenses must be provided before infrastructure funds can be used to build storage facilities for necessary prepositioned equipment.

(C) 30. The NATO EW program can be a model for other rationalization programs. There is more NATO-wide agreement on the need for interoperability and compatibility in EW than any other facet of NATO's

defense. Success here would promote confidence in other rationalization programs as well as build confidence that NATO's air forces can succeed against Pact surface-to-air defenses.

(S) 31. Improved air munitions can also increase NATO's confidence. We suggest a USAF/RAF program of cooperation to break down RAF resistance, such as a 3rd Air Force/Strike Command agreement to exchange RAF tanker support for USAF laser designators. Since remotely piloted vehicles (RPVs) are increasing in importance, OSD should consider a NATO RPV program organized along lines that parallel the NATO EW program.

(U) 32. Rationalizing NATO's air forces requires more *specialization*. Smaller allies simply cannot afford balanced air forces with the full range of capabilities required to meet the WP air threat. The larger and more capable U.K., FRG, and U.S. air forces will have to fill the gaps. Finding the right balance for the USAF contribution will be difficult, but the criterion should be to develop a balanced NATO posture, not a balanced USAFE posture. Trade-offs are essential.

(C) 33. For example, if we want an AWACS in Europe before 1985, it may have to be a U.S. program. Our allies know that the U.S. is buying AWACS and has no more logical place to deploy them than Europe. A cooperative production program would take years of debate, first on a cost-sharing formula and then on a coproduction formula. And we might end up with a system less capable than planned because of the compromises required to develop the cooperative program. On the other hand, AWACS is splendid trade-off material; to promote rationalization, the U.S. could proposed that in return for AWACS the allies take over the air defense role, including NADGE, fixed SAM sites, and peacetime interception and identification of intruding aircraft.

(S) 34. Electronic Warfare Support (EWS) is another role in which the U.S. might logically specialize. We are the only ally with the wealth and technological base to do so. Since worldwide U.S. concerns will drive us to develop an EWS capability anyway, why not use it to fill the NATO requirement as well? We'd trade off U.S. EF-111A aircraft in return for our allies' developing RPVs to aid in the EWS mission.

(U) 35. While politics and prestige may prove insuperable obstacles, the logic of rationalization applies to the MRCA and the lightweight fighter programs as well. Otherwise the escalating cost of the MRCA will critically limit the number of F-104Gs that are replaced. Six nations (the U.S., FRG, Netherlands, Belgium, Norway, and Denmark) seek a lightweight fighter aircraft and three (U.S., Britain, and Germany) need an air superiority aircraft — which the U.S. has in the F-15. At a time of economic stringency, our European allies ought at least to consider such a mix in lieu of the MRCA, and be compensated in other procurement.

(U) 36. Rationalizing NATO's air forces would not require major changes to national air force structures. The RAF mix would not be altered except to make more rational use of available assets; the Luftwaffe would also maintain a balanced force. But the Dutch and Belgian air forces would relinquish their recce role and replace these aircraft with lightweight fighters as an add-on at the tail end of their F-104G replacement program. The single squadron of transports the Dutch and Belgians each maintain add little to NATO deterrence or defense, unless combined with the transport capabilities of their allies and assigned to SACEUR. We propose they also be replaced by LW fighters on a one-for-one basis as an add-on to their F-104G replacement program.

(U) 37. *Consolidating air training* would not only increase ability to operate together, but save money to boot. The U.S. ought to support EUROTRAIN efforts along these lines, but OSD has no single agency charged with this responsibility. Since European weather makes a European-based UPT facility impractical, the U.S. should offer a CONUS-based program. NATO also needs an air combat tactics school. We should share our excellent flight simulators for air-to-air and air-to-surface combat. A Europe-based school would permit joint procurement of simulators and a facility for live-weapons training.

RATIONALIZING NATO'S NAVAL POSTURE

(U) 38. While NATO is hardly oversupplied with modern naval forces, it appears even less well of with respect to its ground/air

shield forces — a situation that suggests certain resource trade-offs. Moreover, NATO's naval posture, designed largely to keep open the sea lanes, seems out of kilter with its top priority need to deter or outlast a short Warsaw Pact blitzkrieg. Keeping open the sea lanes is an essential hedge against a NATO/Pact conventional war lasting more than a few weeks. But our philosophy is that NATO cannot afford to divert so many scarce resources to such a hedge if it *enhances the likelihood that we would lose the war on the continent in the first campaign.* This is simply a matter of putting first things first.

(U) 39. Aside from the above, most European NATO navies are inadequate to meet present naval missions. So they are in need of rationalizing even to cope with present missions in the face of the squeeze created by rising costs and budget constraints. For example, most of them maintain too many large, obsolescent units of marginal effectiveness, thereby impeding essential modernization. Moreover, several European navies siphon off resources that could be better spent on meeting even more serious allied ground and air deficiencies.

(U) 40. On the other hand, the U.S. Navy, given its global role and the fact that only the United States can foot the bill for such a global navy, is a special case. Since the U.S. will maintain powerful naval forces in any event, it is only rational that we should assume the dominant blue-water role for NATO too. Hence we propose essentially an adaptation of the U.S. Navy's "hi-lo" scheme, whereby the United States (helped by the U.K. and Canada) would be responsible for open-ocean operations and the continental European allies would optimize regionally to cope with the local Soviet naval threat. This would also permit some shifting of European defense resources to meeting higher-priority ground and air deficiencies.

41. Since SACLANT has indicated that his present forces are insufficient to both provide initial convoy protection and perform his other priority missions, it is rational to look at ways of *reducing requirements for sea-lane-protection forces.* Possible options include sea-based prepositioning of U.S. equipment and stocks in Europe, increasing airlift capability, "time-phased" allocation of USAF assets

to maritime warfare, modification of certain sealift ships to carry ASW helicopters, and stress on fast sealift to Europe, if time is available between M-Day and D-Day.

(U) 42. *Expensive support and logistics functions* need rationalizing through regional pooling of naval supply, maintenance and training facilities, and consolidation of NATO and national shore-based communications stations and ASW/surveillance air facilities.

(U) 43. *The smaller navies need to concentrate on single-purpose, less-expensive, less-vulnerable naval weapons systems*, instead of expensive multipurpose systems that represent an allocation of defense resources inconsistent with NATO's priority need for improved ability to cope with fast-peaking Soviet capabilities in a NATO/Pact war. Special attention should be paid to the enhancement of NATO "choke-point" naval capabilities, especially straits closure. We suggest a large number of specific options.

RATIONALIZING NATO'S LOGISTIC POSTURE

(S) 44. The case for greater NATO logistic cooperation rests largely on a simple proposition -- *at present NATO may actually lack the logistic backing to fight effectively -- even for the first 30 days:* (a) Serious deficiencies exist in key stocks; (b) it is questionable whether even if available they could be moved forward in time to planned defense positions; (c) proliferation of different weapons, ammunition, and other equipment creates a logistic nightmare in the crucial Center Region; and (d) separate national logistic systems behind national corps sectors deprive AFCENT of the ability to employ its forces flexibly, and would add to the logistic nightmare when LOCs became inextricably intermingled in a fast-moving NATO/WP conflict. The U.S. has not yet developed a new LOC to replace that lost when France withdrew from the NATO military structure. In short, NATO has no real logistic posture, only a collection of national postures; this makes it well-nigh impossible for the NATO allies to fight as a multinational force.

(U) 45. While rationalizing is thus indispensable on grounds of effectiveness alone, the growing resource bind dictates finding cost-saving efficiencies as well. Fortunately, logistic rationalization is less subject to doctrinal or parochial objections than force structure and combat force deployments. But the pernicious "doctrine" that logistics is a national responsibility is a crucial obstacle. National political and military authorities have been as reluctant to give up control of support forces or supplies as they have been to give up control of combat forces. There also has been a lack of NATO initiative to solve its logistic problems. NATO's military authorities have concentrated on standardization as the key to greater effectiveness within available resources, but have not pushed other worthwhile projects as hard.

(U) 46. The go-it-alone syndrome is still reflected in national logistic planning. In part this has been perpetuated by major allies, such as the U.S. and the U.K., which are reluctant to see their forces tied down in ways that limit their flexibility for use in other contingencies. But the U.S. should not let EUCOM's limited responsibilities for contingency operations prevent our participating in logistic programs that will generate significant economies or improve NATO's overall capabilities.

47. In reality, *national logistic responsibility is an outmoded myth*. All allies are so interdependent on each other that no nation can go it alone in Europe — not even the U.S. For example, NATO nations are users of 1.3 million U.S. items and are the sole managers of 445,000 items used by the U.S. Nor could we operate long without POL supplies provided via allied cooperation, their PTT and utility systems, or the local national employees responsible for much of our noncombat support.

48. Realism dictates that NATO will probably take an incremental approach to logistic rationalization. While such "salami tactics" may be suboptimization, they are probably the most feasible approach in a loose 15-nation coalition. Perhaps the most desirable short-term option is a *common Center Region LOC Command*, which would be initially confined

European Defense Supply Agency, if it is to field a credible conventional posture at acceptable cost.

COMPATIBILITY, INTEROPERABILITY, AND STANDARDIZATION

(U) 57. While standardization has always enjoyed devoted lip service in NATO, in practice it has usually been stymied by nationalism and parochialism. It has been the exception rather than the rule. Indeed, NATO has been moving over the last several years toward *destandardization* instead. Again, the U.S. has been the worst offender. But to cope with the growing defense resource bind, the allies must adopt more realistic policies, eliminate duplication in R&D and production, achieve economies of scale, and increase the ability of national forces to operate effectively together.

(U) 58. Above all, *the U.S. must buy European, if we want the Europeans to buy American.* The most logical area for doing so is in ground force equipment, where we are hardly the league leaders. We suggest a number of army items the U.S. might well buy in Europe.

(U) 59. Where standardization proves too difficult to achieve, NATO should focus more on such halfway houses as compatibility and interoperability. For example, even if small arms and artillery cannot be standardized, it is nonetheless crucially important that their high-consumption ammunition be compatible and interchangeable. The gain from minor differences in caliber seems insignificant compared to the operational and logistic advantages of each ally's being able to use the other's ammunition.

(U) 60. A realistic incremental approach to standardization is also essential. Since coproduction and licensing schemes usually end up costing more rather than saving money, we favor single source specialization in R&D and procurement. But the key to success here is *trade-offs*, so that each participating nation gets a fair share of the pie. This is why the broad matrix approach proposed by the U.S. is so useful to making standardization more than a one-way street.

(U) 61. Expensive air-delivered PGMs offer a good opportunity for standardization via trade-offs. We suggest that if NATO standardized

on Maverick the U.S. should share its present stocks, contribute to a SACEUR reserve of such weapons, help in maintenance and training, and share any savings from increased production runs.

(U) 62. Consistent ministerial-level pressure is needed to achieve progress; sad experience shows that it cannot be achieved by leaving standardization, interoperability, etc. to the NATO and national bureaucracies. *We suggest a procedure whereby key ministers would agree among themselves not to procure a new weapon until their services agree on a standard model, or at least a common caliber or round.* This might have a cathartic effect. As a test case we suggest that the FRG, U.K., and U.S. do this on the next generation tank gun and round.

(U) 63. If the resource bind is as tight as we believe, a bolder approach than incrementalism is needed to realize the full potential of standardization and common production. We think the Callaghan proposal for a *North Atlantic Defense Common Market*, with specific goals for common procurement, is an appealing grand design.

MODERNIZING NATO'S MULTILATERAL STRUCTURE

(U) 64. NATO's own elaborate machinery and cumbersome procedures, shaped as much by political as by military factors, are themselves major obstacles to rationalization. Their size and cost are not the real issues. Indeed, the very elaborateness of NATO's machinery tends to mask its central weakness -- its lack of sufficient clout to influence national programs more effectively. Hence we urge strengthening NATO's common institutions, rather than further weakening them, as essential to getting any large-scale rationalization program off the ground.

(U) 65. While modest savings would be possible from further streamlining of NATO's unwieldy military command structure, the chief source of waste and redundancy is the overlap between NATO and national command structures. The cost in duplicatory C^3 alone is horrendous. This is where U.S. remedial action in particular should focus, and we suggest several steps to merge and colocate U.S. with NATO Headquarters.

(U) 66. We suggest several measures for strengthening the role of the Secretary General and IS. As for the Military Committee, it is at present only a pale reflection of the national military chiefs of staff whom it represents, rather than a source of independent military advice. It should either be strengthened by enhancing the role of the chairman and requiring the MC to be more responsive to ministerial guidance, or be eliminated as redundant in favor of a Chiefs of Staff Committee that would meet periodically. The chairman, with a small staff, could then become senior military adviser to the SG and NAC. In either case, the International Military Staff should be pruned.

(U) 67. SHAPE seems overloaded, and its response times to requests unduly slow. SHAPE should delegate more planning and operational functions to its major commands, so that it can concentrate more on strategic and policy issues, and in any case, it is the major commands that will have to fight any war.

(U) 68. The complex, politically inspired command arrangements in NATO's Southern Region desperately need sorting out. We question the need for AIRSOUTH and LANDSOUTHEAST/6th ATAF. Naval command and control in the Mediterranean is even more in need of streamlining; we suggest several options to this end.

(U) 69. Indeed, the need for rationalization of NATO's fragmented maritime capabilities to get the most for the money is so compelling as to warrant another look at the old proposal for a *Supreme Allied Commander Maritime* (SACMAR). We suggest possible ways of meeting past objections.

OTHER KEY ASPECTS OF RATIONALIZATION

(U) 70. *Theater Nuclear Rationalization.* While we offer no detailed recommendations with respect to rationalizing NATO's theater nuclear posture, we are convinced this is required and that it must go hand in hand with the rationalization of conventional forces. However, a radical and highly visible warhead reduction, as some have suggested, would probably be disastrous to allied confidence and, for that matter, to the Soviet perception of our resolve. In our opinion, the NATO triad of linked strategic, theater nuclear, and conventional

capabilities remains the cornerstone of effective deterrence in Europe. Moreover, the rationalization steps for conventional forces that we have recommended will place NATO in a better position to meet any nuclear contingency as well. Rationalization should aim for less vulnerability, some reasoned reduction in obsolescent weapons, and improved warfighting capability in NATO's theater nuclear posture.

(U) 71. *Rationalizing Defense of the Flanks.* We also offer some thoughts on how to rationalize defense of the NATO flanks. This means in essence cutting the coat to fit the cloth; since few flank countries will be able to devote added resources to their own defense, their NATO missions should be reduced to what they can afford.

(U) 72. *Rationalizing NATO Communications.* The elaborate and complex NATO and national communications systems are another fertile area for rationalization. Although our look was summary, it is obvious that NATO is not getting an adequate capability in return for its continuing enormous investment in communications. At the tactical level the various national forces have the wrenching problem of not being able to communicate readily, if at all, with one another. This hamstrings tactical flexibility in employment of the various national forces available. In the larger, nontactical systems, where the bulk of the resources go, there is a maze of duplication, lack of compatibility, and even a failure to interconnect compatible systems that would provide all users more effective communications.

(S) 73. Hence we applaud the main thrust of the DOD-sponsored Corcoran Report that we must all think NATO and rationalize toward a fully integrated NATO communications system. In its ultimate form, such a system would serve national as well as NATO needs in the European area.

(S) 74. *Mobilization and Alert Procedures.* No aspect of NATO's command machinery needs rationalizing more than its complex and cumbersome mobilization and alert system. This is yet another area in which some experts doubt that NATO could effectively go to war. Moreover, the trend toward greater reliance on quickly mobilizable reserves is deepening the seriousness of the problem. The political pitfalls

impeding timely mobilization are more worrisome than the risk of delayed strategic warning. The problem is really whether NATO can react to timely warning. NATO alert and mobilization procedures badly need overhaul.

(U) 75. To help overcome the problem of slow parliamentary procedures, while continuing to reserve to parliaments the right to approve full mobilization, we suggest a system whereby certain predetermined forces could be called up and deployed without recourse to parliaments. One model could be the 30,000-man FRG Standby Reserve, subject to call by the FRG Defense Minister.

(U) 76. *Strengthening NATO's French Connection.* Lastly, the growing resource bind means that NATO needs a stronger French connection. French geography and forces are so important to NATO's conventional defense that every effort should be made to find ingenious ways to include France in rationalization programs. For example, we need to connect NATO and French communication systems. The NADGE connection can be expanded. A similar standby connection could link French military headquarters with AFCENT and AAFCE war headquarters to Boerfink. We also need contingency plans to use French facilities, particularly COBs and APODs for follow-on forces and resupply of forces that may be already engaged in combat.

ONE HUNDRED FORTY-FIVE ACTIONS THAT WOULD CONTRIBUTE TO RATIONALIZATION

I. RATIONALIZATION IN GENERAL

1. Adopt a broad NATO concept of rationalization to permit exploration of the widest possible range of sensible defense measures (pp. 16-18).

2. Use a matrix approach to permit focus on overall net costs and savings, rather than requiring each measure to stand on its own feet (p. 30).

3. Keep high-level focus on rationalization to prevent options from being buried in the bureaucracy or rejected on narrow grounds. Include it on every ministerial agenda and charge the DRC Executive Working Group with monitoring the program (p. 31).

4. Reverse NATO procedures to compel tough focus on priorities; trade-offs must be assessed against priority objectives, if NATO must do more with less (p. 32).

5. Urgently set up and staff adequate machinery to develop explicit trade-offs and to provide the cost data essential for sensible rationalization decisions (p. 33).

6. Develop pragmatic approaches to cost sharing and common funding of rationalization proposals, such as a clearinghouse fund (pp. 33-34).

II. RATIONALIZING NATO GROUND FORCES

7. Give highest NATO priority to rectifying deficiencies in the Center Region ground shield -- priority these deficiencies never have had before (p. 35).

8. Follow the FRG force restructuring model and reduce the large, expensive, and unwieldy size of NATO units, plus the large division slices that support them (pp. 45-47).

9. Relieve U.S. Army forces in Europe of contingency missions outside the Center Region (p. 48).

10. Examine possible trade-offs between reducing mortars and/or tube artillery to permit adding AT weapons and scatterable mine launchers (p. 48).

11. Reorganize Benelux and U.K. wartime personnel now assigned to guarding rear areas into infantry brigades well equipped with AT weapons (p. 49).

12. Thicken NATO's defensive shield by accelerating the deployment of augmentation forces from the U.K., Canada, and the U.S. (pp. 51-54). Free up lift for high priority U.S. movements by careful pruning of all nonessential items and equipment that can be shipped later or obtained from our allies (p. 52).

13. Trade a firm U.S. DPQ commitment to have seven divisions in Europe by M+10 or so in exchange for specified facilities and services to be supplied by our NATO allies (pp. 53-54).

14. Generate more quickly available reserve combat forces by giving reserve units sizable active duty cadres, placing greater emphasis on reserve training and affiliating reserve with active units (pp. 54-60).

15. Arm European allied territorial forces with light AT weapons to supplement regular forces and thicken up antiarmor defense in depth (pp. 57 and 69).

16. Revamp U.S. Army reserve structure to fit Army's mission of providing the bulk of Center Region augmentation forces by the "three-tier" approach cited in 17-19 below.

17. Earmark a relatively small, highly ready segment of our reserve to fill M-Day shortages in active units (pp. 57-58).

18. Give next priority to reserves affiliated with active units as round-out elements (p. 58).

19. Correlate the remainder of the U.S. ground force reserve structure with the active structure to ensure adequate support of combat forces to be deployed (p. 59).

20. Shift resources to make NATO's forces more specifically antiarmor-oriented (pp. 60-62).

21. Ask each nation providing corps-sized contribution to the shield to include a corps-level antiarmor reserve comparable to that planned for the FRG corps (p. 62).

22. For example, convert the Belgian paracommando brigade to an airmobile antiarmor brigade, and ask the Dutch both to increase their buy of heavy antitank weapons and to field a corps-level antiarmor regiment (p. 62).

23. The U.K. could either convert the two corps-level reconnaissance regiments in the BAOR (and the one in the U.K.) into one corps AT brigade, or reconfigure the remaining U.K. parachute and airportable brigades for the antiarmor mission (pp. 62-63).

24. Strengthen further the antitank capabilities of the two U.S. armored cavalry regiments in USAREUR (p. 63).

25. Review the USAREUR scheme for piecemeal deployment of Cobra/TOW companies and concentrate available assets at echelons higher than division (pp. 63-64).

26. Create a highly mobile AFCENT-level antiarmor reserve capable of rapidly deploying to any point where a breakthrough threatens by providing a U.S. antitank helicopter brigade in the new TRADOC configuration (pp. 64-66).

27. Trade this antitank helicopter brigade for logistic support from our European allies (p. 66).

28. Arm the standard Cobra (AA-IG) with 2.75-inch rockets as a cheap addition to NATO AT capabilities (p. 66).

29. Consider replacing some U.S. artillery, especially in the mechanized division, with the FRG light-rocket-launcher system and scatterable mines (p. 67).

30. Trade allied purchase of FRG mines and mine dispensers for FRG provision of common storage sites for these and other barrier materials (p. 67).

31. Standardize barrier doctrine and tactics between corps sectors to preclude end runs by Pact armor forces (pp. 67-69).

32. Have the FRG specialize in barrier construction on behalf of the other Center Region allies (p. 68).

33. Promote standardization by standardizing on the FRG scatterable mine for U.S., U.K., and Benelux forces (pp. 73-74).

34. The U.K., FRG, and U.S. defense ministers should agree that none would procure a new tank until their three services agreed on a common gun caliber and ammo (p. 74).

35. Consolidate NATO training to reduce duplicate training establishments and promote common tactics and procedures (pp. 76-78).

36. Consolidate basic helicopter training in the CONUS and AT helicopter tactical training in Europe (p. 77).

37. Broaden U.S. Marine Corps contingency roles by modifying their configuration, especially in ground and air armaments, to make their employment in the Center Region more practicable (pp. 78-79).

38. Dedicate a Marine air transportable brigade for immediate M-Day deployment to Iceland (p. 80).

III. RATIONALIZING NATO AIR FORCES

39. Make AAFCE a strong operational headquarters in peacetime, with the mission of organizing NATO's national air forces as a balanced, collective force under unified command and control (pp. 84-88).

40. Provide AAFCE an initial C^3 capability with what is currently available from NATO sources and what can be generated by bilateral arrangements with interested allies (USAFE, USAREUR, EUCOM, DCA fixed and mobile assets, NADGE and the FRG's CIP-67 network) (pp. 96-97).

41. Promote joint peacetime air operations to demonstrate how NATO's air forces have the flexibility to meet a broad range of theater-wide threats on a timely basis (pp. 96-98).

42. Make a concerted push to complete COB arrangements to enhance survivability by dispersal, permit progress on the shelter program, and enhance operational capability (pp. 100-102).

43. Use COBs as a foot in the door to help break down the fence between the 2d and 4th ATAFs by routine USAFE deployments to COBs for joint operations (p. 102).

44. Use COBs to help link TAC with NATO by having elements of TAC earmarked squadrons visit their COB location as part of Crested Cap (pp. 102-103).

45. Use the deterrent value that COBs provide by planning *now* for low-key deployments of flights, rather than squadrons, in periods of increasing tension, when full-scale augmentation is not yet desirable (pp. 103-104).

46. Reduce current vulnerability of USAFE conventional munitions by prefinancing infrastructure funding of a munitions storage facility at each COB obtained (pp. 105-106).

47. Use NATO air forces to form a gap-filler force against a WP armor attack, by peacetime planning and exercising to interdict avenues of attack open to WP armor (pp. 106-108).

48. Develop specialty teams using USAF laser designators and allied aircraft with bombs modified for laser delivery to spark NATO interest and promote confidence (pp. 106-107).

49. Expand the aircraft shelter program to include those NATO combat aircraft (30 percent) that will not have shelters as of M+3. We also propose a joint U.S.-U.K. approach to overcome the SACEUR requirements for active air defense — a requirement that precludes U.S. recoupment of shelter funds expended in the U.K. from the NATO infrastructure program (pp. 108-110).

50. Review shelter design to protect aircraft and personnel undergoing munitions loading, refueling, and maintenance during the turnaround time between combat missions, and expedite turnaround time in general (pp. 110-111).

51. Provide more rapid U.S. reinforcement by augmenting existing squadrons before adding earmarked squadrons. In an emergency, increase the number of aircraft and crews of existing USAFE squadrons by CONUS units sending up to six aircraft each to join comparable overseas units within a matter of hours (pp. 113-114).

52. Review tanker support for TAC and USAFE to improve reinforcement and combat operations, including possible dedication of tankers, streamlining the political decision process leading to augmentation, and developing USAF/RAF contingency plans for U.K. tanker support of U.S. aircraft during deployment to Europe and combat operations (pp. 114-115).

53. Provide more airlift for army augmentation units by adding modified wide-body aircraft to the U.S. CRAF fleet and creating a European CRAF -- with or without modified wide-body aircraft. However, a European CRAF with modified wide-body aircraft might be an initiative the EUROGROUP could agree to (pp. 115-117).

54. Provide reception facilities for CONUS-based reinforcements by ending the debate with SHAPE over which comes first: active air defense for APODs or firm arrangements to earmark existing facilities and to provide storage facilities to be financed from infrastructure funds for prepositioned equipment (pp. 118-119).

55. Use technology to promote rationalization; begin by giving renewed support to the NATO Electronic Warfare Program (pp. 119-120).

56. Introduce PGMs into NATO's inventory; we suggest a USAF-RAF program of cooperation (pp. 121-122).

57. Create a NATO Remotely Piloted Vehicle Program (RPV) organized along the lines of OSD's NATO Electronic Warfare Program (p. 123).

58. Accept AWACS as a U.S. responsibility, because to get AWACS before 1985 requires accepting the fact that it will have to be predominantly a U.S. program (p. 125).

59. Make air defense a European responsibility in return for the U.S. AWACS (p. 126).

60. Accept Electronic Warfare Support (EWS) as a U.S. responsibility (p. 127-128).

61. Reduce USAFE's peacetime reconnaissance capability as partial compensation for accepting the EWS mission (p. 128).

62. Consider a high-level U.S. initiative to bring sense to the European MRCA and lightweight fighter programs (pp. 129-131).

63. Replace Dutch and Belgian recce squadrons with LWF aircraft as an add-on to their projected LWF buy. The U.S., U.K., and FRG would provide AAFCE's recce needs (pp. 131-132).

64. Replace the Dutch and Belgian air transport squadrons (one each) with LWF aircraft, unless transports are to be merged into a NATO air transport command (pp. 131-132).

65. To promote joint training in NATO, offer U.S. cooperation for a NATO undergraduate pilot training program *in the U.S.* (pp. 133-134).

66. Consider establishment of a NATO air combat tactics school *in Europe* and offer U.S. computer technology for combat simulators (p. 135).

IV. RATIONALIZING NATO'S NAVAL POSTURE

67. Restructure NATO naval forces, especially those of the smaller allies, on a regional basis to cope with the Soviet naval threat (pp. 141-155).

68. Optimize European navies against Soviet naval capabilities within regional command areas and phase out forces inconsistent with this policy (pp. 155-156).

69. Improve the timeliness and effectiveness of strait-closing capabilities of "strait-guarder" nations, as well as their capabilities to prevent subsequent clearing and forcing of guarded straits (p. 155).

70. Phase out those allied attack submarines not optimum for strait closure, barrier operations, or regional area coast defense (p. 156).

71. Initiate time-phased allocation of appropriate USAF assets to assist in maritime warfare (p. 168).

72. Reduce the requirements for sea-lane-protection forces by *sea-based* prepositioning of U.S. equipment and stocks in Europe (pp. 169-171).

73. Arrange for military forces to have assured access to European domestic POL reserves in emergency to reduce early shipping requirements (p. 171).

74. Modify container ships and tankers to carry ASW helicopters to help in the sea-lane protection mission (p. 172).

75. Increase the frequency with which U.S. Coast Guard ships with an ocean-going ASW capability exercise with U.S. Navy (p. 173).

76. Exploit opportunities for regional pooling of naval supply, maintenance, and other logistic operations (pp. 174-175).

77. Survey NATO and national *shore-based* facilities and missions and consolidate where practicable (pp. 175-176).

78. Belgium: Divert resources projected for construction of 4 DEs in 1977-1979 to improving Belgium's ground force contribution (p. 178).

79. Canada: Shift six escorts from the Pacific to the Atlantic and commit all Atlantic destroyers to SACLANT; eliminate the three Canadian submarines used largely for ASW training and exercise ASW units with U.S. forces (pp. 178-179).

80. Denmark: Shift resources from escorts and submarines to improving strait-closure capabilities (pp. 179-180).

81. Germany: Equip *all* new patrol boats with SSM, rather than procuring SSM for four *Hamburg*-class destroyers (or shift the destroyers to ocean escort missions under SACLANT); in the future, concentrate on smaller, less vulnerable craft for BALTAP defense (pp. 180-182).

82. Greece: Concentrate future procurement on fast patrol boats, missile and torpedo, and mine-warfare craft (pp. 182-183).

83. Italy: Shift resources to small craft optimized against the Soviet Navy, such as PHMs or FPBGs (pp. 183-185).

84. Netherlands: Eliminate submarines; shift emphasis from naval forces to improving I Netherlands Corps antitank and air attack capabilities (pp. 185-186).

85. Norway: Equip destroyer escorts with SSM and improve capabilities in SSM-armed small craft and land-based air ASW capabilities (pp. 186-187).

86. Portugal: Shift emphasis to mine warfare craft and ASW patrol aircraft to assist in control of the Straits of Gibraltar and approaches (pp. 187-188).

87. Turkey: Shift resources to improve strait-closure capabilities, especially in mine warfare craft and fast patrol boats armed with SSM (pp. 188-190).

88. United Kingdom: Place emphasis on maintaining and modernizing British ASW capabilities as the eastern anchor of the sea-lane-protection forces (pp. 190-193).

V. RATIONALIZING NATO LOGISTICS

89. Organize a common Center Region LOC to meet the needs of the U.S., U.K., Canada, FRG, and Benelux countries (pp. 213-216).

90. Establish an AFCENT LOC Command to manage all AFCENT movement of men and supplies from ports and airheads to army group or corps rear boundaries (pp. 216-217).

91. Increase the exchange of logistic data within NATO to permit NATO military commanders to make realistic plans for wartime support of NATO forces (pp. 217-219).

92. Use NAMSA more as a clearinghouse for excess equipment, WRM, and supplies (pp. 219-221).

93. Increase U.S. use of NAMSA for theater support to achieve economies of scale and military manpower (pp. 221-222).

94. Launch a sustained drive to have nations move more forces from national command to earmarked or assigned to NATO (pp. 222-223).

95. Create a SACEUR stock of WRM and munitions by a multipronged cooperative approach that avoids the pitfalls of previously proposed common funding proposals (pp. 223-229).

96. Civilianize the Central European Pipeline System to save costs while relieving the military of an unnecessary burden (p. 229).

97. Appoint a full-time NATO Assistant Secretary General to provide added focus on crucial consumer logistics problems (p. 230).

98. Over the longer run, move toward a full-time centralized agency to integrate NATO logistic requirements in peace and war (pp. 233-234).

99. Develop a logistic matrix covering production and procurement, supply and maintenance to overcome some of political and economic obstacles to standardization (p. 234).

100. Use the "wisemen" approach to study what institutional forms common NATO logistics should take (p. 236).

101. Initiate a SHAPE study on the requirement for a multinational logistic command (pp. 237-239).

102. Begin planning for a European Defense Supply Agency to achieve savings in costs of consumables and to promote mutual support, increased standardization, and common logistic procedures (pp. 239-240).

VI. COMPATIBILITY, INTEROPERABILITY, AND STANDARDIZATION

103. While pressing standardization as much as feasible, focus chiefly on such halfway houses as insuring operability of equipment, harmonizing doctrine and procedures, and joint use of facilities and equipment (pp. 256-259).

104. Push for common calibers and interchangeable rounds for small arms, artillery, and tank guns (p. 257).

105. Decide on common frequencies and procedures for tactical communications (p. 257).

106. Extend aircraft cross-servicing at national air bases to develop common bomb racks, missile pylons, and interchangeable avionics (p. 258).

107. Agree at ministerial level that no new NATO STANAG will be rejected below chief of staff level in NATO's capitals (p. 259).

108. Make trade-offs the name of the game and use the logistic-matrix approach to balance out the potential costs and savings associated with standardization (pp. 261-263).

109. Push for the single-manager approach as first choice and single-source development and joint production as second choice only (pp. 264-266).

110. Procure wheeled vehicles for USAREUR and USAFE from European commercial sources (p. 267).

111. Make a three-way trade-off, with the U.K. producing through-deck carriers, the FRG the Leopard II tank, and the U.S. lightweight fighter aircraft. Use a matrix to offset unbalanced payments (pp. 267-268).

112. Request NATO nations to accept the improved Maverick as the standard airborne antitank weapon and create an initial SACEUR reserve stock from U.S. resources (pp. 268-269).

113. Create better management to control standardization, repeal the Buy American Act, and require executive certification that new major weapon systems do not duplicate already existing NATO systems (pp. 270 and 272).

114. Launch a DOD drive to force the services to consider allied equipment, as well as to educate the Congress on the potential gains and to get restrictive legislation waived (pp. 262-264 and 272-273).

115. Adequately staff OSD agencies responsible for international R&D and cooperative logistics (p. 273).

116. Alter NATO defense planning procedures to include a ten-year development program for major items of equipment (pp. 270-271).

117. Institute a procedure of "ministerial veto in advance" whereby ministers would agree not to procure anything in a given category until their advisers had agreed on a common standard (p. 271).

118. Start by having the U.S., U.K., and FRG ministers agree that none of them will approve production of a new tank gun until their services have reached agreement on a common tank gun caliber and round (pp. 271-272).

119. Pursue a broader solution — the Callaghan approach — which calls for a three-pronged initiative: (1) a North Atlantic Defense Common Market; (2) cooperation in civil as well as military technology; and (3) open government procurement by all allies (pp. 273-275).

VII. MODERNIZING NATO'S MULTILATERAL STRUCTURE

120. Give more peacetime planning and operational authority to NATO commands, to force national commanders to *think NATO* (pp. 250-281).

121. Determine *now* what the ACE command structure should be in the late 1970s to insure compatibility with NICS (p. 281).

122. Revamp NATO's civil structure and reallocate effort and manpower to key NATO functions; strengthen NATO's central organs vis-à-vis national staffs (pp. 282-285).

123. Double the size of the IS Defense Planning and Policy Division and provide it with a strong cost analysis shop (p. 285).

124. Strengthen the Military Committee by increasing the powers of the chairman, putting the IMS directly under the chairman, and requiring the MC to respond to ministerial guidance regardless of national positions (p. 288).

125. Or abolish the MC in favor of a Chief of Staff Committee and make SACEUR and SACLANT the senior military advisers to the ministers. In either case reduce the IMS (p. 288).

126. Reduce the overlap between U.S. and NATO headquarters and aim towards colocation of U.S. and NATO staffs (pp. 293-294).

127. Relieve U.S. military headquarters in Europe of non-European contingency responsibilities, or at least better delineate what these responsibilities are (p. 293).

128. Revise SHAPE's role and give the MSCs increased responsibility for the detailed planning and execution of NATO conventional defense; free SHAPE's staff to devote more attention to policy and strategic issues (pp. 295-296).

129. Strengthen CINCCENT's authority and give him the capabilities needed to use assigned forces flexibly (p. 297).

130. Disestablish AIRSOUTH and make AIRSOUTH an air deputy to CINCSOUTH, or reduce the U.S. contribution to AIRSOUTH (p. 302).

131. Combine LANDSOUTHEAST and 6th ATAF at Izmir, or eliminate them because the Greek-Turkish problem makes them unable in reality to perform their mission (p. 305).

132. Disestablish NAVSOUTH's subordinate commands and adopt a "task force concept" (pp. 307-310).

133. Merge NAVSOUTH and STRIKFORSOUTH into a NAVFORMED (pp. 308-309).

134. Combine NAVSOUTH and MBELANT headquarters (p. 309).

135. Reexamine the old proposal for putting all NATO maritime forces under a Supreme Allied Command Maritime (SACMAR), who would replace SACLANT and remain located at Norfolk (pp. 310-311).

VIII. OTHER ASPECTS OF RATIONALIZATION

136. Rationalize NATO's theater nuclear posture to: (a) reduce its vulnerability; (b) eliminate obsolete weapons; (c) improve C^3; (d) improve target acquisition; and (e) facilitate more flexible theater nuclear options (pp. 312-314).

137. To enhance defense of NATO's flanks, tailor their missions better to their limited capabilities. Reassess the forward defense concept for Greece, Turkey, and Norway. Shift limited local resources and outside aid to meet highest-priority needs, rather than flank allies attempting to maintain balanced national forces (pp. 316-318).

138. Rationalize tactical communications by developing common doctrine, ensuring compatibility of equipment, and agreeing on common procedures (pp. 321-322). Offer NATO access to the U.S. AUTODIN and AUTOVON systems (p. 325).

139. Plug the U.S. into the new CIP-67 network in lieu of upgrading the European segment of the DCS (p. 325).

140. Over the longer run, move toward interconnection and common use of both NATO and national nontactical communications systems, eliminating unnecessary duplication and using civil facilities where feasible (pp. 326-327).

141. Overhaul NATO's cumbersome and complex alert procedures; design a simplified, understandable, and politically acceptable system, using ADP methods (pp. 329-330).

142. To enhance readiness, move toward two-stage or even three-stage allied mobilization procedures, under which relatively small but urgently needed reserve contingents could be called up by defense ministers (pp. 330-331).

143. Discretely develop better contingency plans for early utilization of France's five active divisions (p. 333).

144. Work toward better interconnection of French and NATO communication systems (pp. 333-334).

145. Develop agreed contingency plans for use of such French facilities as COBs, APODs, and a back-up U.S. LOC through France (pp. 334-335).

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I. THE RATIONALE FOR RATIONALIZATION

(U) NATO faces growing difficulties in maintaining a credible deterrent/defense posture over the next several years. The basic reason is obvious — the increasingly painful resource bind created by the rising costs of modern forces at a time of severe budget constraints. Inflation, the energy crunch, lessened international tensions, and competing priorities are all impacting on defense outlays. This study will not go into detail on these factors, because they are plain for all to see. Rather it will seek to develop a practical solution to this dilemma — rationalizing NATO's collective defense posture to permit optimizing it within such severe resource constraints. We will argue that NATO can modernize out of its own hide — without substantial defense budget increases — if only it will spend its existing resources more wisely.

A. THE DILEMMA CREATED BY NATO'S GROWING RESOURCE BIND

(U) While European NATO defense budgets increased an estimated 10 percent during 1970-1973, in terms of what they buy they have really been going down instead of up. This is because other factors such as the increased sophistication of defense equipment have been driving up the costs of equipment and manpower even more than the general inflation rate. And defense budgets are increasingly driven by the rapid growth in manpower costs, especially for countries like the U.S., U.K., and Canada, which man their forces wholly with volunteers. An all-volunteer force, for example, costs the U.S. at least $3 billion per annum and probably more if indirect costs are added in. Such problems are getting worse, not better: Inflationary pressures have increased in all NATO countries, in some at a frightening rate, partly because of the staggering increase in oil prices, to which the European allies are particularly vulnerable.

(S) Hence, defense budgets will almost certainly be held down further and required to absorb the costs of inflation. This seems to be happening already in the U.S., U.K., and Italy, where defense

spending is down in real terms in 1974, and will doubtless become a NATO-wide phenomenon. As ASYG Humphreys recently told the defense ministers:

> Instead of planning to allot a stable or larger proportion of their growing national wealth to defence, most countries appear to be planning to reduce it substantially over the years. This implies a deliberate decision to alter the national pattern of resource allocation to the disadvantage of defence. It also means abandoning any attempt to keep pace with inflation in defence costs.*

The 1974 defense planning review showed that most nations hoped to maintain defense spending in real terms, and a few to increase it marginally, but economic stringency will make this hard to do. Moreover, continued cost growth will mean less output, even if resource inputs remain steady.

(U) Another facet of the resource bind will be growing pressures for manpower cuts, either unilateral or via an MBFR agreement — or both. Congressional calls for withdrawal of U.S. troops from Europe are far from stilled, and if no early MBFR agreement is reached, may become overwhelming. Or the opposite may occur. Cuts in allied forces, because inflation and the energy crunch are even greater in Europe, may trigger U.S. withdrawals. Under these circumstances, mutual NATO/Warsaw Pact cuts, under any reasonably symmetrical MBFR compromise, would seem distinctly preferable to unilateral cuts — and could be used to withstand pressures for such cuts by putting an agreed floor under NATO force levels.** Thus some softening of the present NATO bargaining position is probably in the cards. But one way or another, some NATO force cuts seem quite likely in the period ahead.

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*(U) DPC/D(74)14, *NATO Force Goals 1975-1980*, 13 June 1974 (Confidential).

**(U) While this report is not the place to argue the pros and cons of MBFR, it could be in effect yet another means of rationalizing NATO's defense posture. If even symmetrical mutual cuts are almost a priori preferable to unilateral NATO cuts, then the present NATO negotiating position (which is almost certainly not acceptable to the USSR) needs to be modified accordingly. Moreover, NATO's MBFR position must be so framed as not to hamper rationalization of its residual force posture (a risk at present) lest we end up with the worst of both worlds.

(U) At the same time that real resource inputs are declining and force cuts are in prospect, NATO faces a continuing need to upgrade and modernize its collective defense posture. One obvious reason for doing so is to exploit the new technology that is now becoming available. New generations of weaponry (both conventional and nuclear), advanced command and control technology, and modern means of strategic mobility offer major opportunities as well as risks. Some even argue that precision-guided weapons, when married to new means of target acquisition, will revolutionize warfare, and may even over time abolish the distinctions between strategic and tactical weaponry. However, by and large such new technology is inordinately *expensive*. Options like AWACS, the next generation of SAMs or AT missiles, advanced combat aircraft, even new combat vehicles are proving costly indeed. Thus, how can NATO afford enough of it at a time of severe resource constraints?

(U) Another obvious requirement is to offset the parallel modernization of the WP forces, which has been proceeding at a healthy clip for the last few years. While strengthening its tactical nuclear capabilities, the WP organization has been devoting even more substantial resources to modernizing its conventional blitzkrieg punch with more artillery, more and better armor, improved tactical air, and greater attention to logistic support.

(U) Moreover, despite some real progress over the last few years, NATO's forces are still far from optimized to meet the existing WP threat. A review of such NATO studies as AD-70 and its follow-on reports, or the annual combat-effectiveness reports of the major NATO commanders (MNCs), reveals a pattern of such serious deficiencies as to raise a serious question as to whether NATO could effectively stop a WP blitzkrieg in the center or on the flanks.* This is far more than a matter of the WP having the advantage of the initiative and therefore being able to concentrate its attack at times and places of its own choosing.

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*(U) We discuss these deficiencies where relevant in the subsequent chapters of this study. See also our previous Rand Report, *Restructuring NATO Forces to Compensate for MBFR* (U), R-1231-ARPA/ISA/DDPAE, November 1973 (Secret).

(U) *Nor has this been primarily a resource problem.* It is important to recognize that, up to recently at least, NATO's weaknesses have not resulted primarily from lack of gross resource inputs. According to the best available estimates, NATO defense budgets exceed those of the WP, NATO has more manpower under arms, its trained manpower pool is larger, and its equipment mostly comparable if not qualitatively superior. Thus, it is not so much lack of resources but failure to use them wisely that is at the heart of NATO's weaknesses. Similarly, it is not insufficient active manpower but rather the wasteful ways in which this manpower is used. In short, NATO has, and is likely to continue to have, enough defense resources to field a stalwart deterrent and defense.*

(U) The problem is one of outputs rather than inputs. While NATO's collective defense resources are cumulatively impressive, it simply has not used these resource inputs to best advantage. Among other things, NATO is not collectively organized to use them efficiently. In strong contrast to the Soviet-dominated WP structure, NATO is a coalition of independent national forces, only loosely linked by a supranational command structure. While we cite their deficiencies in more detail in subsequent chapters, suffice it to say here that NATO's forces lack the common logistic base (see Chapter V), communications (see Chapter VII), and compatibility and interoperability (see chapters II-IV) to enable them to fight effectively together as multinational forces.** Hence NATO lacks the operational flexibility rapidly to reinforce areas outside assigned national defense sectors. For example, the Dutch cannot put their finger in the dike and expect rapid reinforcement, because forces coming to support them will have to drag their logistic tails behind them. Instead, the NATO allies would have to fight largely separate wars, vulnerable to defeat in detail.

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*(U) The same argument is made in a provocative study by T. A. Callaghan, Jr., *U.S./European Economic Cooperation in Military and Civil Technology*, Ex-Im Tech, Inc., Arlington, Virginia, August 1974, pp. 16-20.

**(U) See also Callaghan, op. cit., pp. 32-34.

(U) And some sectors of the conventional shield — especially the Dutch and Belgian, are much weaker than others (see Chapter II). We are continually astonished to note how little attention NATO pays to the truism that a chain is no stronger than its weakest links. In Center Region terms, it might make little difference how strong the U.S. and FRG forces were, if a WP blitzkrieg could punch through a weaker sector and then exploit.

(S) Nor is there any common agreement on how to implement NATO's defense concept. While flexible response and so-called forward strategy are broadly accepted at the political level, there has never been full agreement on what they mean in practice, hence not enough of a common program to carry them out. Differing views as to how long a conventional phase should be contemplated before NATO goes nuclear, and even differences in doctrine and tactics, have led to divisive debates over how much and what kind of WRM should be stocked. For example, the U.S. is planning on at least 90 days' conventional WRM in Europe, while its allies have only agreed to 30 days, and don't expect to reach that level until 1978. Thus NATO's posture doesn't seem to fit NATO's strategy very well.*

(S) Moreover, NATO wastes enormous money and manpower on duplicative R&D, production lines, depots, repair facilities, and LOCs that overlap. As the last SACEUR, General Goodpaster, recently told the CNAD, "we are not getting a satisfactory return on our investment for our vast expenditures; we are losing at least 30 percent and in some areas 50 percent of our capability due to lack of standardization."** It results in a heterogeneous collection of weaponry and munitions that almost defy description, and require a far broader logistic support base than otherwise necessary.*** Even if adequate WRM stocks

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*(U) For more details see Chapter I of Rand R-1231, op. cit.

**(S) Statement by SACEUR to CNAD Meeting at SHAPE, 25 April 1974 (*USNATO 2346*, 30 April 1974) (Secret).

***(U) See A. W. Marshall, "NATO Defense Planning: The Political and Bureaucratic Constraints," in *Defense Management*, S. Enke, ed., Prentice-Hall, 1967, pp. 354-367, for an early provocative discussion of "why the Western European allies obtain so little capability to defend themselves for the money they spend."

were available, the proliferation of weapon systems is so great that munitions and spare parts are not interchangeable. In consequence, according to General Steinhoff, outgoing Chairman of the Military Committee, NATO looks "partly like an Army museum."

(C) In short, the whole of NATO's defense posture is less than the sum of its parts. One cannot simply add up all of its forces and assume that they could fight as a unified whole. Moreover, *this situation seems to be getting worse rather than better, as the NATO allies draw farther apart rather than closer together.* For example, twelve NATO allies are developing 13 different types of antitank missiles and studying yet eight more. And different weapons systems spawn different doctrines, perpetuate the requirement for purely national LOCs, raise WRM and storage costs, and unnecessarily raise the price of modernization. ASYG Gardiner Tucker has complained about the progressive "de-standardization" of NATO weaponry.*

B. NATO'S EXPERIENCE WITH COLLECTIVE DEFENSE MEASURES

(U) We do not mean to imply that the NATO allies have ignored the possibilities of collective defense. On the contrary, this has been an oft-repeated theme since NATO's founding, and many measures have been tried -- some of them quite successfully. But the overall experience has been a frustrating and even bitter one, a brief review of which might be instructive. Indeed, NATO is not going to get very far toward rationalizing its collective defense posture unless it realistically faces up to the obstacles that have frustrated previous efforts along these lines.

(U) The concept of collective NATO defense is by no means new. Indeed it was a dominant theme when NATO was founded in 1949-1950, since it appeared that only via collective measures could the slowly recovering Western European nations meet the Soviet threat at acceptable cost. In 1950, the North Atlantic Council called for "balanced collected forces in the progressive buildup of the defence of the North Atlantic Area," and decided that an integrated force should be

*(U) *USNATO 1731*, 29 March 1974 (Confidential).

constituted under the supreme command of an American officer.* General Eisenhower was appointed the first Supreme Allied Commander Europe (SACEUR), with the understanding that he would have authority to train the national units assigned to his command and to organize them into an integrated force. The first Secretary General, Lord Ismay, saw this as marking a major new development in NATO's thinking:

> The idea was to conceive the military buildup so that all effort be directed in the best possible way and to the best possible place. Duplication and overlapping were to be avoided; a government should not be wasting its money on building, say, ships if it could do more important work, equally useful to North Atlantic Defence, in some other field.**

(U) The first major step was to set up a combined Supreme Headquarters Allied Powers Europe (SHAPE) in 1951.*** The combined NATO command structure which subsequently emerged is the chief expression of the collective defense concept (see Chapter VII). But this structure has turned out to have far less peacetime authority over national forces than originally envisaged, and what it had has gradually eroded. Moreover, aside from it, little that is truly integrated has emerged in NATO.

(U) Perhaps the high water mark of attempted integration was reached in 1954 with the abortive proposals for a European Defense Community (EDC). Advanced as the best way to permit German rearmament while protecting the rest of Europe against German revanchism, they called for a common French/German/British/Benelux European Army, integrated down to corps or division level. But the French, who invented the concept, were in the end the ones who buried it.

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*(U) *Sixth Meeting of North Atlantic Council*, 18 December 1950.

**(U) *NATO, The First Five Years*, Lord Ismay, p. 29.

***(U) Eisenhower told the national military representatives working in Paris to form SHAPE that "our purpose is to form here at SHAPE a headquarters to enable us to do together what none of us can do alone" (Secretary of the Air Force Publication #10-973, p. 20).

(U) At any rate, despite numerous proposals of one kind or another advanced over the years, the actual examples of successful joint NATO programs are relatively few. The most striking is the longstanding *NATO Infrastructure Program*, to which since 1951 the allies have contributed over $5 billion as a common fund for joint projects. But even this is shrinking now under the impact of inflation (see p. 210). The *NATO Maintenance & Supply Agency* (NAMSA) has had a modest common procurement role. There is a *NATO Pipeline System* controlling about 6300 miles of pipeline. *NATO's Air Defense Ground Environment Program* (NADGE) is another example of common production logistics, as is the *NATO Integrated Communications System* (NICS) a high-level network program. There have also been several cooperative procurement or production consortia — Hawk, the G-91, the F-104G Sidewinder, Bullpup, Atlantic, Jaguar, and MRCA, etc.,* not to mention a series of cooperative R&D efforts on a bilateral or wider basis.

(U) A major effort was also made by the NATO military authorities to promote *standardization*, as vital to enabling multinational forces to operate effectively together. SHAPE actually promulgated some 49 NATO Basic Military Requirements (NBMRs) before giving up in 1965 because "not one NBMR had resulted in the common production of an item specifically designed to meet it."** True, NATO did agree on a common 7.62mm round (which the U.S. then abandoned), and some other ammo and weaponry (e.g., 105mm tank ammo) is interchangeable. But standardization is more the exception than the rule, usually occurring only when other allies bought or licensed from one producer; in fact, destandardization seems to be occurring (see pp. 244-250).

(U) Beginning in 1969, the EUROGROUP made another effort to develop collective defense measures. Its most notable accomplishment has been a European Defense Improvement Program, really a collection of increases in national programs. It also created a number of

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*(U) See Chapters V, p. 209, and VI, pp. 244 and 246-249.

**(U) Geoffrey Ashcroft, *Military Logistic Systems in NATO: Part II: Military Aspects*, London, IISS, Adelphi Paper No. 68, June 1970, p. 5.

subgroups (EUROMED, EUROTRAIN, EURONAD, EUROCOM, EUROLONGTERM), to promote joint efforts on a European basis. But some years later these can point as yet to little concrete result (see Chapter V).

(U) Nor has the Conference of National Armaments Directors created by NATO in 1966 to breathe new life into joint production and equipment standardization accomplished much to date (see Chapter VI). Moreover, looked at in the round, the above cooperative efforts are very small potatoes compared to purely national programs. Indeed, it is notable how little in the way of commonality or joint institutions NATO has managed to generate over the years. Somehow the early concept of collective defense went badly off the track, and has never gotten back on track again.

C. NATIONALISM AND PAROCHIALISM AS OBSTACLES TO COLLECTIVE DEFENSE

(U) Why is this the case, after some 25 years of NATO's existence? The reasons are many and varied, but underlying them all is that, even in times of crisis, the theoretical advantages of collective defense have been insufficient to overcome the strong centripetal pull of nationalism, traditionalism, and straight institutional inertia. We assess some of these factors below.

1. The Dominance of National over Alliance Considerations

(U) The sheer fact that NATO is an alliance of sovereign national states, each with its own perceived disparate interests, has been at bottom the chief reason why the whole of NATO's defense posture is less than the sum of its parts. The concept of collective defense does not really dominate the planning and programming of NATO's members. Instead, parochial national considerations do. Balanced national, rather than balanced collective, forces have been the order of the day. In every case, while paying lip service to NATO, its members tend to size and configure their forces as much on the basis of national considerations as on that of optimizing their contributions to the common defense.*

*(U) Only the FRG force posture seems fully configured for NATO defense missions, but this is understandable since the FRG forces have no other defense mission, and the FRG is in the forefront of the presumed key battleground in any major NATO/WP clash.

(U) The same holds true of national equipment procurement and other investment programs. Here too, national political and economic particularism have tended to dominate. Almost invariably, individual allies (the U.S. included) have been more concerned to protect their own armaments industries and balance of payments than to maximize NATO-wide military benefits or save on collective costs. Even on common procurement programs, the desire for all participants to get their share of the pie has led to coproduction and licensing schemes that eat away much of the potential cost savings (see pp. 265-266).

(U) Those are sheer facts of life to a great extent, and our desire is less to criticize them than to point out some of their consequences. However, we do find some of them anachronistic in the context of the seventies. For example, the withdrawal of Britain, France, Belgium, Holland, and now Portugal from the vast bulk of their former colonial empires has not yet been fully reflected in their defense postures. Granted that some of them still have non-NATO commitments, the issue is whether in a period of severe resource constraints they should still posture so many forces for overseas intervention at the expense of their NATO contributions.*

(U) *Paradoxically, however, it is the United States that has been both the strongest voice for collective defense in NATO and the worst offender in terms of "going it alone."* The U.S. is cast in the role of dominating NATO, yet insisting on its own freedom of action. One natural consequence has been that the U.S. force posture displays far more of a "go it alone" syndrome than that of any other NATO ally. Even its forces in Europe (not to mention its other NATO-earmarked forces) are more self-contained, the argument being that the U.S. must structure on an expeditionary force basis to project its military power overseas and must be able to use its Europe-based forces for non-NATO contingencies.** And in the case of defense production, the

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*(U) We suggest some tradeoffs in Chapter II.

**(S) The proviso in DOD's FY 1976 Defense Programming and Planning Guidance (DPPG) to plan on the basis that U.S. forces in Europe are there to meet European contingencies (and will not be redeployed to meet other contingencies) is a major step forward.

U.S. wants to have its cake and eat it too. It follows a policy of military self-sufficiency, while wanting NATO to standardize, mostly on U.S. equipment.

(U) Admittedly, the U.S. faces far more of a genuine dilemma than any other NATO ally in terms of posturing for NATO missions versus other contingencies. As a superpower it must play a global role. And non-NATO contingencies seem far more likely to occur than a major NATO/WP clash. For these reasons, the U.S. must maintain general purpose forces, not just configure them for NATO-first scenarios. But the latter scenarios are surely the most important, if not the most likely, and are indeed the sizing case that primarily determines the scale and configuration of our nonnuclear forces. Besides which, we seriously question whether such great emphasis on general purpose forces is really as cost-effective as often thought. Implicit in much of the analysis that follows is the concept that tailoring a large fraction of our force posture more for the NATO mission would (a) free substantial resources for tradeoff; (b) materially improve the effectiveness of our NATO contribution; and last but not least (c) actually improve our capabilities for responding to other contingencies as well.*

2. The Nuclear Syndrome

(U) Another factor tending to obscure the need for collective defense measures has been the pervasive influence of the American nuclear deterrent. So long as U.S. nuclear superiority provided a solid deterrent umbrella, neither the U.S. nor its allies felt compelled to pay undue attention to the needs of combining for conventional defense. While the U.S. has long since recognized the need for flexible response, many European allies still cling to the belief that only a

*(U) We have in mind such measures as faster reinforcement capabilities (chapters II, III, and IV), a better reserve structure (Chapter II), and the economies inherent in greater dependence on allied support (chapters II, III, and V), standardization and co-production (Chapter VI), and reallocation of naval forces from sea-lanes protection to force projection (Chapter IV).

brief conventional pause before going nuclear is really needed to deter, or at any rate they use this as an excuse to neglect conventional options. However, they too are gradually coming to acknowledge that the advent of strategic nuclear parity, plus the growth in Soviet theater nuclear capabilities, cannot help but erode the credibility of too exclusive a reliance on nuclear deterrence. This is already evident in the FRG stance, though the British and French (with large sunk-costs nuclear forces) are the most reluctant to modify their views. This is by no means to argue that they, or we, should prematurely abandon nuclear deterrence (see pp. 312-314), only that the conventional component of flexible response is becoming more important than at any previous time in the history of the alliance.

3. Lack of Initiative on the Part of the NATO Authorities

(U) Nor do NATO's political and military authorities appear to have been aggressive enough in pressing the advantages of collective defense. This is all too understandable, since the way NATO is set up, their primary institutional loyalties have been to their nations. NATO has never created the strong multinational bureaucracy increasingly characteristic of the EEC, partly because (at the wish of the Europeans) Americans have tended to dominate it. At any rate the national defense ministries and services have always been dominant.

(S) Also seriously lacking has been adequate NATO machinery for developing tough priorities and pointing up any differences between these priorities and national programs. Thus, despite the NATO force planning cycle, NATO force improvement has been a diffuse incremental process without clear priority guidance that would put the necessary emphasis on first things first. Even the AD-70 exercise lacked clear operative priorities in this sense. Of course, this partly reflects the divergent allied views on what the MC 14/3 strategy really means. But whatever the reasons, the lack of an authoritative NATO-developed road map has inhibited NATO from making optimum use of its money and manpower inputs and has made it easier for nations to follow divergent

paths influenced more by national doctrine and parochialism than by the needs of the common defense.

(S) In fact, we would argue that the present system under which the NATO military authorities generate biennial force proposals, all stated as having first or second priority, is actually counterproductive, since to correct all the detailed list of deficiencies cited invariably costs far more than the allies are willing to spend. For example, of over 800 force proposals submitted by the MNCs for 1975-1979 and blessed by the MC with little change, over half were listed as first priority — a situation that leads to loss of focus on the critical deficiencies, rather than the reverse. This is one major reason why NATO has never optimized its defense posture to meet what it claims to regard as the most serious threat — an air and armored WP blitzkrieg in the Center Region.

(U) The lack of clout and initiative of the NATO authorities has also prolonged the life of such pernicious doctrines as that of logistics being "a national responsibility," the fatal flaws in which they have been all too slow to spell out.* While they have been much more aggressive in pressing for standardization across the board, the known difficulties of achieving this nirvana make one suspect that, as in the case of past "blue sky" force requirements, they are using the need for standardization as an excuse not to press harder on such lesser and more realizable goals as compatibility and interoperability (see Chapter VI).

4. These Problems Have Long Been Recognized

(U) Of course, all these problems have long since been recognized — and regularly deplored. NATO's literature is full of such hortatory injunctions as that of the assembled ministers in their June 1970 NAC Session:

> In spite of the excellent progress that had been made in the exchange of information on defence equipment, it has proved

*(U) See Chapter V, pp. 208-209.

possible to establish relatively few firm NATO projects for cooperative development and production of equipment. They recognized that more political support would be necessary to overcome the obstacles to greater cooperation. They agreed to the need for a more positive approach in order to achieve the financial and operational benefits of more widespread adoption of jointly developed and produced equipment.*

When General Steinhoff, the last chairman of the MC, warned the DPC that it was by no means certain that the alliance would meet the challenge of the AD-70 program, he too pointed out that:

> The problem is compounded by the fact that, in some ways, we are not making the best use of our available resources. This raises two main issues of interdependence; the first is, I would be the first to admit, probably not capable of early realization in other than specialized areas; and this is the idea of rationalization of forces between nations. By that I mean that the day is fast approaching when there must be some more rational allocation of defence tasks as between the various nations.
>
> The other, of course, is the whole area of standardization -- and this brings me to my second main point. I use the word standardization to embrace the whole gamut of equipment collaboration, from Research and Development to production: and covering a number of different options from complete identity to mere compatibility. Great efforts have been made in the past; but I think you would agree with me that much more could have been achieved in terms of collaborated hardware.**

(U) Or, as Senator Nunn noted in a recent report on the conventional balance: "Overall, we have a strong deterrent in Europe, but a poor defense posture if deterrence fails. Our goal should be to strengthen our defense capabilities without weakening our deterrent."*** He listed several reasons why, despite roughly equal resources, NATO's defense posture is somewhat inferior, e.g., "the diversity and differences of equipment and operations among NATO forces weakens their

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*(U) Excerpt from "NATO Final Communiqués, 1949-1970," p. 233, para. 19.

**(U) Verbatim Record of May 1972 DPC Ministerial Meeting, p. 3 (Secret).

***(U) *Report of Senator Sam Nunn to Senate Committee on Armed Services, 23rd Congress, 2d Session, 2 April 1974* on "Policy, Troops, and the NATO Alliance," p. 6.

overall power and ability to work together," and "the failure of the alliance to coordinate support and logistics leads to a wasting of NATO resources and a weakening of conventional capability."*

(U) But given NATO's spotty past record, what hope can there be that the alliance can now surmount the deep-seated obstacles to more efficient collective defense that it has failed to overcome over the last 25 years? There is no easy answer. There is, however, both a threat and an opportunity which may prove the needed catalyst. It is the growing defense resource bind. This means in simplest terms that either NATO must find a more cost-effective defense posture or the viability of the alliance may be compromised.

D. RATIONALIZATION AS THE ANSWER TO NATO'S RESOURCE DILEMMA

(U) Thus *rationalization* is an approach whose time has come. The advent of nuclear parity, the stabilizing of the strategic nuclear balance, and prospective multilateral (and/or unilateral) force cuts all dictate a costly revamping of NATO's posture. Moreover, if NATO, despite its enormous resource investment, probably cannot even defend itself effectively as a collection of separate national forces without the joint logistics, joint communications and compatibility to deploy flexibly, then something must be done. But correcting NATO's deficiencies and modernizing its forces in the traditional manner would surely involve enormous defense budget increases, which are simply not in sight. So how do we resolve the looming dilemma created by these pressing NATO needs versus the increasingly binding constraints on defense resource availabilities discussed at the outset of this paper?

(U) We are convinced that large-scale rationalization could provide the means to achieve the necessary defense/deterrent posture while still living within severe resource constraints. Indeed, rationalization of NATO's posture to put first things first and exploit the cost-saving potential of a more collective defense may be the only viable answer. It may be the only way to free sufficient resources for essential modernization to maintain deterrent credibility vis-à-vis the modernization of the WP. Its potential is the subject of our study.

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*(U) Ibid., p. 8.

(U) Rationalization would also serve two other important purposes. First, it may be indispensable to allowing NATO to absorb mutual or unilateral force reductions with minimum damage to its residual posture. This was the theme of our last report.* Second, the balance-of-payments problems created by the rise in raw materials prices, especially oil, may again raise the painful and divisive issue of compensating the U.S. and U.K. for any balance-of-payments deficits on military account. If so, rationalization offers ways of reducing U.S./U.K. balance-of-payments costs without necessarily raising allied costs, especially if mobilizable allied civil assets could be substituted for existing support forces.

1. Rationalization Should Be Broadly and Flexibly Defined

(U) But what is rationalization anyway? As developed in this report, it is a concept, and a technique, and a program. Conceptually, it is worth defining as broadly as possible to permit including under its rubric any sensible (or *rational*) approach to achieving greater overall effectiveness at no greater (or less) overall cost. In its pioneering study OSD/PA&E defined it as:

> Any action that makes a more efficient use of the defense resources of the NATO nations, including greater cooperation, consolidation, specialization and reassignment of national defense resources to higher priority NATO needs, without changing the total defense funding of the member states.**

Secretary Schlesinger aptly defined it as "simply producing more defense capability with given resources."*** In effect rationalization is seeking the best means of cutting the coat to fit the cloth.

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*(U) Rand R-1231, op. cit.

**(U) *NATO Rationalization Potential*, OSD/PA&E, 31 May 1974 (Secret). The authors participated in the preparation of this study.

***(U) SecDef Statement to June 1974 DPC, para. 15 (Secret).

(U) Viewed in this way, rationalization flexibly encompasses — *but is not confined to* — such subsidiary concepts as standardization, specialization, harmonization, compatibility, and interoperability. It avoids the pitfalls of too narrow a definition, which can be seen in the many allied reservations about the Dutch concept of specialization. The Dutch proposals for specialization (see pp. 23-24) have been interpreted by other allies as a means of evading defense commitments, or even as a Dutch attempt to get out of the nuclear business. These reservations, though vigorously denied by the Dutch, have cast a pall on the Dutch initiative. We think NATO got off on the wrong foot by tending to regard rationalization as meaning primarily specialization by one country or one service in providing certain functions to other allies. Similarly we feel that by becoming hooked too early on standardization — probably the hardest of all to achieve — NATO has tended to neglect easier roads such as harmonization, compatibility, and interoperability, which would in themselves have led inexorably to greater standardization in the end (see Chapter VI).

(U) The rationalization concept also can encompass measures undertaken on a NATO-wide, multicountry, bilateral, or even purely national basis, such as getting more for the money from existing national forces. The FRG force restructuring program (see pp. 22-23) is a major case in point. Indeed, one major virtue of rationalization is that — unlike standardization or other multinational measures — much of it can be undertaken by individual allies, thus avoiding the painful obstacles NATO has confronted in multinational programs.

(U) Nor need rationalization be confined to equipping and configuring forces, or construction and logistic programs. It can also cover planning, doctrine, tactics, and above all setting rational priorities. And it encompasses institutional changes in NATO's structure to organize collective defense more sensibly (see Chapter VII).

(U) In sum, one of the great advantages of the rationalization concept is its *flexibility*. It can encompass the whole range of measures NATO might take to generate an optimum defense posture at acceptable cost. *Thus, we strongly urge that NATO adopt a broad conception*

of rationalization to permit exploring the widest possible range of sensible defense measures. The dangers in defining it too narrowly are amply evident and would lead to neglecting productive avenues of approach.

2. The NATO Allies Are Already Interdependent Anyway, So Why Not Take the Next Step?

(U) We are constantly surprised that the NATO allies seem to take so little cognizance of the obvious fact that, for the most part, they are already highly dependent on each other for any effective defense against the threat against which most of them posture. Indeed, this is why NATO was created in the first place, though it has never carried the logic of collective defense very far. True, the European allies have long since recognized their dependence on U.S. nuclear power, and planned accordingly.

But the fact of the matter is that *all allies (the U.S. included) are also dependent on each other for conventional defense as well.* It goes without saying that no single European ally could defend itself against WP attack without massive help from its allies. Nor could the U.S. defend Western Europe unilaterally, and its loss would be a crippling blow. This is why Secretary Schlesinger says that: "Rationalization will acknowledge, more than create, interdependence."* The latter is a fact of life. But failure to acknowledge it more fully may well condemn NATO to increasing impotence at a time of severe resource constraints.

3. On the Other Hand, Rationalization Does Not Necessarily Mean Integration

(U) While the logic of interdependence clearly suggests a truly integrated common defense posture as the ultimate solution, the political obstacles make this academic in the main. The strength of European

*(U) SecDef Statement to June 1974 DPC, para. 19 (Secret).

nationalism makes revival of schemes like the EDC politically unrealistic at this time. It is equally hard to envisage the U.S. and Canada subverging their independent defense establishments in a NATO entity. A virtue of rationalization is that it does not call for the politically unachievable but is more a halfway house. While some greater integration may be not only militarily desirable but politically feasible (e.g., a common air defense warning and control system — see Chapter III, or a common AFCENT LOC — see Chapter V), rationalization in general would envisage mostly more modest steps, often on a purely national basis. Experience suggests that NATO must learn to crawl before it learns to walk.

4. Nor Does Rationalization Have to Be NATO-Wide

(U) Our view of rationalization as a flexible instrument also avoids such issues as Atlantic-versus-European approaches, the center versus the flanks, or the *ohne mich* attitudes of allies like France or currently Greece. For example, where a EUROGROUP approach seems more likely to be productive than operating through the NATO machinery, the former should be pursued. As we understand it, this is U.S. policy (though we sometimes wonder). Similarly, we think that many rationalizing measures can be more profitably confined initially to the Center Region (on which our study concentrates), rather than expanded to encompass the often quite different problems of the flanks. In yet other cases, two or three countries or services might profitably get together (as in various production consortia).

(U) To take another example, the rationalization concept might usefully be employed to bring France closer to the alliance again in those informal ways that probably represent the limits of the possible. We understand the arguments for making France pay a price for its withdrawal, lest others follow her example. But it is equally plain that France's contribution is highly relevant to minimizing the costs of effective common defense. Somehow this dilemma must be resolved, and we suggest various measures in Chapter VIII.

5. Last but Not Least, the Necessary Resources Are Available If NATO Only Uses Them Wisely

(U) If defense budgets in real terms remain no greater than at present, or even decrease, could NATO nonetheless free enough resources out of its own hide both to remedy present deficiencies and permit adequate modernization? This is a crucial question, to which there are no easy answers. Obviously, much would depend on the extent of any cuts and on the degree of rationalization that proved feasible in practice.

(S) But as we stressed earlier, NATO's defense outlays are cumulatively impressive, and likely to remain so even after cuts. After all, GPF budgets totalled over $53 billion in 1974 (including only that portion of the U.S. budget — $18 billion — for NATO-committed forces). In a preliminary study that looked only at a modest number of specific rationalization options, OSD/PA&E estimated that some $5.6 billion could be saved and shifted into priority improvements in the Center Region alone.*

(U) Though objections are raised that many tradeoffs would entail giving up assets that already represent sunk costs, e.g., naval vessels, the point is that these *are* sunk costs. So why keep throwing good money after bad? Moreover, the great bulk of all allied defense budgets goes not for investment or equipment, but for manpower (some 56 percent of our DOD budget and 67 percent of the Army's) plus O&M. These outlays *are* largely fungible, and are where the greatest resource shifts are possible.

(U) Another way of assessing the resources available for rationalization is to compare NATO-committed versus national forces. Every ally (even the FRG with its border police) maintains sizable national forces often of marginal utility. Revamping many of these to assist in NATO defense could do much to overcome NATO's deficiencies at low cost.

(U) NATO's 14 separate national overheads, in most cases for three or even four separate national services, are another source of cost savings. So too are all the separate training bases. Outdated force

*(U) *NATO Rationalization Potential*, op. cit. (Secret).

structures that use scarce active manpower wastefully offer yet other opportunities for savings. Even the cumulative existing costs of all these national outlays have never yet been calculated. Hence a useful first step for NATO would be simply to assemble these figures. We think they would be revealing.

(U) Lastly, the probable costs to NATO of failure to rationalize are suggestive of what might be accomplished. Callaghan estimates, admittedly crudely, that NATO is wasting over $11 billion per annum by failing to reap the full benefits of common R&D, joint procurement, and common support.* We cited on p. 5, General Goodpaster's estimate to the CNAD that "we are losing at least 30 percent and in some areas 50 percent of our capability due to lack of standardization."

(U) All in all, it is hard to avoid the conclusion that enormous possibilities are opened up by rationalization -- if NATO has the will to bite the bullet -- without substantial added budget costs. The choices involved in resource transfers would be painful and certain calculated risks would be involved. But the real issue is whether NATO can afford not to bite these bullets. Is there any other viable alternative if NATO wants to preserve a credible defense?

E. NATO RATIONALIZATION ALREADY HAS ITS SECOND WIND

(U) As mentioned earlier, we are not suggesting anything particularly new. One form or another of what might be termed rationalizing measures have been a recurrent feature of the NATO scene. But several recent developments embolden us to think that it is becoming a major concern: (1) the 1975-1980 FRG force-restructuring program; (2) the Dutch specialization initiative; (3) U.S. urging of rationalization as well, and such U.S. measures as the Nunn Amendment conversions to teeth from tail; (4) the creation of Allied Air Force Central Europe (AAFCE) as a major step toward rationalizing the Center Region air posture; (5) the rationalization studies being undertaken under the aegis of the Executive Working Group (EWG) of the DRC in Brussels; and (6) the recent

*(U) Callaghan, op. cit., pp. 22-36. He regards his estimate as conservative and probably grossly understated.

British defense review, which largely resulted in cutting forces devoted to other missions in order to maintain an effective U.K. contribution to the NATO Center Region.

1. The FRG Force-Restructuring Exercise

(U) In our view this is perhaps the most striking new development in NATO over the last several years. It is a remarkable example of far-sighted rationalization on a purely national basis. The genesis of this program lay in the FRG's realization of precisely the dilemma we have cited as confronting all of NATO — that rising manpower and operating costs were progressively eating up its defense budget, leaving less and less for essential investment and modernization. The FRG's solution was to convene a high-level blue-ribbon panel, which concluded in 1972 that, given rising equipment and manpower costs, only by restructuring the Bundeswehr could the felt need to allocate at least 30 percent of the defense budget for modernization be reconciled with maintenance of the FRG's commitments to NATO. The solution proposed was to save 30,000 active manpower spaces by putting 12 of the Bundeswehr's 36 proposed brigades on cadre status, to be flashed out rapidly when needed from a new 30,000-man special ready reserve of recent conscripts.*

(S) However, the FRG Ministry of Defense (MOD), having decided that keeping all 36 brigades active was vital, came up with an even better alternative. It did so by pruning the active army (and to a lesser extent the air force and navy) of all personnel not deemed essential on M-Day, a solution that still permits converting 30,000 active personnel into the new reserve. Going a big step further, the MOD is also restructuring the Bundeswehr between now and 1980 to optimize it for halting an armor-heavy WP blitzkrieg. Most unit strengths are being streamlined, more units are being created, and armor and AT weapons will be sharply increased (see Chapter II). This FRG program is such a notable example of what can be done while holding down costs as to be in general a valid model for other NATO allies. We use it as such in subsequent chapters.

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*(U) *The Force Structure in the FRG, Analysis and Options, 1972-1973*, Report of the Force Structure Commission of the EWG, Bonn, 1972, pp. 26-32.

2. The Dutch Specialization Initiative

(S) In June 1973 the new Dutch government made an imaginative proposal that NATO systematically study how to achieve greater defense efficiency via greater specialization among Center Region allies. In their view, the smaller allies in particular could not be expected to maintain balanced forces, especially at rising costs, though they have doggedly insisted that their goal is not to reduce contributions to NATO.* The resulting preliminary study of the possibilities of specialization laid on by the DPC was not very productive, but the Dutch have continued to press the need for more rational use of NATO's collective defense outlays via specialization, etc., along lines similar to those we argue in this report. For example, at the June 1974 DPC, Defense Minister Vredeling argued that "specialization of tasks and standardization of equipment" are essential to "more effective use of limited available resources." Unfortunately, the restructuring program proposed by the Dutch for their own national forces is far less acceptable to NATO than that of the FRG. It contains serious flaws. In particular, it would reduce the ready contribution of the I Netherlands Corps to the NATO shield below acceptable limits. Other allies have also seen in the Dutch proposals an effort to shift some defense burdens to other allies. But however unsatisfactory the specifics, in principle the Dutch initiative points in precisely the direction NATO as a whole will have to take.

3. U.S. Rationalization Initiatives

(S) Third among encouraging recent developments, the U.S. not only enthusiastically endorsed the Dutch initiative but urged expanding it to cover broad-scale rationalization of NATO's force posture as well.** Secretary Schlesinger vigorously advocated rationalizing measures in his June 1974 DPC statement, as having potentially "a major payoff."*** The U.S. has led in proposing actual rationalization and specialization (R/S) options, and in suggesting a *matrix* approach to show the cumulative costs

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*(U) See, for example, *USNATO 3028*, 23 June 1973 (Confidential), which gives the Dutch proposal, and *USNATO 3416*, 18 July 1973 (Secret).

**(U) The Dutch had included "rationalization" in their original proposals, but their operative focus seemed to be mostly on specialization.

***(U) DPC-VR(74)U, Addendum, p. 13 (Secret).

and savings to each ally from all measures proposed (see p. 30).* The unique merit of this matrix is that it provides a basis for balancing burdens on an overall rather than option-by-option basis, thus facilitating equitable sharing of any burdens. We think it will prove invaluable to this end.

(U) The Nunn Amendment mandate to DOD to either withdraw 18,000 U.S. troops from Europe by end-FY 1976 or convert up to 18,000 spaces from support to combat also ranks as a major rationalization measure, again on a national basis. The U.S. plans chiefly to add two brigades to USAREUR, to increase the peacetime strength of other army combat units, and to add further combat aircraft. This conversion to teeth instead of tail will visibly increase the Center Region deterrent and initial combat strength.

4. The NATO EWG Studies on Rationalization

(U) Primarily as a result of the Dutch and U.S. initiatives, rationalization and specialization have at least been formally launched as a joint NATO endeavor. In December 1973 the DPC laid on a series of studies under the aegis of its Executive Working Group. Other allies have also made suggestions and studies are under way by a series of EWG-sponsored working groups, though to date no concrete decisions have been taken. After rationalization was again blessed by the DPC in December 1974, the EWG has sensibly decided to focus first on such less controversial areas as training, communications, and logistics.

5. Rationalization of the Center Region Air Posture

(S) A fifth major encouraging development is the NATO program, spurred by the U.S., to revamp the Center Region's tactical air posture so that it can fully exploit the inherent flexibility of air power against a WP blitzkrieg. It entails welding the six Center Region national air forces into a single air instrument responsive to a new

*(U) The first matrix and set of preliminary illustrative options was presented to the EWG in March 1974. A revised and expanded version entitled *NATO Rationalization Potential* was submitted in July 1974.

centralized headquarters Allied Air Forces Central Region (AAFCS), capable of deploying national air contributions wherever most needed along the entire central front. We discuss this further in Chapter III, and merely point to it here as a major step toward more rational utilization of Center Region air power. In fact, NATO's air forces have far outstripped its ground and naval forces in moving toward rationalization.

F. SUBSTANTIVE GUIDELINES FOR RATIONALIZATION

(U) In this section we attempt to develop some general principles for exploiting the full potential of rationalization. They are naturally quite tentative and by no means complete. We discuss them here only in general terms and deal with more specific applications in subsequent chapters. We are under no illusions that the 14 NATO allies could reach early political agreement on any such far-reaching set of guidelines. Nonetheless we are convinced that, implicitly or explicitly, NATO will have to move in these directions if it is to do more with less.

(U) 1. *NATO must frankly acknowledge that it confronts a growing resource bind* and concentrate on first things first. While it is always tempting to exhort laggard allies to increase defense spending, and while formulas proposing that a fixed level of GNP be devoted to defense help serve this purpose, realistic NATO planning must be at least tacitly based on the assumption that real resource inputs will probably decline while manpower and modernization costs will continue to rise (see pp. 1-3). Only if NATO faces up squarely to this prospect will priorities be tightened and the best use be made of the impressive resources that would still be available.

(U) 2. *NATO must reach better agreement on what posture its strategy implies.* It has the basis for a common strategy — and a good one — in MC 14/3. But agreement was only reached by fuzzing over several key aspects of what it really means. For example, everyone agrees that flexible response means an initial conventional defense, but the allies differ widely on how long or how stalwart it should be. Similarly, forward defense obviously means a different thing to the FRG than to some other allies who are clearly not posturing to defend well forward. Ambiguity

has its uses in deterrence, but it is the enemy of sensible planning and programming. If the FRG is really serious about forward defense, it would seem rational for it to make a greater effort to help other allies (Benelux, U.K., U.S., and obviously France) strengthen their M-Day forces in Germany. Similarly, it is irrational for the U.S. to posture WRM for at least a 90-day effort when most allies are not even up to a 30-day level yet. It would be wiser to spread munitions stocks more widely to make a comparable level available to all.

(U) 3. *On the principle of first things first, top priority must be given to initial ground/air defense against a WP blitzkrieg.* If budget add-ons cannot be counted upon, then the NATO allies can no longer afford to disperse resources over too wide a range of capabilities. Instead they must be redirected into meeting highest priority needs. To us, this is simple common sense. The best deterrent is obviously one that convinces the chief potential enemy that he cannot achieve a quick decisive victory in the crucial theater.* Moreover it is not necessary to debate posturing for short versus longer war. Unless NATO can hold in the short run, posturing in Europe for sustained conflict becomes academic. Thus a high-confidence initial defense posture is not only the best deterrent but indispensable to buy the time to posture against a longer war. This means in practice highest NATO priority to halting well forward the armor-heavy blitzkrieg for which the WP is so obviously postured. Given the NATO deficiencies previously discussed, this entails sufficient armored and antiarmored forces and a strong tactical air posture. As we suggest later in this report, it may be necessary to shift resources from other purposes such as protecting the SLOC or rear areas (see Chapters II-IV).

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*(U) What is not so widely grasped is that this also helps deter lesser actions, e.g., against the flanks. We are at a loss to understand the fatal fascination of many analysts with limited WP initiatives on the flanks or in Berlin (or the notorious Hamburg land grab). Admittedly, these might be militarily feasible, but their political impact would be an unmistakable warning to NATO. Unless quickly followed up they would only lead NATO to rearm and mobilize, making ultimate WP success even more problematical. Thus a minor land grab could forestall a major one.

(U) 4. *On the same principle of first things first, marginal or low priority national forces or overhead must be ruthlessly pruned to free resources to meet higher priority needs.* If NATO must both meet existing deficiencies and modernize out of its own hide, then resource shifts are essential. Lower priority outlays must be pruned to free resources for tradeoff into meeting higher priority needs. We suggest in various following chapters numerous examples of how this might be done.

(U) 5. *Restructuring and streamlining of NATO forces is essential to reduce wherever possible the use of increasingly costly active manpower.* To free sufficient resources for modernization, manpower and O&M costs must be held down. The solution is rigorously to streamline active forces and their support and overhead — the solution adopted by the FRG. The allies — the U.S. included — cannot afford to regard existing T/Os or support ratios as sacrosanct unless they want to end up spending all their money on maintaining existing forces at the expense of modernization. Thus we see force restructuring as a vitally needed rationalization measure, and suggest numerous applications in chapters II-V.*

(U) 6. *A "hi-lo" mix of ready forces and quickly mobilizable trained reserve formations is essential to meet NATO needs.* Given high manpower costs, NATO cannot meet its needs entirely with expensive active forces. Greater reliance on reserves is the only rational way to meet NATO force requirements at acceptable cost. But to be optimally effective such reserves must be well trained and quickly mobilizable — which implies (a) active duty cadres; (b) more extensive training; (c) adequate equipment fill; and (d) affiliation with active units in some cases (see chapters II and III).

(U) 7. *The NATO allies must shift from balanced national forces toward a concept of balanced collective forces.* "Going it alone" must be increasingly replaced by a partnership approach if optimum use of constrained defense resources is to be achieved. While this will only

*(U) See also our previous report, R-1231, on *Restructuring NATO Forces to Compensate for MBFR*, op. cit.

acknowledge existing interdependence, it is indispensable to a credible deterrent/defense posture at acceptable cost — and to the flexible employment of existing forces vital to this end. The next five guidelines spell out more precisely what is needed.

(U) 8. *NATO's air assets, especially in the Center Region, must be pulled together via centralized command, control, and communications (C^3) to take full advantage of the inherent flexibility of airpower.* As previously mentioned, several steps to this end are under way, but a lot more needs to be done (see Chapter III).

(U) 9. *Interoperability and compatibility of forces and doctrine, plus standardization to the extent feasible, must be stressed.* Past experience shows that the ultimate goal of standardization — however desirable — will be very difficult to achieve in many cases. Where this is so, it should be approached incrementally via stress on such lesser measures as interoperability and compatibility between national forces and equipment (see chapters II, IV, and VI).

(S) 10. *Consolidation of training, procurement, maintenance, and other programs should be stressed.* This could produce significant savings and, equally important, enhance compatibility and even standardization over time. For example, OSD/PA&E estimates that consolidating basic jet and helicopter pilot training in the U.S. could save roughly $500 million over five years.* We suggest options in just about every subsequent chapter.

(U) 11. *The pernicious doctrine that logistics is a national responsibility must be progressively superseded by common logistics approaches.* Again, this would produce sizable savings over time, but even more important would be its contribution to the flexible employment of NATO forces. Above all a common Center Region LOC is indispensable to permit flexible employment of available forces, especially optimum use of U.S. reinforcement (see Chapter V).

(U) 12. *Communications too could profitably be rationalized.* This eats up a surprisingly large fraction of NATO resources, probably well over $4 billion in the next five years. Significant savings could result from combining features of national systems into an integrated nontactical

*(U) *NATO Rationalization Potential*, op. cit., p. 6, and Annex B-2.

NATO communications system.* Tactical communications must be made compatible to permit national forces to function effectively together (see Chapter VIII).

(U) 13. *Lastly, NATO must rationalize its institutional structure to reduce proliferation and give NATO organs more clout.* While some savings might be possible, the primary goal here would be to strengthen the multinational NATO organs vis-à-vis national authorities in order to facilitate rationalization. Above all, better machinery to develop and follow through on tough-minded priorities is badly needed (see Chapter VII).

G. MAKING RATIONALIZATION WORK IN PRACTICE

(U) Defining rationalization and suggesting generalized guidelines is relatively easy. What is more difficult is to make it work in practice, viz a cumbersome 14-nation bureaucracy like the NATO structure, which suffers from having all too little clout with the 14 nations involved. In effect, NATO is simply not institutionally geared to deal with broad-scale rationalization. Its own past frustration in attempting to agree on collective defense measures amply indicates the difficulties involved.

(U) The big risk is that, however desirable rationalization may seem, it will not achieve the necessary sustained momentum over time needed to achieve its full potential. For one thing, rationalization is not a short-term approach that can be laid on once and for all and then forgotten. It is rather a continuing process of interaction. Little would be accomplished if it turned out to be essentially a one-shot operation, yielding a few concrete initiatives but then running out of steam, as has happened often in NATO. A related risk is that of suboptimization — a series of halfway measures that convey the impression of progress but don't in fact add up to enough to make the effort worthwhile.

*(U) Ibid., p. 6, and Annex B-1.

(U) But past NATO experience is also suggestive of ways to minimize these risks that rationalization won't be given a fair try: (a) sustained high-level leadership to prevent it from degenerating into a routine bureaucratic exercise; (b) viable machinery for the purpose; (c) procedures that help keep focus on priorities and show both the cost/benefit tradeoffs and how costs can be equitably shared; and (d) techniques for forcing NATO to think partnership, such as common funding mechanisms. We discuss some of these below.

1. Focus Must Be Kept on Rationalization as a Whole via a Matrix Approach

(U) The temptation must be resisted to let various rationalization measures be treated only on their individual merits in relevant expert bodies. Their expertise is important, but to have real impact, rationalization must be approached on a broad scale that will permit offsetting increased costs and benefits in some cases against decreased costs in others.

(U) The U.S. proposal for construction of a *matrix* or scoreboard on which each nation's gains or losses can be balanced out on the bottom line is indispensable to this end. Painful as it is to construct such a matrix, with the interminable controversy over cost and other data it will entail, the effort is emphatically worth the candle. To construct and keep current a valid matrix, however, will require more and better data than presently available to NATO, especially on costs (see p. 33 below).

(U) The other great advantage of the matrix is that it permits doing what has never been done before in NATO -- *matching savings against offsetting force improvements* to show how much could be achieved at equal overall cost.* Thus it is not a device for cutting costs, but rather one for showing how to finance modernization via tradeoffs (see below).

*(U) In its partial preliminary study of *NATO Rationalization Potential*, op. cit., OSD/PA&E identified potential resource transfers totalling over $5.6 billion.

2. Consistent High-Level Focus Is Needed

(U) It is almost axiomatic in NATO that nothing gets done on an alliance basis unless it is pushed and blessed from the top. NATO's coalition nature is such that its civil and military bureaucracy has power only to plan, study, and exhort, not to decide. Collective decisions at ministerial level are almost invariably required on any matter or substance, even if quite minor. Hence rationalization must become more or less a fixed item on every ministerial agenda, if its potential is to be realized.

(U) Suitable high-level machinery for this purpose is also essential. Experience suggests that if rationalization gets bogged down in the interminable procedures of the cumbersome NATO and national bureaucracies, and is thus inevitably fragmented, little will be done. Hence having the Executive Working Group of the DRC as the overall monitor (as also on basic issues) was a sound beginning, and must be continued. The worst outcome would be if issues were dealt with exclusively in expert panels and subgroups, and never pulled together at a higher level where tradeoffs between them could be considered in an overall matrix.

3. Trade-offs Must Be Made Explicit

(U) Given the severe resource constraints that dictate rationalization, essential force improvements must be paid for out of NATO's own hide. This means that *trade-offs*, either within national budgets or on a multinational basis, is the name of the game. We follow our own prescription by offering some explicit trade-off options in the succeeding chapters. But such trade-offs, which are hard enough to achieve within one country's defense budget, will be doubly difficult between sovereign alliance members. Here is an added powerful reason for high-level focus and machinery to prevent trade-off options from being buried in the bureaucracy, or rejected on narrow grounds. But some machinery must be created to make NATO commanders and national authorities consider and face up to explicit trade-off choices.

(U) The matrix approach will be indispensable here. Another device to compel trading off the cost of maintaining existing forces versus

needed investment would be the adoption as a NATO-wide guideline of the FRG plan to reserve 30 percent of its defense budget for investment. Our point is not that 30 percent is necessarily the right figure, but rather that if the NATO Ministers agreed on some percentage goal of this sort (averaged over a five-year period), it would help to induce countries to rationalize their existing force posture in order to free resources to meet investment goals. It had precisely this effect in the FRG case.

4. Means Must Be Devised to Compel Focus Strictly on Priorities

(U) But tradeoffs must be assessed against some set of priority objectives if NATO must do more with less. Failure to exert sufficient pressure for doing first things first has been one of the NATO bureaucracy's greatest weaknesses. In Chapter VIII we urge strengthening the clout of NATO's central organs vis-à-vis national staffs. Priority issues too can only be settled at the highest level, another reason why rationalization needs top-level sponsorship. Thus we see great merit in the current U.S. proposal for institutionalizing the priority process by making ministerial guidance for biennial force planning contain specific priority guidelines.

(U) NATO's military authorities also must bite the bullet in advising on priorities, even where these conflict with national preferences. As mentioned earlier, they have been quite reluctant to do so. We suggest that the MC and MNCs be required to modify their present system whereby so many force proposals are accorded high priority that it robs the process of much meaning. First priority items must meet two criteria -- they must both have a high payoff and be feasible in budget and other terms. Too often the latter criterion is ignored. Another device, though rather arbitrary, might be for the Ministers to insist that no more than 25 percent (in terms of cost) be labelled first priority. And if an ally like the Netherlands is determined to cut its forces, SACEUR must be prepared to advise it what should be cut first and what last (a notable omission from SHAPE's comments on the recent Dutch proposals).

5. NATO Machinery Is Needed to Provide Adequate Costing Data

(U) It will simply not be possible to develop tradeoffs, construct a valid matrix, assess responsiveness to priorities, and take sensible rationalization decisions without better cost data than are now available to NATO. As we acknowledge in the Preface, this is a serious deficiency in our own study. Its lack has been a far more serious impediment to NATO planning of more cost-effective postures for many years. At U.S. urging, NATO began during the 1960s to gather a data base and construct cost models, particularly at the SHAPE Technical Center (STC). In 1967 a requirement was laid down for annual cost reports (PESRs). But the U.S. among others soon found this a nuisance, and about the only multilateral costing capability now extant in NATO is a handful of harassed bureaucrats on the International Staff (IS) and a few costers at STC, who were able, for example, only to cost crudely some 60 percent of SHAPE's 600 1973-1978 force proposals and whose capabilities since then have reportedly diminished as a result of budget cuts.

(U) We must face the fact that rationalization simply cannot be carried out unless an agreed data base and costing machinery is developed. Otherwise proposed measures and tradeoffs will bog down in interminable bickering over comparative costs involved. Thus if NATO is serious about rationalization, urgent steps are needed to set up and staff properly a NATO costing facility. Since proposals to increase the NATO staff budget always have tough political sledding, we suggest that the STC itself be placed directly under the IS (though it would also remain available for SHAPE work), and that its costing component be increased.

6. Common Funding Is a Highly Useful Device to Promote Joint Programs

(U) Almost invariably a critical issue in joint NATO programs is how they should be funded and what share each participant should bear. In the case of purely national R/S measures, this is no problem, while in some other cases separate bilateral or trilateral deals will suffice. But if multinational rationalization programs are to work in practice, some common funding and/or cost-sharing mechanisms are essential. We

suggest a quite pragmatic approach to this problem. Some R/S projects might qualify for inclusion under the NATO Infrastructure Program, in which case a funding and cost-sharing arrangement already exists. Moreover, the definition of eligible infrastructure projects might be broadened to permit including more R/S projects. Since many of the measures we propose apply only to the Center Region, it might be desirable to set up a separate Center Region fund for certain categories of common-user programs, perhaps shared proportionally to each ally's present percentage infrastructure contribution. Tim Stanley's concept of a NATO Common Fund could be adapted to support R/S.* In the defense R&D and procurement field, another provocative study has suggested a North Atlantic Common Defense Market and agreed goals for common defense procurement (see Chapter VII).**

7. Last, but by No Means Least, the U.S. Must Put Its Money Where Its Mouth Is

(U) We pointed out earlier how the U.S. is at one and the same time the strongest advocate of collective defense in NATO and the worst offender in terms of "go it alone." This has led to persistent allied suspicions that U.S. advocacy of rationalization and standardization is really a technique for selling U.S. equipment and getting more burdensharing from our allies. Thus, given the still dominant U.S. role in NATO, rationalization will work only if the U.S. puts its money where its mouth is, and validates its leadership in concrete ways by engaging in multilateral tradeoffs and buying European equipment if our allies buy American. We suggest numerous options to this end in the chapters that follow. But for this to happen *the U.S. services must get in the habit of thinking NATO*, and not unilaterally. The growing realization that the U.S. can no longer go it alone in its contribution to defending Western Europe has not yet permeated through all levels of command. It is still far from dominating U.S. planning for Europe. To bolster allied confidence in interdependence and overcome allied feelings of inadequacy vis-à-vis the WP, the U.S. has a special responsibility to be a better partner to its allies.

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*(U) Callaghan, op. cit., pp. 36-49.

**(U) Callaghan, op. cit.

II. RATIONALIZING NATO GROUND FORCES

(U) The deficiencies in NATO's conventional ground force posture -- especially in the Center Region -- are probably the most serious in NATO's overall defense capabilities. This is not to imply that NATO's air and naval posture is satisfactory, merely that NATO seems even worse off on the ground. Though NATO has deliberately avoided over the years assigning relative rankings to its weaknesses, its own analyses, such as AD-70, amply suggest this conclusion.

(U) Such ground deficiencies were more tolerable when the alliance could rely upon a predominantly nuclear strategy. But as we stressed in Chapter I, NATO's 1967 adoption of the MC 14/3 flexible response strategy, and Soviet achievement of nuclear parity, have made strengthening NATO's conventional shield far more essential than before. Logically, these developments should have led to a corollary shift in program priorities. However, it is hard to escape the conclusion that no such major shift in real priorities took place.

Thus, rectifying the deficiencies in the Center Region ground shield should receive highest priority in NATO -- something they never had before. This is not to deny that there have been many worthwhile improvements in NATO's conventional ground posture. The point is rather that these have been incremental and relatively unstructured, without a clear sense of overall NATO priorities. AD-70 was a partial step in the right direction, but as the Chairman of the Military Committee pointed out to the June 1974 DPC meeting, NATO is still far short of where it should be in meeting the AD-70 goals.* Moreover, AD-70 was a "wish list" that did not impose tough choices among competing priority demands or even address some of NATO's most serious ground/air deficiencies.** As a result, the allies have found it easier to follow widely divergent paths, influenced as much by national/service doctrine and parochialism as by NATO-approved guidelines (see Chapter I).

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*(U) DPC-VR(74)15, Part II, p. 33 (Secret).

**(U) See R-1231, op. cit., pp. 27-29.

(U) Another factor dictating greater focus on remedying NATO's ground force deficiencies is that *ground forces are the ones likely to be hit hardest by any MBFR or unilateral cuts.* This is implicit in both the NATO and WP negotiating positions and in the sheer fact that ground forces are the largest component of the forces in the geographic area under discussion. Since ground forces comprise two-thirds of forward deployed U.S. manpower, they also are under the heaviest Congressional pressure for reduction. Thus, if NATO's ground force deficiencies are already its most serious, compensatory measures are needed to ensure that MBFR does not degrade them further to an unacceptable degree.

(U) Nor is rectifying existing deficiencies the only problem. NATO's ground forces urgently need *modernization* to keep up with improving WP capabilities. To name just a few items, second and third generation AT missiles and new short-range air-defense systems (SHORADS) will be very expensive, as will improved conventional munitions. But the high manpower costs of NATO's ground forces, by nature manpower-extensive, threaten to eat up resources needed for modernization. One estimate is that simply maintaining the current U.S. Army force at current budget levels would, in a few years, consume the Army's entire budget, leaving nothing for modernization. So something will have to give.

A. CHIEF DEFICIENCIES IN NATO'S CURRENT GROUND POSTURE

(S) Before examining how rationalization could help resolve the above problems, it is essential to define more specifically what NATO's chief ground deficiencies are. What follows is our own synthesis of AD-70, SACEUR's combat-effectiveness reports, and other NATO and U.S. studies. Far more extensive and detailed shopping lists of deficiencies are produced for the biennial NATO force goal exercises, but as we stressed in Chapter I, their lack of clear priority ranking — and their sheer number — act as a disincentive, rather than the reverse. Besides, to correct them all would cost more than the NATO allies could reasonably be expected to fund.

1. The Core of the Problem: NATO's Ground Forces Are Not Properly Organized, Deployed, Equipped, and Trained for Defense Against the Prime Threat — An Armor-Heavy WP Blitzkrieg

(U) Given the risk of surprise attack, NATO must find better ways to delay and attrit Soviet armored spearheads until NATO can fully mobilize. Two other keys to a successful defense are (a) a balanced capability to defend in depth on all key avenues of attack, and (b) powerful, highly maneuverable counterattack forces to prevent successful breakthroughs. Yet instead of being configured for this primarily defense mission, most NATO ground forces are still structured essentially for offensive maneuver.

2. NATO Lacks Sufficient Ground Combat Forces for Forward Defense in Depth

(U) Although overall NATO active manpower compares quite favorably with that of the WP (even in the Center Region, including France), it fields far fewer major combat units of the sort needed to cope with the WP threat. Since NATO must grant the WP the initiative as to time, place, and weight of attack, this condemns NATO to a thin linear defense without sufficient depth to contain penetrations without permitting breakthroughs. Moreover, NATO's politically mandatory forward strategy militates against trading too much space for time — and there is not much space to trade in any case without losing most of the FRG.

(S) The Belgian and Netherlands corps sectors are generally regarded as the weakest, and NATO military authorities often cite their weaknesses as an invitation to the WP to mount its main weight of attack against these sectors of the NORTHAG front. Forward-based Dutch forces of less than two brigades number only 4400; while the I Belgian Corps in the FRG is somewhat larger, two brigades are soon to be withdrawn. Both are notably weak in heavy AT weapons. In all, no less than 13 allied brigades in NORTHAG are stationed a considerable distance behind their GDP positions, and NATO military authorities question whether many of them could deploy forward in time to meet a quick WP thrust.

3. NATO Lacks Flexibility to Shift Forces to Meet the Main Weight of WP Attack

(U) Besides, Center Region ground forces are deployed in a "layer cake" of national corps sectors, with only limited possibilities for mutual reinforcement. This is because the forces in each national corps sector have their own LOCs, their own weaponry, their own largely incompatible communications, and their own tactics and procedures, which tend to confine them rather rigidly to operating in their own sectors.* In many respects, their weaponry and ammo are not interchangeable. In effect, despite the superstructure of higher NATO headquarters, it would seem that the various Center Region allies would have to fight their own largely separate wars in their own sectors. This is why the current CINCCENT worries lest he have no wartime mission. He can't easily redeploy national forces outside their own sectors, and he has few reserves to allot.

(U) We frankly doubt that NATO could actually fight effectively in this manner. At present, it would be very difficult flexibly to redeploy forces from one sector to another, or from CENTAG to NORTHAG, to meet a developing threat. These are just the types of problems that NATO is trying to meet on the air side by new command arrangements and improved C^3. But relatively little has been done as yet to overcome the equally serious ground force problem. Moreover, as pointed out in Chapter I, NATO's forces are growing farther apart, not closer together. For example, twelve NATO allies are developing 13 different types of antitank missiles and studying yet eight more.

4. NATO Lacks Sufficient Antiarmor Capability to Deal with WP Attack

(S) There is wide consensus within the alliance that this is a critical deficiency. It has been highlighted in AD-70 and numerous

*(S) From north to south their frontages in NORTHAG are I Netherlands Corps — 55 km., I FRG Corps — 60 km., I U.K. Corps — 55 km., I Belgian Corps — 35 km. Then, in CENTAG are III FRG Corps — 55 km., V U.S. Corps — 60 km., VII U.S. Corps — 185 km., and II FRG Corps — 190 km., on a total front of 695 km. AFNORTH must also defend about 100 km. of frontage in the FRG.

other reports.* Considerable progress has been made, especially over the last few years, in strengthening NATO tank and AT capabilities to cope with this problem; for example, the FRG's force restructuring (see pp. 61-62) is primarily addressed to it. But serious gaps remain, particularly in the U.K., Dutch, and Belgian sectors. NATO is also weak in its ability to slow down an armored advance with flexible tactical barrier systems that would greatly complicate the enemy's problem.

5. There Are Too Few Augmentation Forces and Currently Most Would Arrive Too Late to Help Contain an Initial WP Blitzkrieg Thrust

(U) This problem compounds those already cited. The Inspector General of the Bundeswehr recently called reserves "the weakest point of NATO's military posture."** However, because of concern over a quick WP surprise attack before NATO could mobilize, the NATO military authorities have long laid primary stress on ready M-Day forces, to the comparative neglect of well-trained, quickly mobilizable reserves.*** Such reserves as do exist receive for the most part wholly inadequate peacetime training.† But given the escalating costs of active manpower, reserves may be the only solution NATO can afford to the need for more troops for defense in depth, plus more flexibility to overcome the maldeployment and layer-cake problems.

(S) Most NATO field commanders — even in NORTHAG — seem reasonably confident of their ability to contain the first wave of a Pact attack, given even a few days' warning. However, they express grave concern over their ability to keep holding for more than a few days as WP

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*(U) Many NATO forces still have first generation ATGMs, which must be "flown to the target with a joystick." These are so much less effective than second generation ATGMs as to raise the question as to whether expensive active manpower should be wasted on them.

**(U) American Embassy Bonn Dispatch, A-93, 2/19/74, p. 2 (Secret).

***(U) See Rand R-1231, pp. 29, 32, 75, 237, and 271 for discussion of this problem.

†(S) For an excellent analysis of Center Region army reserve establishments, see Colonel Neil Creighton, "Mobilization of NATO Ground Reserve Forces in Central Europe," State Department Senior Seminar Case Study, 1973.

pressure builds up: They simply lack sufficient additional ground forces for this purpose. While the U.S. and France could provide numerous augmentation divisions, French availability is uncertain, while currently, many U.S. forces would be slow to arrive. Moreover, given the layer-cake problem, it might be difficult to employ U.S. or French forces in other national sectors.

6. Most NATO Ground Forces Are Weak in Field Force Air Defense

(S) Most NATO allies appear to lack sufficient air defense gun and missile units to cope adequately with an all-out WP air effort to support an armored blitzkrieg. The 1973 Arab-Israeli war showed the difficulty of providing close air support when confronted with an enemy force having powerful air defenses. Again, it is dangerous to analyze from FRG and U.S. Army holdings, because the other allies appear considerably weaker in this area. This deficiency, too, was highlighted in the NATO's spring 1974 review of basic issues.

7. Sufficient War Reserves Are Lacking

(S) Here, also, the picture is extremely spotty. The U.S. programs for a 90-day stock level, while some allies have only a few days' supply of certain critical items. While present plans would permit all Center Region allies to reach a 30-day level by 1978, we question whether this is likely under foreseeable constraints. Moreover, much stockage is poorly located way behind GDP positions; there is a serious shortage of forward storage sites and lack of a logistic system that can move stocks forward in timely fashion.

(S) Cumulatively, all these deficiencies led SHAPE itself to question whether present NATO Center Region ground forces could "outlast" a WP blitzkrieg.* Consequently, rectifying them clearly demands high, if not highest, NATO priority. While efforts are under way, especially by the FRG and U.S., to cope with these deficiencies, they will take considerable time and money to rectify fully. It is our impression also

*(U) SACEUR's 1973 Combat Effectiveness Report.

that many such efforts to date are too small and incremental to be commensurate with the need, and lack the priority emphasis vis-à-vis other NATO programs that they deserve.

(U) It is not good enough for the Americans and Germans to modernize just their own forces. No matter how well their sectors are defended, a WP breakthrough in the weaker U.K. or Benelux sectors could undo all their efforts. The analogy to the battle of France in 1940 is all too clear, and surely not just to us. As stressed in Chapter I, we are continually astonished that the U.S. and FRG seem to show so little concern about the weak links in the NATO chain.

(U) In addition to the obvious consequence that U.S. forces, by programming for a 90-day war reserve level, might be fighting alone by D+30 or so, there are other implications. War reserves are costly. Every day of war reserve the U.S. provides beyond the capability of its allies to continue the struggle absorbs resources that could be better applied to meeting the D-Day to D+30 problem. Furthermore, if you plan war reserves for a 90-day period, it stands to reason that you develop simultaneously a force structure appropriate for the same period. A force developed for a 30-day conflict could and probably would look far different from a force destined for a 90-day, or longer, conflict.

B. THE CASE FOR RATIONALIZATION AS A SOLUTION

(U) These ground deficiencies will have to be dealt with in a context of severe political, economic, and manpower constraints. Above all, the manpower costs that increasingly drive defense budgets necessarily impact most heavily on the budgets of the most manpower-extensive forces — the armies. *High manpower costs within constrained budgets will eat into necessary investment in modernization far more in their case than in that of other services.* This was precisely the point made by the FRG Force Structure Commission in calling for restructuring of the FRG ground forces.* The decline in conscription periods in continental armies at a time of increasing need for long-service personnel to

*(U) *The Force Structure in the FRG*, op. cit.

man sophisticated equipment will compel increasing reliance on expensive volunteers and further drive up manpower costs.

(U) Hence, NATO must face up to the fact that it cannot rely primarily on the preferred military solution of adding on yet more forces to those presently on hand. Instead, it must accept as a planning assumption probable cuts in real resource allocations, in active manpower strengths, and/or in length of service. And these cuts will necessarily impact most heavily on ground forces, as the most manpower-extensive. Thus, the essential modernization of NATO's ground capability must be financed largely by *trade-offs*, not add-ons. It must increasingly find the resources needed out of its own hide.*

(U) Moreover, it is equally plain that in a severely constrained economic and manpower environment NATO's needs can no longer be met almost solely on the basis of individual national efforts. These would be simply too expensive. Since NATO's national forces are in fact already interdependent anyway (see Chapter I), only by melding their resources on a partnership basis can NATO achieve the sufficiently cost-effective use of its collective resources to meet NATO deficiencies within likely constraints. Rationalizing NATO's existing posture is also the only viable way to free enough resources for continuing modernization to keep up with or ahead of that of the Warsaw Pact. If trade-offs rather than add-ons must be the order of the day, then such measures to cope with Center Region ground deficiencies deserve very high priority.

(U) Above all, rationalization means imposing stringent priorities on the disposition of limited resources — doing first things first in NATO. For example, one crying need is to get the Dutch and Belgians to shift resources, if necessary, into strengthening the I Netherlands and I Belgian corps, which according to SACEUR and other NATO military authorities are the prime candidates for enemy breakthrough in event of a WP clash. It is ironic that in the face of such repeated criticism of their

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*(U) See the similar conclusion of Brigadier Kenneth Hunt, a former senior NATO staff officer, in *The Alliance and Europe: Part II: Defence with Fewer Men*, IISS, Adelphi Paper No. 98, 1973, pp. 1-2. He, too, focuses particularly on ground forces.

deficiencies, the Netherlands and Belgium still devote such sizable resources to meeting other, less pressing needs. Indeed, the Dutch restructuring plan skimps ground force in favor of naval and air force modernization. Since these are precisely the kind of priority issues NATO must tackle, we stress in this chapter options to beef up the Dutch and Belgian ground force contribution to the NATO shield.

(U) In broader terms, we see the following general types of rationalization as essential to meeting NATO's critical ground force needs:

1. Restructuring and streamlining combat forces to optimize them for the NATO defensive (primarily antiarmor) mission, and to make optimum use of increasingly expensive manpower.
2. Reducing less essential ground force missions and capabilities in favor of meeting higher priority needs (e.g., deemphasize home defense).
3. Freeing active manpower for combat roles by altering tail-to-teeth ratios, and finding alternative means of providing necessary support.
4. Relying on cheaper reserve manpower or civilianization wherever possible, especially for rear area and support missions.
5. Consolidating noncombat support, training, and overhead where it would free needed resources and/or provide the required flexibility in deployment and employment of ground forces (this is treated in Chapter V).
6. Stressing harmonization of forces and tactics. and interoperability of equipment, as well as standardization wherever feasible (see Chapter VI).
7. Some specialization of defense tasks, perhaps by the larger powers assuming certain highly sophisticated and costly functions on behalf of the smaller powers (e.g., intelligence, ECM).
8. To the extent that the above measures do not free sufficient resources to meet high priority ground force needs, shifting resources from lower priority uses in other services (e.g., continental navies — see Chapter IV).

(S) One key NATO country is already doing a remarkable job along many of the above lines, though on a purely national basis. This is the FRG in its 1975-1980 force restructuring program. The genesis of this program lay in the FRG's realization that rising manpower and operating costs were tending to eat up the Bundeswehr budget, leaving less and less for modernization. Concluding that only through some reduction in active manpower could essential funds be freed for modernization, a blue-ribbon panel proposed that 12 of the Bundeswehr's 36 proposed brigades be put on partial cadre status, to be fleshed out rapidly in wartime by a new 30,000-man special ready reserve.*

(U) The FRG Ministry of Defense decided, however, that keeping all 36 brigades fully active was essential, and came up with an even better alternative. It pruned the entire active force structure (including navy and air force) of all active personnel not considered essential on M-Day, a move that still permits shifting the 30,000 men into the ready reserve. The MOD plan also called for reorienting FRG ground forces to optimize them for halting an armor-heavy WP blitzkrieg by sharply scaling up their armor and AT holdings. It is extensively restructuring its ground forces to reduce manpower needs by streamlining TO&Es and to give them optimum tactical flexibility for the assigned defensive mission.** Emphasis is being placed on mobile airborne and heliborne corps-level reserves to stem breakthroughs and on a family of new weapons, such as scatterable mines, to form hasty tactical barriers. In our view, this FRG program is such a notable example of what rationalization can achieve within severe constraints that it should be used as a model for the other Center Region allies.

C. R/S OPTIONS TO GENERATE MORE HIGH PRIORITY COMBAT FORCES WITHIN EXISTING RESOURCES

(U) If our analysis of NATO's key ground force deficiencies is broadly valid, then there is a crucial need for more well-equipped ground

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*(U) *The Force Structure in the FRG*, op. cit.

**(U) For example, the T/C of the FRG armored brigade is being reduced from 3400 men in peacetime and 4500 at war strength to 3200 in both peacetime and wartime. The mechanized brigade goes from 3700 or 5200 to 3900.

combat forces to permit carrying out the forward strategy by defense in depth beginning well forward, and to provide more adequate mobile reserves for coping with potential breakthroughs. As described by Brigadier Hunt in his perceptive study on *Defense with Fewer Men*, there are roughly four ways to generate more such forces, if severe budget and manpower constraints dictate that NATO must find the necessary resources out of its own hide. These are (a) force restructuring; (b) more rapid reinforcement in a crisis; (c) more reliance on reservists; and (d) more reliance on territorial-type forces.* We think NATO will have to adopt all four techniques to achieve the needed results. Indeed, our previous Rand study suggested numerous ways in which to use all four to optimize Center Region initial defense capabilities (both U.S. and allied), while still saving costly active manpower.**

1. Restructuring NATO Ground Forces

(U) To overcome the deficiencies cited earlier, while still living within sharp fiscal and manpower constraints, will inevitably require restructuring of NATO ground forces. Indeed, this is to some extent an ongoing process, especially as new weaponry is introduced. What we are suggesting is a broadening and acceleration of the process. We suggest in later sections of this chapter certain restructuring options to increase antiarmor strength (see pp. 60-67) and to make better use of reserves (see pp. 54-60). Here we focus on more general means of restructuring ground forces.

(U) In particular, we think it highly desirable to follow the FRG model and reduce the large, expensive, and unwieldy size of NATO units, plus the large division slices that support them. These World War II-style ground force structures are incompatible with high manpower costs and the need for greater mobility and maneuverability. The size and unwieldy nature of these forces, particularly the support forces, stems from the apparent requirement for sustainability. Considering other factors (e.g., NATO-wide level of WRM and nature of conflict anticipated)

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*(U) Hunt, op. cit.

**(U) R-1231, op. cit.

the degree of sustainability provided may be a luxury that the U.S. can no longer afford. Smaller, more flexible divisions or brigades would permit manpower savings to be traded off for higher manning levels, more long-service personnel, better equipment, and more WRM.* We are convinced that such trade-offs would result in a more rational NATO ground-force structure. We also see merit in the other allies' moving toward the FRG practice of making the brigade, rather than the division, the basic combined-arms tactical and administrative unit.

(U) One thing urgently needed is to "de-fat" the TO&Es (as General Lesley J. McNair used to say — and as he did so successfully with our Army ground forces in World War II).** Noting how "invariably commanders seek more and tend always to make their unit self-contained,"*** he sought vigorously to prune TO&Es by a combination of pooling and streamlining. We doubt that there is a single NATO military establishment that could not profit from the same treatment today. Ground forces, which are the heaviest users of scarce manpower, are especially in need of trimming (with the possible exception of the Bundeswehr, which is already pruning from the active establishment all soldiers not essential on M-Day).

(S) To show how modelling on the new FRG force structure might save other allies substantial manpower, let's compare it with similar Dutch and Belgian units. At war strength, the new FRG armored brigade will be pared from 4500 war strength to 3200 in both peace and war, yet have four maneuver battalions with 109 tanks. In contrast, the Dutch armored brigade at war strength has 3870 men in three maneuver battalions with 102 tanks. The Belgian armored brigade is even larger, with 4476 men in four maneuver battalions with 96 tanks. Turning to mechanized infantry brigades, the new Bundeswehr structure is pared from a 5200-man

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*(U) For specifics, see R-1231, op. cit., chapters IV, V, and VIII.

**(U) For a provocative résumé of General McNair's valiant efforts, see the study on "Reorganization of Ground Troops for Combat" in the volume of the U.S. Army official history of World War II entitled, *The Organization of Ground Combat Troops*, Historical Division, Department of the Army, Washington, D.C., 1947, pp. 383-434.

***(U) Ibid., p. 315.

war strength to 3900 men in peacetime or wartime in four maneuver battalions with 66 tanks. The comparable Dutch brigade has almost 5000 men in four battalions with 52 tanks; the Belgian mechanized brigade numbers about 3900, but has only three maneuver battalions and 48 tanks. The new FRG structure is also much heavier in AT weapons. Clearly, adopting the FRG structure would enable the Benelux countries to sharply pare unit strength while increasing combat power.*

(U) Also required at a time of sharp manpower and fiscal constraints is particular stress on maximizing early combat strength by wherever possible, converting active support spaces to combat teeth. Reducing tail-to-teeth ratios may well be one of the most significant R/S options for increasing badly needed initial combat strength. This is not to denigrate the importance of adequate support, especially for extended combat, but rather to argue that there are alternative means available — whereas such substitutes are not available for high-priority combat troops.

(U) Among such alternative means, which generally also entail lower costs, are: (a) substituting reserve for active support forces, for non-M-Day functions; (b) multinational consolidation of support functions; (c) use of civilians rather than military personnel; and (d) reliance on mobilized civil assets. In our previous report, we noted how all these techniques might be used to reduce the "expeditionary-force tail" of the U.S. Army in Europe.** The U.S. is finding, as it seeks to conform to the Nunn Amendment, that many trade-offs are possible for strengthening our commitment of combat forces to NATO in return for our allies' assuming certain support functions. To the extent that this could be done

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*(U) Similar comparisons of these countries' tanks that have battalion or higher headquarters and recon elements would further favor the FRG. The U.S. mechanized or armored brigade is not comparable because it is task-organized and does not have assigned the organic support provided in the FRG or Benelux TO&Es.

**(U) R-1231, op. cit., chapters IV and VII. As Callaghan dramatically puts it, "Deployed in the midst of an advanced industrial economy second only to our own ... we may as well be deployed — for industrial support purposes — in the midst of a trackless desert. After a quarter century, ours is still an expeditionary force, depending on our own 3000- to 6000-mile pipeline to our own industrial heartland for almost every significant item of industrial support" (op. cit., p. 30).

with civil assets quickly mobilized, the costs should be minimal. OSD/PAE estimates that around 14,800 active U.S. and 500 U.K. personnel could be trimmed by such means, for an annual saving of $145 million.* But if they are to rely more on local European support, U.S. Army forces in Europe must be relieved of contingency missions outside the Center Region -- a step long overdue. It no longer makes sense, if it ever did, to assign such out-of-theater missions to USAREUR forces, since it is hard to conceive of such a contingency that would not also involve a Soviet threat -- in which case USAREUR would have to be reinforced, not stripped. Out-of-theater missions for USAREUR forces have the same "beefing up" effect on the force structure as does the perceived need for added sustainability (see above, p. 41).

(U) Many European NATO countries also have rather large national overheads and training establishments from which additional combat spaces could be squeezed. Our impression is that most of our allies are as vulnerable as the U.S. to accusations that higher headquarters are too large and too proliferated at the expense of combat forces.** Perhaps the way to get at this would be for the DPC to mandate a study of how 10 percent of each ally's total overhead manpower (both in NATO headquarters and in national commands) could be cut.

(U) If NATO ground forces must be primarily antiarmor oriented, the trade-off possibilities in reducing other weaponry such as mortars and tube artillery in favor of AT weapons and scatterable mine launchers (see pp. 67-73) should be examined. This is not to deny the importance of adequate artillery, as proven again in the 1973 Arab-Israeli conflict, or the value of improved conventional munitions. It is simply to argue that in a period of severe constraints all priorities must be reassessed, and painful trade-offs contemplated. Both the U.S. and other Center Region allies are comparatively richer in artillery than in many other key items. It is notable that the FRG force restructuring pr[illegible]

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*(U) *NATO Rationalization Potential*, op. cit., Annex A-7

**(U) For example, the Royal Netherlands Army of about 71,[illegible] about 23,800 men manning schools and training centers, almost as [illegible]y as the FRG, which has almost five times the active army strength.

includes no increases in tube artillery, but rather in cheaper rocket launchers especially for scatterable mines.* Moreover, as the allied air forces increase their capabilities for close air support, especially with PGMs, this may reduce the need for so much artillery.

(S) Since the Belgian, Dutch, and British sectors are the weakest in the Center Region ground shield, there is a special case for finding ways to strengthen them. For example, OSD/PAE has suggested that over 20,000 active personnel in various small Benelux and U.K. combat units with low-priority rear-area security missions and only light weaponry could be converted into more useful units, some on a cadre basis to be fleshed out with reservists in wartime. They suggest that Belgium and the U.K. each form various light units into two AT-heavy corps reconnaissance groups at an estimated cost of $75 million over a five-year period. In addition, about 85,000 Benelux and U.K. wartime personnel now allocated to light companies, battalions, and brigades (for guarding rear area LOCs against sabotage and airborne landings) could be reorganized into 21 infantry brigades heavily equipped with AT weapons at a five-year cost of $20 million each.**

(S) A cheaper alternative would be to shift some of the active personnel involved into increasing the presently unsatisfactory M-Day strengths of these nations' forward-deployed divisions. At present, most Center Region active ground forces (except U.S.)*** are at

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*(U) In 1945, the U.S. Army created the 519th Rocket Field Artillery Battalion with 36 towed rocket launchers, each with 24 4.5" tubes.

**(U) *NATO Rationalization Potential*, op. cit., Annex E-2.

***(U) Overall, U.S. forces in USAREUR are authorized to have personnel assigned up to 90 percent of TO&E. On the average these forces are maintained at 95 to 98 percent of authorized, that is, in real terms, 85.5 to 89.2 percent of TO&E. This has the effect of reducing the number of worker-types in combat units, e.g., riflemen in infantry squads, crewmen in tank crews, etc., since the overhead and support requirements continue to absorb the same number of people. In responding to the Nunn Amendment, the Army is considering using some of the support spaces saved to improve the manning level in combat units. This is moving in the right direction.

substantially less than war strengths. Many of their personnel are poorly trained to boot. They also lack modern weapons and adequate WRM in key categories. Thus, it might be better to beef up existing units before creating new ones. For example, the Chairman of the NATO Military Committee flatly told the DPC in June 1974 that if the Netherlands carries out its proposed reorganization of the Dutch forces, the I Netherlands Corps would be reduced to the point where it could no longer carry out its mission.*

(S) As for American NATO-committed ground forces, sooner or later our Army will simply be compelled, by fiscal and manpower constraints, if not by the realities of the situation, to streamline its present force structure. As suggested in our previous report, this can and should take the form of reducing the tail-to-teeth ratio and maximizing the effective combat strength available for employment on M-Day. To understand the possibilities for such action, it is necessary to explore the meaning and use of the 48,000-man planning factor for a Division Force Equivalent (DFE): (a) the 48,000-man DFE is the estimated average manpower required for a division and its combat-support and service-support elements in a mature theater under typical conventional war conditions (e.g., Central Europe after 180 or more days with a completely structured force); (b) it is based on the U.S. philosophy that support forces are required to insure that combat and support units are maintained at a high level of effectiveness through continuous replacement of manpower and replacement or repair of equipment in the combat area; and (c) it visualizes providing commanders the optimum size and mix of forces to meet almost any conventional war situation. The U.S. Army has not ignored this problem, as evidenced by a whole series of studies over the years which have suggested Europe-oriented restructuring options (e.g., ASTRO, COMAF, COMAD). Rather, the difficulty has been a degree of rigidity built into planning by the assumptions of at least a 90-day war, the philosophy of constant replenishment, and the requirement for U.S. NATO forces to be capable of facing a variety of conventional contingencies around the world.

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*(U) DPC-VR(74)15, June 14, 1974, p. 19 (Secret).

Let us assume for a moment that the U.S. Army, including USAREUR, were given guidance to: (a) plan to fight in Europe only so long as the bulk of other NATO ground forces can fight (approximately 30 days); (b) U.S. forces in Europe and those capable of being deployed there by D+30 shall have that as their only mission; and (c) these forces shall be structured to maximize their capability to meet a primarily armored threat as soon after M-Day as possible and extending through D+30. Would the force be structured differently from the way it is currently? Yes, it probably would. In fact, in response to the Nunn Amendment the Army is planning, in addition to increasing manning levels in combat units, to increase the number of combat units at the expense of support units. Only time will tell if this forced rationalization goes as far as it might if the criteria above were fully applied.

2. Faster Reinforcement Schemes

(U) Clearly, one of the best ways to thicken the NATO defensive shield would be to accelerate the deployment of presently available augmentation forces from France, the U.K., Canada, and the U.S. Because the NATO authorities have been mesmerized by fears of a surprise attack, they have tended to neglect the major contribution that could be made by hastening such deployments.* On the contrary, the new U.K. defense review calls for eliminating the 3d Division and one additional brigade, cuts that will deprive the BAOR of much-needed augmentation. The U.S., at least, is devoting new emphasis to quicker reinforcement, including expanded airlift and measures to accelerate readiness, such as reducing POM times (see Chapter III for our suggestions on airlift).

(U) There is a wide variety of options to this end, many of them low cost or no cost, which we believe add up to some of the most sensible rationalization measures NATO could undertake. They would also provide an invaluable hedge in case of MBFR cuts. Moreover, many of these options have built-in multilateral trade-off possibilities; broadly speaking, the continental allies could provide port and reception facilities,

*(U) See R-1231, op. cit., pp. 26, 30-34, 41-43, and 237-263.

LOC support, collocated bases, certain common-user supplies, and even some sea lift and airlift assets in return for the offshore allies' posturing to deploy more forces faster.

(S) In our previous report we suggested numerous such measures for U.S. ground forces, including (a) leaving equipment in Europe of any units withdrawn under MBFR, but avoiding the purchase of duplicate sets of equipment by using alternative techniques; (b) deploying incrementally in battalion- or brigade- rather than division-size reinforcement packages and attaching such units to existing USAREUR divisions; (c) pruning forces scheduled for early deployment of all personnel and equipment not essential for the first 30 days of combat and rescheduling this for later shipment; (d) utilizing post 30-day attrition stocks to equip arriving units instead; (e) using mobilized allied assets to replace LOC troops and resources now scheduled for deployment; and (f) revamping Army readiness procedures to reduce POM time.* We also proposed certain similar measures for U.K. and Canadian forces.**

(U) The Lawrence-Record study also suggested revamping U.S. ground forces for quicker deployment by stationing six two-brigade divisions in Europe and posturing their third brigades in CONUS for rapid airlift reinforcement. The parent division would maintain the prepositioned equipment for this brigade. They propose several other streamlining measures.***

(U) A fruitful no-cost rationalization option is to reduce the early tonnage going to Europe by careful pruning of all nonessential items, and those whose shipment can be postponed until later or obtained from our allies. We understand that the USAF has already sharply reduced its initial tonnage requirements by this means. The Army and Navy should do the same. One Rand study estimates that Army requirements for airlift through M+30 could be reduced on the order of one-sixth, chiefly by shipping certain key items in administrative rather than operational

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*(U) Ibid., pp. 52, 56-59, 151-154, 161-171, 209-214, 226-228, 230, 243-244, and 248-249.

**(U) Ibid., chapters IX and X.

***(U) Richard D. Lawrence and Jeffrey Record, *U.S. Force Structure in NATO: An Alternative*, The Brookings Institution, Washington, D.C., 1974, pp. 51-99.

configuration.* Army in-house analyses also suggest that a great deal now scheduled for early deployment could be postponed until later, thus freeing lift for higher priority movements.

(S) A new Navy study, SEA EXPRESS, suggests a whole series of low-cost or no-cost ways rapidly to sealift U.S. forces to Europe before M+23, using such techniques as (a) moving equipment incrementally when it is ready instead of waiting until the whole unit is ready; (b) moving organic wheeled vehicles and aircraft cross-country on their own power, rather than by rail; (c) selecting optimum ports and berths; (d) selecting optimum ships, taking advantage of several new ship types; and (e) sailing ships independently at best speed, before war starts. The study claims that by these means "the unit equipment of all nonpre-positioned active Army divisions in CONUS together with their combat support and 40 percent of their service support" could be moved fast enough by sea lift to arrive in the Frankfurt area within 23 days after M-Day. Of course, the personnel would move by air. By purchasing inexpensive flatracks to allow greater use of fast container-ships, these results could be further improved upon. SEA EXPRESS suggests that a combination of airlift and fast sea lift would be optimum, if on the order of 23 days between M- and D-days can be expected.** Sending as much as possible to Europe before D-Day is all the more essential because SACLANT says that he may not be able to provide protection for Europe-bound convoys until he has won the battle of the Atlantic.

(S) *A Possible Area of Trade-off* — Why couldn't the U.S. offer specified concrete steps to accelerate initial ground and air reinforcement, if our allies would take parallel steps to provide added necessary reception facilities and more logistic support? This general proposition could be broken down into air and ground packages. For example, we could trade a firm DPQ commitment to have a set number of divisions (say, seven) in Europe by M+7 or M+10 in exchange for specified facilities and services to be supplied by our NATO allies. The

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*(U) According to an internal Rand study by Colonel J. C. Hays.

**(U) Navy Accelerated Sea Lift Study, *Project SEA EXPRESS*, OP-96, Department of the Navy, 25 July 1974 (Secret).

latter might include port facilities, warehouse space, earmarked railway/barge/truck assets, certain consumables such as cement or sand and gravel, more airhead reception facilities (the current U.S. requirement is for seven APODs, but only three are firm), and possibly more real estate and other facilities for dispersing prepositioned equipment closer to where the troops would land. We suggest that our services and overseas commands be tasked to develop such a trade-off package. Since it mostly entails existing U.S. forces and mobilizable European assets, the peacetime add-on costs entailed should be relatively minor.

(U) In looking at ways to generate more quickly available ground forces for the Center Region, NATO cannot afford to ignore the French, who already have two divisions in the FRG (see pp. 331-333). Assuming that the American LOC is shifted north to Belgium and that plans are developed to use U.S. augmentation forces in NORTHAG, the flexibility concept would be enhanced if France could be prevailed upon to assume wartime missions on the Center Region southern flank. This would help contain any Warsaw Pact attack up the Danube Valley from Austria, a possibility that worries the FRG in particular.

3. Generating More Quickly Available Reserve Combat Forces

(U) To contain and outlast a WP blitzkrieg will require more reserve combat formations than are presently available. They become even more indispensable in event of budget-induced cuts in active forces or an MBFR agreement. All NATO allies have more or less extensive pools of trained men available for this purpose, many of whom are not now included in mobilization plans.* Others are due to be mobilized only later as fillers, or are assigned to a variety of units, many of which seem of relatively marginal utility. Thus, plenty of European manpower exists to meet the need.

(U) A much bigger problem is that of equipping them properly at a time of constrained defense budgets. However, aside from the fact that equipment now is generally much cheaper than manpower, we would

*(U) Creighton study, op. cit.

propose equipping them largely from the stocks made available by active force modernization programs. For example, the FRG plans to equip some of its cadre formations with M-48 tanks as it replaces these with Leopards.

(U) An equally serious problem is that of achieving a sufficiently high level of reserve readiness so that well-qualified units become available in time to help contain a WP blitzkrieg. Insofar as this is a function of their peacetime training, their lack of it is pathetic.* It is also partly a function of how much warning time can be relied upon before D-Day, but the point is worth making that even reserve combat units deployed as late as D+15 to D+30 might still make a useful contribution.

(U) A key way of enhancing readiness is to give such reserve units sizable *active duty cadres* — a classic European technique employed by the WP as well. The size of the cadre is a matter for professional military judgment, but at a minimum, part of the officer and key NCO complement, and perhaps key technicians, should be active duty personnel. We believe that the U.S. in particular should examine the desirability of active duty cadres for reserve formations, since our present reserve units are, for the most part, composed exclusively of reservists, a condition that reduces readiness.**

(U) Greater emphasis on reserve training, for the most part sadly neglected in NATO, would also be desirable. In general, NATO reservist pools seem to be too large and too poorly trained. A trade-off of quantity for quality would be militarily desirable, though very difficult because of the political requirement to train all conscripts for equity's sake. One inexpensive technique that could be more widely adopted is the Netherlands RIM system, which involves moving complete units from

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*(U) See Creighton study on "Mobilization of NATO Ground Reserve Forces in Central Europe," op. cit.

**(U) Some exceptions are the 4th Marine Division (which has a large active duty cadre), some Navy reserve fleet ships that are manned with 65 percent active personnel, and some USAF reserve manpower that is associated with active airlift units and would flesh them out upon mobilization.

active to reserve status every 18 months, thus ensuring that the entire unit has trained together for an extended period.

(S) Another technique would be affiliating reserve with active units to enhance the former's proficiency. This is now being adopted by the U.S. Army, which plans to go from 13 to 16 active divisions, while staying within its present 785,000-man ceiling, partly by rounding out three divisions with one affiliated reserve brigade each. Another 22 reserve maneuver battalions will affiliate with active divisions to round out their structure, and will join the divisions upon mobilization.* Each German mechanized brigade will also have an affiliated reserve motorized infantry battalion.

(U) Broadly speaking, NATO should rationalize its reserve posture by moving toward two broad types of reserve forces: (a) relatively small but highly trained and well-equipped ready reserves, primarily designed to flesh out the active force structure in time to help absorb the initial shock of enemy attack; and (b) a much larger reserve at lower readiness. The small ready reserve would receive greater pay incentives, more training, and be closely affiliated with active units. It should be callable in advance of mobilization, as is the case with the new FRG ready reserve. Restructuring and rationalizing NATO reserves in this manner would allow NATO to go quickly to a much greater readiness posture in the event of a feared surprise attack, without taking the politically sensitive step of full mobilization. This would aid materially in relieving the current severe constraints on the NATO alert system.

(U) Beyond the above is the need for NATO to take a close look at the utility of the substantial numbers of "territorial-" type forces and paramilitary police forces maintained under national command by all continental NATO allies. Most are only lightly equipped and have only small active duty cadres, to be fleshed out upon mobilization by

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*(U) The total of 30 round-out battalions will represent 25 percent of the combat power of the 11 Army divisions in the affiliation program. See address by Assistant Secretary of Defense W. K. Brehm to 96th Conference of National Guard Association, 23 September 1974.

reserves. Nonetheless, rationalizing them might be productive of some savings, or at least improved effectiveness. Again, the relevant model might be the German Territorial Army (GTA), with an active duty cadre of around 30,000, which would be fleshed out in wartime to over 300,000. It is designed to provide rear area support to all NATO forces in the FRG, besides performing rear area defense against airborne attack and internal defense missions. It seems better designed for NATO purposes than the comparable French or Benelux forces.

(U) The proliferation of light AT weapons also raises the possibility of using territorial forces armed with such weapons to supplement regular forces by thickening antiarmor defenses in depth. For example, Gen. von Kielmansegg, CINCCENT from 1963 to 1968, suggested supplementing the FRG's 36 active brigades with "six militia-type blocking brigades with a total of 30,000 to 35,000 men." These units would be capable of relieving the active forces, notably during the early stages of a conflict, of such tasks as border protection, barrier operations, some delaying operations, etc. Kielmansegg pointed out that such militia-type combat units on the Swiss and British model would not compete for peacetime active personnel, would require little additional infrastructure, and would be able to operate at low cost.* Since many European allies have large trained but unassigned reservist pools, using them in this manner, and equipping them in quantity with cheap and easy to use AT weapons, seems well worth exploring.**

(U) As for the U.S., which is currently expected to provide the bulk of Center Region augmentation forces, revamping of our Army reserve structure for this purpose also seems essential. We suggest a "three-tier" reserve system:

a. A relatively small, highly ready segment of our reserves should be earmarked to fill M-Day shortages in active

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*(U) *The Force Structure in the FRG*, Bonn, 1972, pp. 43-44. Giving the FRG Border Police light AT weapons and mines might be equally desirable.

**(U) See proposals in R-1231, op. cit., pp. 273-274.

units* and to provide to unit TO&Es** those augmentation elements that are not normally authorized in peacetime. Priority of fill should be given to units deployed in Europe, followed by units in the U.S. by their deployment dates. To be most effective, these first echelon reserves should: (a) consist of members of the active reserve on training status; (b) be associated with a specific parent unit and organized for speedy and efficient mobilization; (c) be provided an active duty cadre from the parent unit to plan and monitor training and to facilitate administration; (d) have their discretionary O&M fund expenditures subject to supervision by the parent unit; and (e) be authorized added training periods and other compensations to attract sufficient high quality personnel and assure a satisfactory readiness status.

b. The next priority group of reserves should be those affiliated with active units either as round-up or round-out elements.*** Again, priority within this group should be in accordance with deployment schedules for the active units. It may be necessary to have several subpriorities within this category, since it would be fairly large, and to place a high

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*(U) The present plan is to use the Individual Ready Reserve (IRR) as a pool from which this fill will be made when required. The IRR consists of those individuals who have satisfied their active duty or active reserve obligation and are serving the remainder of their total eight-year obligation in an inactive status. Using the IRR as a basis means providing a supposedly qualified body to fill a slot at the moment of crisis with no prior association or refresher training. This system leaves a lot to be desired.

**(U) There is a certain amount of this provided for in our current system (e.g., intelligence, logistic, medical, legal, and administrative teams already prepackaged and on training status). Nevertheless, it is not carried as far as to provide an active cadre and a specific parent unit in most instances.

***(U) Round-up elements are those required to bring the active unit to minimum TO&E, such as a third brigade for a division. A round-out unit is one provided above minimum TO&E, such as an eleventh or twelfth battalion for a division.

priority on too large a category is to establish no priority at all. Similar provisions to those required for the small initial reserve element are needed for the affiliated units. They should: (1) be in close geographical proximity to the parent unit to facilitate training and administration;* (2) be separately organized (e.g., round-up brigades be separate brigades rather than divisional brigades); (3) be provided active duty cadres from parent units; (4) have their training, administration, mobilization planning, and discretionary O&M fund expenditures supervised by the parent unit; and (5) be given added training and individual incentives (pay, retirement, privileges). A further incentive for the affiliated category, as well as the initial small category, would be to provide unit designations and distinctive insignia and patches that clearly associate them with the parent active unit.

c. The remainder of the U.S. ground force reserve structure should be carefully correlated with the active structure to ensure our capability to deploy the maximum combat power, with adequate support to Europe or other areas, as soon as possible.** This could and probably should result in some reserve units' being scheduled to deploy to Europe before units in the active structure. For example, a reserve truck

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*(U) This is particularly important. In the one instance where the round-out concept has been applied and tested, namely, the 2d Armored Division at Ft. Hood, Texas, which has three affiliated reserve component battalions, the three reserve component units are from three different army areas and not one of them is in the same army area as the 2d Armored Division. This causes added expense and difficulty in providing them training assistance and in bringing the units to Ft. Hood for their annual two-week active duty training. The round-out system would work much better if the 2d Armored Division's round-out units were physically located in Texas.

**(U) Some would argue that this is done today, and to some degree it is. However, it is done imperfectly and would have to be redone anyway to ensure a mesh with the active forces committed to NATO after the current U.S. rationalization activities are completed.

company or engineer unit formed around a civilian base in the trucking or construction business, respectively, could be ready to deploy relatively early, since its members maintain their unit proficiency in their day-to-day occupation. Thus, were this the case, there would be no need to maintain such a unit in the active structure. On the other hand, competent combat units and certain highly specialized support units are time-consuming to develop and have no civilian counterpart. They would belong in the active structure, if required early.

(U) Altering our reserve component structure or changing its relationship to the active Army is a ticklish task involving practical political problems. The National Guard, the largest segment (approximately 400,000), is also the militia for the 50 states and the federal territories. Therefore, it is responsive to the state and territorial adjutants general, as well as to the governors. One resulting problem is ensuring that equipment reaching the Guard is issued in accordance with Army priorities and not state priorities. So to restructure the Guard would not be easy. The Reserve is a somewhat different story, being under the command of and responsive to the Army. The Reserve has, however, a strong Congressional lobby. Another problem is that the present breakout of ground force units places the majority of the combat units in the Guard and the support units in the Reserve. It would be easier to structure optimally along the lines indicated if the reverse were true.

D. USING R/S TO STRENGTHEN ANTIARMOR CAPABILITIES

(S) If one of NATO's top priorities must be to strengthen its capabilities to cope with an armor-heavy blitzkrieg without substantial increases in defense budgets, then here too R/S must be the solution. NATO must shift resources into making its forces more specifically antiarmor-oriented as their primary mission. NATO's spring 1974 report on progress toward meeting AD-70 goals notes that, while all allies have now set up programs for introducing modern ATGMs, many of these are on only a limited scale.

Again, the best available model is the new FRG force restructuring program. After rich study, the Bundeswehr decided to redesign its ground forces primarily for defense against Soviet armor by greatly increasing their tank and antitank weaponry, creating flexible airmobile corps reserves to stem breakthroughs, and stressing flexible tactical barriers of scatterable mines. To these ends, the Bundeswehr is restructuring its units from corps down to company to: (a) reduce unit size, while improving span of control and increasing tactical flexibility; (b) increase sizably the numbers of tanks and tank destroyers, heavy and medium ATGMs, and mechanized fighting vehicles equipped with ATGMs; (c) convert the three airborne brigades into corps airmobile antiarmor reserves; (d) add an AT helicopter battalion to each corps; and (e) have brigade, division, and corps engineers concentrate on the antiarmor-barrier mission, using swiftly implantable scatterable mines (11 corps engineer battalions will be reconfigured exclusively for barrier laying).*

(U) Of course, this new Bundeswehr force structure is designed for a single-mission defense against a WP blitzkrieg on the FRG's own soil (and also permits logistic reliance on the FRG civil infrastructure). But the fact is that all other Center Region ground forces have the same primary mission and will also fight on FRG terrain. Thus, we regard the new FRG force structure as a valid model for the rest of AFCENT's European ground forces. It would be a highly sensible rationalization measure for other Center Region allies to restructure their own NATO-earmarked ground forces along the same or similar lines, with suitable national modifications to meet special national needs. For example, U.S., U.K., and Benelux units that must deploy forward into Germany would need more transport capability. Moreover, the Bundeswehr force design, which is rich in expensive tanks and tank destroyers, may be too expensive for poor allies, such as the U.K. or the Benelux

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*(U) Bundeswehr briefing of EWG, 5/31/74 (Secret), which states explicitly that "the new structure of the German Army is essentially governed by the implications of the antiarmor concept." Interestingly, the FRG does not call for any increase in tube artillery whatsoever, emphasizing instead rocket launchers for mine dispensing.

countries. Thus, they might better stress proliferation of AT weapons (this is also the way the U.S. Army has gone). Increasing the density of AT weapons in mechanized units also helps free armor for use in the counterattack role, for which NATO, at present, has comparatively few reserves.

1. The NATO Military Authorities Should Ask Each Nation Providing Corps-Size Contributions to the Shield to Include a Corps-Level Antiarmor Reserve Comparable to That of the FRG Corps

(U) Similarly, their artillery and engineers should be reconfigured to provide a comparable mobile barrier capability, and perhaps all should standardize on the FRG family of scatterable mines and mine dispensers. Such a capability in quantity would surely give pause to Soviet blitzkrieg planners. AT weapons holdings should be brought up to the U.S./FRG level. By such means, AFCENT ground forces could be converted into a much more effective antiarmor force than presently exists or is planned — thus greatly enhancing their deterrent value as well.

(U) Not surprisingly, the AT capabilities of the Benelux and U.K. corps in NORTHAG are the most in need of beefing up with modern missilery. These countries need to equip their infantry units properly and to develop AT-capable reserves. For example, the Belgians maintain an elite four-battalion paracommando brigade originally designed for possible interventions in the Congo. It is now committed to the I Belgian Corps, but hardly configured to stop Soviet armor. We suggest that this 2700-man outfit be converted to an airmobile corps antiarmor brigade on the FRG model. The Dutch lack any heavy AT weapons at present, and although some TOWs are on order, a more substantial buy of AT missiles seems essential. They too should be asked to field a corps-level antiarmor regiment.

(U) The British, also, are weak in antitank weaponry, aside from their excellent tanks.* Perhaps the two corps-level reconnaissance

*(U) For some reason, the British Army does not regard fighting tanks as a "normal infantry task." Their infantry insists that the armored forces must provide this function.

regiments in RAOR (and the one in the U.K.) could be similarly converted into one corps AT brigade. Moreover, the U.K. parachute and airportable brigades (based in England, but earmarked for NATO), are too light for the antiarmor mission, and, in any event, will be cut back as a result of the U.K. defense review. Reconfiguring what is left, or at least giving it an AT add-on package, would be desirable.

2. The U.S. Should Reconfigure Its Corps-Level Antiarmor Capabilities

(S) Like the Bundeswehr, the U.S. Army has already gone a long way toward substantially increasing its antiarmor capabilities. In fact, it will have more heavy and medium AT weapons in the mechanized infantry battalion (18 TOWs and 27 Dragons) than the FRG. Now USAREUR has gotten approval to increase the number of Dragons to 31. The Army plans to go even further and to increase TOW/Dragons in USAREUR and prepositioned units by at least an additional 1500. Among other things, Dragon will be given to combat support units to improve their organic AT-defense capability. This will help remove the requirement on combat units to provide AT defense to combat support units.

(U) The Army has already reconfigured the two armored cavalry regiments in USAREUR to strengthen their capability to attrit armor in delaying actions. Each ACR already has 162 Sheridan tanks and 51 M-60s, and TOWs and Dragons will be added to each ACR infantry squad. But they could be strengthened even further, since their logical primary mission is delay rather than reconnaissance.

(S) Our concerns relate chiefly to doctrine concerning employment of the AT helicopter in U.S. forces in Europe. *We believe the U.S. should promptly review the evolving German concept for airborne and airmobile units primarily configured for antiarmor operations as part of their corps reserve* (see pp.44 and 61). For example, the FRG plans to concentrate its antitank helicopter units entirely at corps level. This concept is different from that finally chosen by USAREUR for deploying the Cobra/TOW system. After much study, USAREUR has decided it now wants about 252 in units instead of the 165 presently programmed. Each division would have 42, including two Cobra/TOW companies. In addition,

each corps would have an antiarmor helicopter battalion of 42 Cobra/TOWs in two companies, with a third company of utility helicopters to facilitate mobility and support.

(S) But piecemeal deployment of two Cobra/TOW companies to each U.S. division in Europe seems wasteful of an expensive asset,* and shortsighted from an overall Central Region point of view. It would certainly violate General McNair's principle of "pooling and streamlining" (p. 46). It would be tantamount to what the French did in World War II when they parcelled out their armor assets to support other type units. As a result the Germans, by concentrating their fewer tanks of poor quality, were able to overwhelm the French armor at the points of decision. Maintenance, training, and flexibility of employment also would be enhanced by concentrating available Cobra/TOW assets at echelons higher than division. You can always parcel out assets held at higher echelons: To do the reverse is not so easy. Besides, by concentrating an asset as flexible as the Cobra/TOW, subordinate unit commanders can expect to get far more support in times of serious need than they would if each subordinate controlled a portion. We, therefore, believe that the precious Cobra/TOW assets should not go to U.S. divisions in Europe. Rather the two corps battalions should be made somewhat heavier by adding the assets of a division-type company to each and restructuring to develop a strong three attack company battalion. This, possibly in conjunction with some application of the FRG antitank concept, would provide a healthy, flexible antiarmor capability for each corps. Using USAREUR's deployment scheme as a base, that would leave the assets of the remaining six Cobra/TOW companies for other use.

3. AFCENT Needs a Highly Mobile Theater-Level Antiarmor Reserve, Able to Deploy Rapidly to Any Point on the Front Threatened by a Breakthrough beyond the Capacity of Any Corps to Handle

(S) To neglect this requirement invites a complete breakthrough in the weaker allied corps sectors in NORTHAG while the U.S. and FRG corps

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*(U) At the present time the Army is programming a buy of some 595 Cobra/TOW helicopters. Approximately 280 of these are in the FY 1975-1976 program years and should start to come off the production line in late CY 1975.

stand firm. AAFCE air forces, when equipped with Mavericks and A-10s, could help perform this role (see Chapter III). But we are convinced that a very long-legged antitank helicopter brigade at theater level would also be desirable. It could either support the two U.S. corps or be available for deployment elsewhere in the Central Region. Such a brigade would require an equally long-legged airmobile tail, which could be expensive. The U.S. might be the only nation capable of bearing this burden. Instead of USAREUR's recommended employment of the Cobra/TOW, we suggest allocating the six Cobra/TOW companies (126 aircraft) freed above, plus their normal backup, to help structure the brigade.

(S) Therefore, as a later part of the 18,000-man conversion of support to combat troops mandated by the Nunn Amendment, the U.S. should undertake to provide such a unit as soon as possible. We are not talking here about deploying the current U.S. Air Cavalry Combat Brigade (ACCB), which we recognize as unsuitable, but about the new TRADOC-proposed configuration, in which this brigade would have almost 4000 men organized in two attack helicopter battalions, a reconnaissance squadron, and a support group, with 336 helicopters (138 Cobras). There are several practical objections to the proposal, of which the doctrinal one of how to employ AT helicopters seems paramount.* But we believe these can be solved. The large support tail generated on the basis of Vietnam experience, and necessary for operations in areas like the Middle East, does not seem as essential in the highly developed Center Region of NATO. Options like prestockage of a few days' supply of ammo and fuel to alternate bases would be relatively easy in the FRG and would help give a theater-level brigade sufficient legs.**

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*(S) These objections can be capsulized as follows: (1) The current ACCB, particularly its support, is not long-legged enough to be able to perform the AFCENT mission; (2) the U.S. Army has not sufficiently settled, as yet, on the doctrinal employment of such a unit in the European environment; (3) sufficient Cobra/TOW assets for such a unit will not be available for two to four years, depending on priority of distribution; and (4) the current configuration of the ACCB may not be optimal (insufficient antitank capability for resources committed).

**(U) No matter what is done, Cobra/TOW availability is dependent on the production rate and the distribution decision.

(U) In our view, such a unit would have far higher visibility, provide much greater tactical flexibility, and thus have far greater deterrent value than an equivalent mechanized unit. When Secretary Schlesinger was pressing the need for greater "flexibility" of force deployments, he pointed out to his fellow NATO Ministers that:

> An adversary is best deterred from taking any invasion route if he knows that NATO forces have an impressive capacity to move to the vulnerable spots, wherever they are, and fight cohesively when they get there.*

A properly configured, highly mobile, U.S. antitank brigade built around the Cobra/TOW is superbly suited for this purpose. One form of specialization by the larger allies would be for the U.S. and the FRG, as the only two allies planning large antitank helicopter units, to concentrate on providing this type of antibreakthrough insurance. As a trade-off, the U.S. could ask the FRG and Benelux to provide more logistic support for U.S. forces, to replace the capability lost by the Nunn Amendment conversion.

4. Other Antiarmor Measures

(U) Armed helicopters other than the Cobra/TOW can make a contribution to antitank defense. For example, the AH-IG (standard Cobra) armed with 2.75-in. rockets can place area fire on armor formations, forcing tanks and armored personnel carriers to button up and destroying periscopes, antennas, and externally stored equipment. At Ft. Hood, relatively good accuracy has been achieved out to ranges of 5000 meters, and with the AH-IG at 50-foot altitude or less. In addition, an element within the Army Materiel Command has experimented with some improved 2.75-in. rockets using the retarded bomblet approach. The bomblets can be antipersonnel, antitank, or a mixture. Since the antitank bomblets are attacking the top deck of the armored vehicles, a relatively small warhead can penetrate. Even though this is not an accepted U.S. Army technique as yet and the 2.75-in. rockets with bomblets are not standard,

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*(U) *NATO 3355*, 121845Z, June 1974 (Secret).

it has been successfully demonstrated and could provide a cheap addition to the NATO AT capabilities, if pursued. Moreover, the U.S. has huge stocks on hand.

(U) The U.S. might well consider replacing some of its artillery, especially in the mechanized division, with the FRG light rocket-launcher system and its scatterable mines (see pp. 73-74). Since the U.S. Army spends, according to one estimate, about $1.5 billion per year on artillery, trade-off possibilities obviously exist.

(U) While all the above rationalization measures could be undertaken mostly on a national basis, as part of each ally's modernization program, their cost would be reduced to the extent that common weaponry was bought. For example, the FRG seems far ahead of the rest of NATO in the development of scatterable AT mines and launchers. As part of the matrix approach, other allies could purchase the new FRG mines and mine dispensers (see p. 73). In turn, the FRG could undertake to provide common storage sites for these and other barrier materials (or these could be funded under NATO's infrastructure program). As another option, if other allies would buy more TOW missiles, the U.S. could offer to provide common maintenance and forward depot facilities for them in Europe.

E. RATIONALIZING BARRIER OPERATIONS

(S) If NATO is to optimize its defense capabilities within sharp fiscal constraints, then a new look should be taken at such classic economy of force measures as preemplaced barriers. We are not talking here of either the mobile tactical mine barriers earlier discussed, or of Maginot-Line-type fixed fortification, but of hasty barriers emplaced after M-Day to help slow down WP armor. These are also very low cost. The use of barriers has had its ups and downs in NATO, and at present, most barrier plans call chiefly for demolitions as all that would be possible in event of surprise attack. But now that even MC-161 acknowledges that NATO should have at least 48 hours' warning time, the whole issue of barriers deserves high-level review. We are not saying that barriers are *the* solution to Pact superiority in armor — only that they are a partial solution that cannot be ignored.

(S) One senior general told us that early in his NATO assignment he watched with amazement during a high-level map exercise while barriers were erected in an irregular and uncoordinated manner that invited end runs by Pact armor. When he asked why, the game director agreed that it did not make sense, but told him it was a waste of time to argue the point because the national commanders participating would not agree to change deployments in their respective corps areas. They'd rather lose than switch. This situation makes even less sense than the artificial division of the airspace over the FRG, which the alliance is now trying to resolve. Given the Pact advantage in armor, how can corps area commanders insist on national prerogatives that give the Pact the additional advantage of gaps in NATO's defenses? Since the Military Committee, SACEUR, and CINCCENT have not been able to solve this issue, we suggest it be addressed by the DPC at the ministerial level.

(U) For several reasons, it might be a sensible R/S option for the FRG to specialize in barrier construction on behalf of the other Center Region allies. First, they have the most to gain from forward defense — it is their political border that will be violated in the initial attack. Since it is their territory, they can initiate plans for or even begin barrier construction without waiting for formal implementation of the alert system. This would prevent gaps in case any nation withheld the authority for their national forces to begin operations in their designated defense sector. Most military planners we talked to about specialization expressed deep concern that specialized forces might be delayed or withheld while national political authorities made their decisions. We believe the FRG would have too much at stake to delay action in this case.

(U) Second, the FRG has the greatest familiarity with the terrain and a large reservoir of personnel whose peacetime duties are associated with patrolling the political border. For example, the Federal Border Police under the Ministry of Interior has responsibility for prevention of illegal entry across the Eastern border and for coastal patrol in the Baltic. They are organized into four area commands with 22 battalions of 651 men each. Why not give them light AT weapons?

Some *Forstmeisters* and *Jaegermeisters* in wooded areas are already responsible for maintaining equipment caches for the GTA. In the open areas, farmers know the conditions of the fields, the roads, and the bridges; in the villages, local police and fire departments have in-depth knowledge of normal access ways and possible bypasses. In addition to terrain familiarity, these people have other advantages: Many are outdoorsmen, at home with firearms and heavy equipment, and used to discipline and to assuming individual responsibilities.

(U) While many of the above already have mobilization assignments, they could be supplemented by FRG territorial forces and a large pool of unassigned reservists. The Kielmansegg proposal for "six militia-type blocking brigades" (see p. 57) included a barrier mission for them.* We suggest some amendments to the Kielmansegg proposal. More prepositioning of barrier construction material in the forward area at a number of strategic points could be funded from the NATO infrastructure budget. National barrier equipment/materiel now on hand could be made available to the FRG at no cost. We would also propose a cadre system parallel to the U.S. Air National Guard system whereby a limited number of civil employees with reserve assignments would be responsible for day-to-day maintenance of necessary equipment and WRM, coordination of peacetime training and exercising of the barrier force, and the necessary interface with the national forces responsible for each corps area's defense.

(U) Once the barriers had been emplaced, the forces proposed by Kielmansegg could play a significant role as a delaying force, if equipped with modern antitank weapons. ARPA is currently studying concepts and weapons for a Decentralized Area Defense (DAD) by small units that would operate ahead of or in gaps between major combat units. If the weapons they have under study prove to be as effective as preliminary assessments suggest, they would be ideal for FRG barrier forces — being relatively inexpensive, easy to maintain, and requiring little training for experienced marksmen.

**The Force Structure in the FRG*, op. cit., pp. 43-44.

(U) In return for FRG acceptance of barrier construction as a specialized task, nations with forces in the AFCENT area could agree to increase antitank weapons in those units, as suggested on pp. 67-69. This might be a very desirable tradeoff for the FRG to accept, since it would result in a substantial overall increase in Center Region forward defense capabilities.

F. RATIONALIZING GROUND AIR DEFENSE

(S) We deal with the air force aspects of this problem area in Chapter III, and ground systems here. Because it consumes a high proportion of total NATO assets and because changing technology is constantly opening new possibilities, the rationalization potential in the air-defense field deserves exploration. The present Nike high-altitude system is obsolescent, raising a question as to when and how it might be replaced. The improved Hawk can handle most of the threat, except at very high altitudes. The U.S. Army sees SAM-D as the needed follow-on system, but it is proving very expensive.

(U) Air defense is a logical field for multinational rationalization, because area defense no longer makes much sense on a national basis, at least in the Center Region. Mobile field-force air defense must remain organic to national forces, but even the French recognize the need for an integrated Center Region air defense system. Moreover, because of the enormous cost of new SAM systems, AWACS, etc., proliferation of national systems is undesirable. But this is in danger of occurring. The relative weight to be placed on air-defense aircraft versus missiles also merits review. We are not qualified to suggest answers to all these issues, but we believe that the rationalization program offers a highly desirable format in which to examine such high-cost options in a period of severe fiscal constraints.

(S) There is also a rationalization aspect to the need for a short-range air-defense system. The Secretary of Defense has said that we would buy a European system, if after testing it proved to meet our needs. The Franco-German Roland II system looks most promising to the U.S. after testing. But if this system is radically modified to meet

special U.S. requirements, compatibility may be lost and cost certainly driven up. It would be costly enough to produce this system under license in the U.S., rather than in Europe, thus losing the advantage of longer production runs.

(S) *Specialization Option* — The U.S. has long been trying to get the FRG to take over its fixed SAM installations, but the FRG has been reluctant to incur the added burden. Thus, some kind of trade-off is needed to compensate the FRG. How about the FRG taking over all forward Nike and fixed Hawk installations in return for the U.S. and Benelux taking on compensatory missions, e.g., the U.S. providing an ACCB and Belgium and Holland each providing a corps-level AT helicopter brigade?

G. COMPATIBILITY, INTEROPERABILITY, AND STANDARDIZATION

(S) It is painfully clear that if NATO ground forces are to achieve the necessary flexibility for optimum defense against a WP blitzkrieg, they must be able to operate more effectively together than is now the case. To take one example, NATO inventories today include 31 different types of antitank weapons, with 18 improved types being developed. ASYG Tucker believes NATO should have only four. A similar problem exists with medium- and long-range SAMs, where four separate national development efforts are under way.* Lack of adequate tactical communications interface would seriously impede joint allied operations.

(U) The obvious answer, and the one usually given, is standardization — of equipment, C^3, tactics, and logistics. But NATO's limited success in standardizing over the last 25 years makes it equally obvious that this is perhaps the most difficult goal for NATO to achieve. We deal with standardization in general in Chapter VI. This section is concerned only with ground-force aspects.

(U) While the U.S. is usually in the lead in calling for standardization, it is frequently one of the worst offenders (as in the case of the M-16 rifle). Of course, in highly sophisticated air and naval

*(U) DPC-VR(74)15, Part II, p. 32 (Secret).

fields in particular, the U.S. has a great technological edge. So, if the U.S. wants to put its money where its mouth is, it must find a way to expand its purchases in other categories. We raise this issue in the ground-force chapter because the one broad area in which the U.S. cannot claim technological superiority is in ground-force equipment (there are naturally exceptions, such as helicopters). Many Army officers may not like this assertion, but we think it amply proven by experience going back before World War I. Nor are we the largest consumer of such equipment. Collectively, our European allies have much larger requirements than we. And is it really necessary to design *all* our equipment for use anywhere in the world? We doubt it. For these reasons, *if the U.S. really wants to promote standardization, it means buying more European ground-force equipment*, if we want our allies to buy American planes (see Chapter VI).

(U) In fact, the U.S. Army's best interest would be served by buying allied equipment, as long as it could get DOD and Congressional approval to trade off the resultant savings for more forces and greater readiness.* The reason lies in the simple fact (see Chapter I) that growing Army personnel and manpower costs are increasingly squeezing RD&P. Not only are Army equipment and RD&P budgets going down (from $2.8 billion in 1973 to $2.4 and $1.8 billion requested in 1975) but, far more important, the purchasing power of the 1975 dollars is far less. If something isn't done soon, the Army will either have to cut manpower and/or readiness sharply or give up modernizing. Here is an added powerful argument for buying European, if it could lead to significant savings.

(U) If we do face up to these facts, several types of European equipment might be suitable for purchase. Possibilities include the SHORAD systems that our Army is now testing, the Leopard II tank, or the new 155mm FH/70 Howitzer being jointly developed by the FRG and Italy. The way the Army handles procurement of the Roland II SHORAD

*(U) The extent of such savings would depend, of course, on how much the Army was willing to depend on allied R&D, instead of redesigning everything, and to buy from allied suppliers (thus getting the savings from longer production runs), instead of licensing U.S. suppliers, which usually results in *increased* unit costs. Given past experience, this is a tall order.

missile system, which it has decided is best, will be an interesting test case of how well it understands the above facts of life. Will we join the present Franco-German development program, or insist on one of our own? Will licensed manufacturers of all components in the U.S. be insisted upon, despite the increased costs entailed? Will so many modifications be made that the U.S. and allied systems are not really compatible. We wonder.

1. Standardize on FRG Scatterable Mine

(U) As we suggested earlier, another possibility particularly applicable to NATO's primary antiarmor mission is the FRG family of scatterable mines and launchers. Standardization has its best chance of being accepted under three conditions: (a) the system to be standardized has not yet been procured, allowing time for agreement on joint procurement; (b) one ally's system is clearly superior; (c) the funding involved is not so great that national desires to support their own industry predominate. The FRG scatterable-mine program seems to meet these criteria.

(S) The FRG seems to be the league leader in developing scatterable AT mines of several types: (a) the LARAT I (formerly Pandora) -- an air-delivered CBU-type cluster bomblet or artillery-rocket-delivered (eight mines per rocket) due for series production shortly; it can destroy tank tracks; (b) the LARAT II (formerly Medusa) -- a larger artillery or rocket-deliverable AT mine, still being developed and due for series production in 1977; and (c) the Dragonseed, a rocket-delivered scatterable AT mine, still quite a way into the future. All are self-destruct. The FRG also seems to be ahead on inexpensive delivery systems. The Germans intend rocket delivery via their 36-tube LARS (Light Artillery Rocket System) and a proposed new 280mm Medium Artillery Rocket System (MARS or RS-80), which was a joint U.K./FRG program until the U.K. withdrew after its recent defense review.

(U) If the U.S. wants to promote standardization in the high priority area of antiarmor, why not buy into this FRG program? Since the U.S. is not making a comparable effort and the items involved are

relatively cheap, here's a good thing to "buy European."* It might even be possible for the U.S. to get something free as part of offset arrangements. And if the U.S. buys, this could be used as a powerful lever to get other allies to buy in too.

2. Standardization of Ammunition Is Even More Crucial than Weapons Standardization

(U) Even if NATO cannot agree on standardizing major combat equipment, there is an overwhelming case for standard calibers and interchangeability of ammunition. This is so important that it should become the top standardization priority, and the Ministers should agree that no country will henceforth produce equipment in certain key categories that doesn't use standard compatible ammunition.

(S) In fact, such standardization was in the past recognized as so important that the one major item on which most of NATO standardized was the 7.62mm round. Now the Belgians have suggested standardization on a new common round, and perhaps rifle. Similarly, the FRG strongly urges a common tank gun and round for the next generation of main battle tanks. As one German general officer and expert said, it would be "a crime" if the NATO countries each had different tank guns for the European battlefield.** As we see it, the advantages of standardization are far greater than the marginal differences between national military requirements. Therefore, while the ministerial level cannot substitute its own for professional military judgment, it should force the military to compromise by agreeing not to authorize procurement of specified new weapons until a common design, or at least common ammo, is agreed on. For example, *if the U.K., FRG, and U.S. defense ministers agreed that none would procure a new tank until their three services agreed on a common gun caliber and ammo, this would really force the issue.*

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*(U) Two shrewd senior officials noted that the U.S. Army would face an internal "roles-and-missions" conflict in this case. The engineers regard mines as their baby, but the artillery claims the rocket launchers, while the infantry would want both. But the Germans solved this problem — why couldn't we?

**(U) DIA IIR No. 6-834-0195-72, 5 March 1972 (Confidential).

3. Go for Compatibility, Harmonization, and Interoperability First

(U) In general, however, while still pressing all viable opportunities for full-scale standardization, NATO might well focus chiefly on lesser step-by-step measures that, taken cumulatively, would add up over time to significant progress toward standardization. As discussed in Chapter VI, we have in mind such measures as: (a) interoperability; (b) compatibility; (c) joint training; (d) harmonization of doctrine and procedures, and the like. SHAPE's call for each ally to develop facilities for cross-servicing of allied aircraft is a constructive example that should also be attempted in other fields. As Secretary of Defense Schlesinger has proposed, there should be similar policies to ensure land-force interoperability, especially to enhance flexible deployment of Center Region reserves. This concept perhaps can best be illustrated by a series of examples:

a. ~~(S)~~ *Command signal procedures and compatible tactical signals equipment.* (*USNATO 4363* argues for this.) SACEUR's 1973 Combat Effectiveness Report notes how land-force communications "lack flexibility, survivability, capacity and speed necessary to support operations as planned. Secure voice communications to Corps remain a pressing need."* In the course of rectifying these deficiencies, SecDef Schlesinger has urged that compatibility be stressed, if NATO forces are to achieve any flexibility.**

b. ~~(S)~~ *Common consumables.* The FRG recently suggested that NATO focus first on standardizing combat consumables so that at least the various forces can work together. They seem to have in mind especially small arms, tank, and possibly AT ammunition (*USNATO 4363*). But standardizing artillery ammunition ought to have high priority as well, since it is by far the largest in weight and bulk.

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*(U) SACEUR's 1973 Combat Effectiveness Report, Annex A.

**(U) SecDef Statement to June 1974 DPC, para. 37 (Secret).

c. (U) *Common AFCENT LOC* (for rear area movements — see Chapter V).

d. (U) *Common barrier materials.* If the FRG is given responsibility for nonmobile-barrier erection, as we suggest on p. 68, commonality in materials will be easier to achieve.

e. (U) *Reliance on FRG territorial and paramilitary forces.* In concept, the FRG has designed its territorial forces to perform several important functions on behalf of *all* NATO forces in the FRG, such as movements control, much engineer work, allocation of civil assets, PW handling, and rear-area security. Yet we see little evidence that the other forces have modified their own planned structures to take this into account. The GTA should be tasked to brief its plans for all such missions, and other allies could then eliminate any duplication.

H. CONSOLIDATING TRAINING

(U) Obviously, gradual consolidation of cumulatively quite substantial, but largely duplicatory, training establishments of the NATO allies would be a sensible rationalization measure. Indeed, it is indispensable to a NATO partnership concept, instead of "going it alone." Without it, flexibility of force employment is difficult. While the obstacles are substantial, such consolidation would not only save money on facilities and overhead, but promote common tactics and procedures and even common equipment. An added financial reason for combining training facilities is that new training aids, such as laser-beam fire simulators, which enormously enhance realistic training, are also very expensive. This suggests that they should be pooled wherever possible.

(U) Moreover, it need not necessarily be done on a NATO-wide basis; these results could be achieved by any combination of two or more nations. A particular effort is needed to rationalize training facilities for the Dutch and Belgian forces, to avoid the present tying up of so many of their limited active personnel in their training establishments.

(U) So we think the whole field of combined training and more combined exercises should be thoroughly explored. While NATO training in the U.S. would help offset U.S. balance-of-payments costs and be a form

of burdensharing, a balance between having some NATO training centers in Europe and some in the U.S. is politically essential.* One rule of thumb might be that the country providing equipment should also provide training, as the U.S. already does for Nike, Hawk, Pershing, and Lance.

1. Consolidated Basic Helicopter Training

~~(S)~~ This possibility is being studied by EUROTRAIN. It is firmly supported by the FRG, Norway, and Denmark. The Netherlands, because the U.K. held off during its defense review, went ahead with training in Canada instead of the U.S. EUROTRAIN proposed a contract with the U.S. Army Aviation School under which the allies would contribute 50 percent of the added instructors needed. Under this scheme, for example, Dutch costs for training a pilot would drop from $90,000 to $30,000 if at least 150 students a year were sent. Thus, U.K. hesitations temporarily doomed this scheme.** But the Dutch-Canadian arrangement covers only a two-year period, so the issue should be reopened. Even Canada might join in, because of its budget bind.

2. Combined AT Helicopter Tactical Training

(U) The flexibility of AT helo units, because it permits their lateral movement outside national corps sectors, imposes a requirement for Center Region-wide joint doctrine, tactical procedures, and training. Logically, this should be done in Germany for familiarization with the terrain over which the units would be fighting. But the severe FRG restrictions on night and low-altitude operations might have to be modified, at least in certain areas, for this to be practical. Denmark has already proposed an advanced helicopter training school in Europe. A single AT missile firing range for use by all Center Region allies would also be economical and would facilitate standardization on the TOW missile. We urge that exploratory discussions on the above be initiated promptly in NATO before each ally goes ahead with its own plans.

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*(U) *USNATO 4093*, 25 July 1974 (Confidential).

**(U) USNATO Letter to ISA, 6 August 1974 (Confidential).

3. Training of Forward Air Controllers

(U) Common training would appear indispensable in this field to exploit fully the flexibility of allied air power in providing air support from more than one country. The U.K. and FRG are already collaborating on such joint training.

4. Ground-Training Centers in Canada

(U) Plenty of space is available in Canada for NATO infantry, AT, armored, and engineer schools and training areas, with adequate room for firing ranges.

I. BROADENING U.S. MARINE CORPS CONTINGENCY ROLES

(S) One aspect of rationalizing the U.S. contribution to NATO which in our view deserves examination is that of utilizing USMC forces to meet higher priority needs than those for which they are presently earmarked, i.e., NATO flank actions. If the crucial Center Region remains inadequately manned, we question whether Marine forces should be earmarked primarily for the flanks. We recognize that, for good political and military reasons, we want the flank allies to continue believing that such U.S. forces would indeed be sent to their aid. But we believe that contingency plans (and equipment programs) should also be established for utilizing these high quality and highly ready forces in the Center Region, if needed. This may be seen by the USMC as a threat to their relative autonomy (and their amphibious assault specialty) and run afoul of USMC/Army reluctance to operate together. But such doctrinal or parochial concerns may have to go by the board if NATO's defense posture is to be optimally rationalized.

1. Explore Shifting Marine Corps Assets from a NATO Flank-Reinforcement Role to a Center Region Reinforcement Role

(S) The U.S. response to DPQ75 makes the two Marine amphibious forces (MAF) available to the Center Region, in an emergency, as well as to the flanks. But the MAFs are configured mainly for the flanks, and such a shift would require modifications, especially in armament and

Marine air components, for effective Center Region operations. A shift to air transportable brigades might be needed, although faster sea lift should also be explored along the lines of the SEA EXPRESS scheme (see p. 53). We understand that preliminary studies along these lines already suggest that Marine deployments to Europe could be greatly speeded up.

(S) The Marines have planned sea lift for 1-1/3 division MAF assault landings. Present plans are for the first marine amphibious force (division-size) to arrive in the Mediterranean between M+35 and M+45, apparently for service in Greece or Turkey, and presumably for an opposed assault landing. Even if successful, this venture would contribute little to meeting the highest priority need for holding in the critical Center Region. The chances for success in an opposed landing are also deemed dim in view of the critical absence of gunfire support ships and the relative ineffectiveness of air bombing from vulnerable aircraft carriers (some estimates indicate that six carriers would be needed to support a division-size landing, i.e., provide the weight of ordnance delivery usually required).

(C) Whether or not Marine divisions are programmed for Center-Region deployment, consideration should also be given to deploying Marine air wings to that Region, if needed, during D to D+30. The Marines will object to this as destroying their integrated amphibious-force concept, but the marginal relevance of amphibious-assault landings to meeting the main threat and the dubious likelihood of their success in a NATO/Pact war appear to be more compelling arguments for such a diversion.

2. One Marine Brigade for Each Ocean Appears Sufficient

(U) All factors considered, a Marine assault capability of one brigade for each ocean, air transportable, or contained in less expensive and less vulnerable ships (especially since the most likely use would not be against Soviet forces), appears sufficient. Saved resources could be shifted to improve Marine lift and equipment for Center Region development.

(U) The U.S. Navy is buying five helicopter amphibious-assault ships (LHA) — one already launched — for a total estimated cost of $1145 million. Each ship is designed to carry a complete Marine Corps battalion landing team, each with all its landing craft, helicopters, trucks, tanks, supplies, and ammunition, and to land them ashore. The 820-foot LHAs will have a loaded displacement of about 39,300 tons, about as large as the World War II *Essex*-class attack aircraft carrier. In a NATO context, it is difficult to visualize the utility of this type of capability, even if all five LHAs (five battalions) could be deployed simultaneously. And, at the moment, figures are lacking for the protective forces that would have to accompany the LHA and the resultant drain on the overall defense budget.

3. Dedicate a Marine Air Transportable Brigade (with Aircraft and Effective SAMs) for Immediate Deployment on M-Day to Keflavik and Reykjavik

(S) Although Navy thinking (in SEA EXPRESS, for example) acknowledges the Soviet capability to neutralize Iceland in the early days of a war by bombing air and radar facilities, little, if any, consideration has been given to the existing Soviet capability to *capture* Icelandic airfields using airborne and air transportable troops, in parallel with Center Region aggression. An unpublished Rand study assesses this capability as possibly feasible now, even with U.S. F-4s at Keflavik, and certainly feasible if the Icelandic government cancels U.S. base rights.

(S) If the Soviets choose to establish sea control in the North Atlantic as a hedge against a protracted war in which NATO seaborne reinforcements and resupply would be the balance for NATO success (assuming that NATO improves sufficiently, in their view, to force a protracted war), a tempting option would be to capture the bases concentrated in the Reykjavik/Keflavik area. With Iceland in hand, the Soviets would possess surveillance, air-attack, and advanced submarine-base facilities that would enable them to interfere with, or interrupt completely, NATO shipping, CAPTOR mining of the Norwegian Sea, ASW-barrier submarines, and of course, the ability to station AWACS and ASW aircraft at Keflavik.

(S) It is understood that SACLANT plans call for the sea transport to Iceland of one U.S. infantry brigade (with SAMs, plus reinforcement with AWX and AEW aircraft), but that this would not occur until after the initial lift to reinforce Center Region forces, i.e., probably after M+30. *In light of assessed Soviet capabilities and the potential importance of the Iceland base, this is too late.* To forestall a Soviet attempt at the capture of Iceland, war plans should include the immediate deployment on M-Day of a Marine air-transportable brigade suitably reinforced with SAMs and aircraft (preferably types that can cope with Foxbat).

III. RATIONALIZING NATO AIR FORCES

(U) Rationalizing its air forces must be one of NATO's top priorities:*

1. It is essential to a credible NATO conventional deterrent/defense against WP attack. As stressed in Chapter I, it is time for NATO nations to *acknowledge* that there is no practical alternative to mutual reliance on one another for defense against the Warsaw Pact. Although each nation may want to maintain balanced ground, naval, and air forces, it is becoming increasingly irrational, if not impossible, to do so. It is equally irrational for each nation to attempt to maintain a balanced air force patterned after the U.S. Air Force. There are welcome signs that NATO nations — particularly the smaller nations — realize this.
2. The high cost of today's and tomorrow's air technology makes needed modernization of NATO's air forces so expensive as almost to dictate rationalization to free the needed resources at a time of severe resource constraints. Moreover, it is the nature of modern air power that many of the measures under way or proposed are very expensive. In a period of severely constrained budgets, this means that they will have to be at least partially funded via trade-offs from other less essential programs, despite the impact such trade-offs may have on national programs.
3. Since the U.S. itself has challenged NATO to make more rational use of its air assets, our failure to follow through would severely handicap our efforts to gain acceptance of equally important army and navy rationalization programs.

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*(U) In our previous study on restructuring NATO forces to compensate for MBFR we stated "what would help NATO most would be *to organize NATO's air forces in toto as a rational and fully coordinated force* able

(S) For example, if we cannot overcome the doctrinal and parochial obstacles that have created an artificial barrier between 2 ATAF and 4 ATAF, how can we hope to remedy the more difficult layer-cake problem facing NATO's ground forces in the Center Region? Or make more efficient use of NATO's naval assets? Or persuade NATO to adopt a Total Force Policy that makes the most rational use of all its assets, instead of continuing independent national policies that in turn promote inadequate ground, naval, and air forces? Thus we see rationalizing NATO's air posture as the leading edge to stimulate parallel rationalization of other aspects of its posture.

(S) It is also encouraging to note the far-reaching programs already under way for improving NATO's air posture. This is a clear indication of the practicality of the *concept* of rationalization, when carried out by aggressive and pragmatic negotiating. We refer to:

- The creation of a new Center Region air authority -- Allied Air Forces Central Europe (AAFCE) -- to control the activities of the allied tactical air forces.
- Pending agreements on numerous *colocated air bases* to ease the serious overcrowding that would otherwise result when U.S. augmentation aircraft deploy to Europe.
- Continuing steps toward more protective shelters for combat aircraft.
- The search for a *common* replacement aircraft for the aging F-104 by four NATO countries, with agreements not to take unilateral action before all possibilities for a joint solution have been explored.
- USAF relocation of F-4 assets for better utilization and increased effectiveness.
- Efforts under way to upgrade NATO air capabilities via precision-guided munitions (PGMs).
- Proposals for a new airborne warning and control system (AWACS).
- The progress made in NATO's electronic warfare program by NATO air forces.

(U) Taken together, these measures indicate that NATO has moved much faster to develop a blueprint for the modernization and rationalization of its air forces than for its ground and naval postures. But drawing the blueprint is simply the first essential step. Much hard work by NATO's political and military authorities will be required before these improvement programs become realities. Our effort in this chapter will be twofold:

1. To discuss ways of improving NATO air posture by more rational allocation of, or by changes in, programmed resources and current responsibilities within and between individual allies.
2. To suggest ways to overcome political and military obstacles to needed improvements. The latter may be more difficult to overcome than the economic constraints.

A. WHY IS CENTRALIZED CONTROL OF ALLIED AIR POWER SO IMPORTANT?

(S) Our purpose here is not to discuss the NATO-Warsaw Pact air balance, although we agree with those who feel that NATO's advantages in terms of more modern equipment, armament, and better trained aircrew, are often ignored in favor of numbers of aircraft available. Hence, even if the Warsaw Pact does have a numerical advantage (and this is debatable), it is not NATO's biggest air problem. The problem lies in the fact that NATO is not in a position to use effectively the sizable air forces it now has.

1. Making AAFCE a Viable Command Is Essential to Using Air Power Optimally

(U) NATO cannot win an air war against the Warsaw Pact using different doctrine and tactics in an airspace the size of that over Oregon. NATO nations contributing forces to the 2 and 4 ATAF areas may be willing to operate under different rules and stay within present boundaries, but there is no reason to believe Warsaw Pact forces will agree to do likewise. One reason for General Johannes Steinhoff's strong support of the new AAFCE was his personal experience in the German defense of Sicily against allied air attacks in World War II. Following is an excerpt from his [illegible] so that the reader

can substitute his own choices of names and places.* Steinhoff's description of events that occurred over 30 years ago aptly describes the situation today.

> The sight of [Chinisia's] blasted airfield reminded me of my visit to the [Italian] fighter wing stationed there, and at the same time I realized that I had almost completely forgotten about the existence of the [Italian] fighter arm. During the gruesome finale [on this island] it was a case of every man for himself. The heavy attacks had begun before we had had time to establish signals communications with each other or to coordinate our tactics — steps we would have taken as a matter of course had conditions been anything like normal. This meant that each air force had begun fighting its own war. And, in circumstances where relations between the [Italian] and [German] high commands were far from good, not only were the arrangements for controlling the units of the two nations entirely separate but the orders they received were also different, so that any coordination in the operational field was out of the question. Indeed, that had been the main defect of the joint command ever since the start of [Mediterranean] campaign; the two controlling organizations had been so much concerned with prestige that each had taken all possible steps to prevent its own units being placed under the other's command. Thus, although the battle was a common one, the assignments and orders were invariably different.

(S) NATO's air forces have not established adequate communications with each other, there are wide differences in doctrine and tactics, arrangements for controlling national units are separate, and the orders they would receive would differ. For example, there are no effective means to interface air-defensive and air-offensive operations, allocate air resources between ATAFs, or coordinate the air and ground battle. In some respects the situation may be worse than 30 years ago, because one air force, the Luftwaffe, must be trained to operate under two separate doctrines and with two sets of tactics. There is no assurance that the operations of one ATAF will not conflict with the other or that friendly and enemy air activities over the ground battle will not become so confusing that ground forces will resort to "shooting them all down

*(U) *The Straits of Messina*, Johannes Steinhoff, p. 196.

and sorting them out on the ground."* The foregoing may seem a strong indictment, but our reason for such a forthright statement is to dispel any ideas that the creation of an AAFCE headquarters solved all the air problems in the Center Region. It is an important first step, but essentially a political compromise on which we can build.

(C) Another reason for making AAFCE a viable command is the imbalance between the capabilities of 2 ATAF and 4 ATAF. At full augmentation, 80 percent of the force will be bedded down in the 4 ATAF area, while the threat in the 2 ATAF area could be as high or higher -- on the ground as well as in the air. Part of this imbalance can be solved by colocated operating bases (see pp. 100-108) but some imbalance will still remain. However, aircraft do not have to be based in the 2 ATAF area in order to fight there and NATO has better ways to spend its defense dollars than to build airfields to even out force allocations. Aircraft from 4 ATAF can be on NORTHAG targets in a matter of minutes; moreover USAF aircraft based in the U.K. can support ground operations in NORTHAG more readily than they can support CENTAG. But neither the U.S. nor German air forces should have to operate under different rules in order to support either of the two army groups. If AAFCE can develop common doctrine and tactics and standardize combat training of aircrews, then costs can be limited to the necessary communications to ensure effective command and control.

(C) This would permit centralized allocation of resources and flexible decentralized execution of assigned tasks. It would enable the AAFCE commander to ensure that there was no counterproductive interference between defensive and offensive air operations. Close air-support operations and the necessary air resources to execute them could be delegated to the individual ATAFs -- and resources could come from either ATAF. Interdiction missions, whether against second echelon ground forces closing

*(U) Dr. Malcolm Currie, Director of Defense Research and Engineering, in a speech to the American Institute of Aeronautics and Astronautics noted that in the 1973 Middle East war, Arab aircraft were knocked down by Arab SAMs, and Israeli aircraft were sometimes downed by Israeli SAMs. Currie said: "We cannot be confident that our own experience in similar circumstances would be much better." *Aerospace Daily*, May 14, 1974, p. 77.

on the FEBA or deep into enemy territory, need to be centrally controlled for several reasons: they need more preplanning, they require combat air patrol (CAP), and also escort and electronic-support aircraft, and they may need refueling and air-sea rescue support as well. *To be successful, they must have real-time intelligence, including the current air, ground, and electronic order of battle from every source possible.* But such information is of limited value unless the recipient also knows what total friendly resources are available and also has the authority and requisite C^3 to fight the force.

(S) Since such flexibility is essential, NATO's Defense Ministers recently asked SACEUR to develop a plan in which Center Region forces could be used to react to threats wherever they occur, and the U.S. indicated willingness to deploy reinforcements to the northern half of AFCENT.* But neither U.S. political nor military authorities would want the responsibility of committing U.S. ground forces to an area where it would be impossible to furnish them close air support or protection against enemy air attack because NATO has not provided effective air/ground interface and the necessary communications support. If NATO's military have sincere apprehensions about a Warsaw Pact attack with limited warning, then the time for action is *now*. It will be too late to sort out this tangled mess once hostilities ensue. As General Steinhoff puts it, "the war in the air is a technological war which cannot be won by a technologically inferior fighting force, however high its morale or dauntless its resolution." NATO's C^3 arrangements for its air forces are technologically inferior to the Pact's. This is particularly distressing, because NATO has an inherent C^3 advantage over the Pact — most of our aircrews speak a common language, English, whereas Warsaw Pact crews have a real voice communications problem once they are out of their assigned sectors. NATO also has the start of a common electronic language amongst its air forces that could be enhanced to promote the interoperability and flexible deployment between ATAFs.

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*(U) *USNATO 3355*, 131845A, June 1974 (Secret).

2. Facilitate Using Air Forces As a Gap Filler

(S) Another overriding reason for promoting interoperability and flexibility of NATO tactical air forces is to enable using them as a gap filler to help overcome the serious deficiencies in NATO's ground shield vis-à-vis a Warsaw Pact blitzkrieg. *We are not suggesting that air forces can substitute for ground forces.* But the U.S. and NATO need to put teeth into the Total Force Policy by using the potential air forces have to move rapidly to any critical point in the ground battle. In discussing ground forces in Chapter II, we made the point that NATO defense against a Pact armored attack should take on some of the characteristics of a three-dimensional chess game because there are several realistic scenarios in which NATO's air forces could be used to help blunt the Pact's great advantage in armor. In the event of a worst case surprise attack, they could help the antitank helo units and the forward ground elements hold, while the remainder of NATO's ground forces moved to their EDP positions. Once NATO's ground forces are at their EDP positions, NATO's air forces can be massed against the primary point of the Pact's attack to furnish close air support and protection against the Pact's offensive air forces. Moreover, and more important in FRG eyes, tactical air attacks can be launched against the second wave of the Pact's armored forces as they mass for attack, to delay or prevent their entry into the ground battle.

(C) There are good reasons to attribute these capabilities to NATO's tactical air forces. They are kept at a relatively high level of alert. They have the mobility and flexibility to move quickly to any trouble spot over the entire combat zone — they can cover in minutes distances that would take armored forces days or helo-borne forces hours. And while there may be many avenues of attack that the Warsaw Pact ground forces could take, there are none that cannot be quickly covered by allied air forces.

(C) Further, the approaches available to the Pact's armor may not be as numerous as they seem. There is a limit to how far tanks can travel on their tracks, and not all of the Pact's supporting elements are tracked.*

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*(S) The Israelis used 11,000 sets of tracks in the October 1973 conflict.

The amount of ammunition and POL the attacking elements can carry with them is also a limiting factor for off-road operations. Western Europe is a megalopolis, but again there is a limit to the load-bearing capacities of roads and bridges and, hence, to the alternative routes available to wheeled and tracked vehicles. Furthermore, the smaller towns, with their narrow and crooked streets, create roadblocks that armored columns must either thread through or circle. Air attacks, coupled with hasty barrier operations and support of airmobile or helo antitank units, can slow and/or channel the attacking forces towards terrain more favorable to defending ground forces.

(S) Weather permitting, tactical fighters with PGMs such as Maverick can inflict heavy losses on the advancing force, while other aircraft with laser or electrooptical PGMs can destroy key bridges, intersections, and overpasses to slow the enemy's progress. With preplanning, these interdiction points can also be hit under all weather conditions by the peacetime implanting of sensor systems. The possibilities are tremendous, but such operations require common doctrine, tactics, centralized command and control, real-time intelligence, and the requisite communications. These are within reach in peacetime. But it will be too late to begin after the whistle has blown.

3. If AAFCE Is So Important, Why the Opposition to Its Formation?

(U) The agreement to create AAFCE is a dramatic and important political breakthrough. But it took over two years of negotiating and pressure to secure the present arrangements, and many authorities would be more than willing to let the issue rest. For example, one senior official in the U.K. Ministry of Defence told us that the 2-4 ATAF problem had been the most controversial subject within the MOD and took more of its time than any other single subject discussed in 1973.

(S) Some of the reasons for resistance are suggestive of ways to overcome the remaining obstacles to making AAFCE more than a paper headquarters and a political solution to satisfy a U.S. recommendation. First, we need to remember that until 1966 there was an AIRCENT under AFCENT for control of the 2 and 4 ATAFs. Under the MC 14/2 strategy,

AIRCENT's usefulness was questioned on several occasions, because the tasking of tactical units for the nuclear-strike role and their command and control were SACEUR responsibilities and intermediate headquarters were bypassed.* Adequate C^3 for conventional operations was a secondary consideration under a strategy that relied on conventional operations primarily as protection against incursions, infiltrations, and local hostile actions. Indeed, SACEUR himself doubted the necessity for AIRCENT. Only strong resistance by NATO and national air force commanders kept it in existence. President de Gaulle's demand in 1966 that NATO headquarters and allied forces be withdrawn from France overcame this last line of resistance. NATO had too many other serious problems — finding new locations for the NAC, SHAPE, and AFCENT, building facilities, and moving — to worry about AIRCENT's demise. In fact, many saw the move from France as a golden opportunity to prune NATO overhead. The U.S. was similarly engaged in finding homes for EUCOM and the Army and Air Force units that had to move from French soil. The U.S. was also deeply involved in SEA. Our main European initiatives were to overcome the political and psychological impact of French withdrawal and to promote alliance acceptance of the flexible response strategy embodied in MC 14/3. The importance of an AIRCENT to such a strategy simply was not recognized by more than a few. One four-star Army general who held a NATO command at that time told us he had recommended retaining AIRCENT and merging 2 and 4 ATAF with it at one of the ATAF locations. SACEUR told him that NATO had enough political problems to solve without adding this issue to the agenda. It would appear that both generals were correct.

(S) In December 1967, NATO adopted the MC 14/3 strategic concept, "based upon a flexible and balanced range of appropriate responses, conventional and nuclear, to all levels of aggression or threats of aggression."** But like most other NATO documents, MC 14/3 represents a compromise subject

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*(S) Under MC 14/2 alert procedures, the tactical squadrons were generated for nuclear QRA. Aircraft for conventional operations were to be made available for tasking by the ATAFs *after* the strike mission had been completed.

**(U) Communiqué of the Ministerial Meeting of the Defense Planning Committee, 12 December 1967.

to interpretation by individual nations. This interpretation comes in the form of the doctrine and tactics adopted by the national forces earmarked or assigned to NATO military commanders. Differences are resolved slowly and more often by erosion than by outright change. The serious imbalance in forces and the differences in doctrine and tactics between 2 and 4 ATAF became apparent to allied air officers early in the implementation phase of MC 14/3. Attempts were made to iron out such conflicts in order to promote interoperability, but since these differences were generated by national strategic perceptions, little was accomplished. Thus the need for centralized command and control and the ability to use NATO's air power flexibly was not forced into the open until the U.S. initiative of December 1971.

(U) After two and a half years of hard and often hot negotiations, we again have a Center Region Air Headquarters superimposed over the two ATAFs. But the differences generated by national attitudes remain; nor will they be resolved solely by NATO's political and military staffs, which operate on instructions from home and are limited in their freedom of action. AAFCE, if it is to be more than a paper duplicate of AIRCENT, faces some hard bargaining.

(S) U.K. opposition to a strong AAFCE has many facets. From a strategic viewpoint, the U.K. historically has favored the early use of a few tactical nuclear weapons to warn the USSR and the Pact that further aggression raised the risk of NATO's escalating to strategic nuclear warfare. Theoretically, this early but limited use would reestablish deterrence, give both sides the opportunity to decide whether the issues were worth the risk of a strategic exchange, and afford time for a negotiated settlement. U.K. agreement to MC 14/3 did not mean that they had changed their strategic thinking; indeed, the U.K. position has since persisted through successive changes of government. There are several reasons for this consistency.

(U) Neither of the major political parties can suggest a return to conscription and lower military pay without being turned out of office. U.K. manpower costs, like those of the other NATO nations, are rising at the very time the defense budget is being sharply cut. Since conventional

forces are manpower-intensive, both political parties emphasize nuclear deterrence and weapon systems with a long-life cycle.

(S) Nor is either political party willing to tell the U.K. public that they may once again be attacked by conventional enemy bombers. The thought of bombs falling on British soil without retaliation against the attackers' homeland is unacceptable. This position is documented by the U.K.'s refusal to participate in the NATO aircraft shelter program, even though infrastructure would have paid for 88 percent of the cost involved! The British also opposed shelters for USAF aircraft based in the U.K., reluctantly agreeing to them in September 1974, only after great pressure had been applied and a rationale developed that could be accepted by the man in the street.

(S) Both parties see international political utility in being a nuclear power. As the economic pressures get tighter, neither party is likely to deemphasize the U.K.'s nuclear status by diverting resources to improve U.K. conventional capabilities. There is also political utility and prestige in the number of key command and staff positions the U.K. holds in NATO's political and military structure. As one of the three nuclear members of the Alliance, the British can and do get more key positions than their overall contribution warrants. A switch of emphasis to conventional capabilities would place them in a poorer position relative to the FRG, which already makes a greater contribution to defense of the Center Region. Therefore, the British naturally resist any changes that would challenge their eminence in NATO. Since they are in deep financial difficulties, they will buy weapon systems that give credence to their prestige position. By doing this they support the strategy as they interpret it and in turn impose doctrine and tactics in support of that strategy on 2 ATAF and NORTHAG.

(S) The British have bitter memories of what the Luftwaffe did to their cities and countryside in World War II. Their control of NATO commands corresponds to their postwar zone of occupation, and they will not give up their position in this area without a struggle. They realize that their air force contribution to the Center Region — less than 100 aircraft based in the FRG — does not support their command dominance of

2 ATAF, but their determination that RAF forces will not be commanded by a German is understandable.

(S) In sum, the British have hammered out an interpretation of NATO's MC 14/3 strategy that is acceptable to both political parties and to the population at large. It fits their manpower resources, is within the range of defense budgets likely to be supported, gives them political stature as a nuclear power, and offers a nuclear counterbalance to an increasingly strong but conventionally armed Germany. They are unlikely to accept any changes that impact on their position of influence or that cost them more money.

(S) The viewpoints of other nations contributing air forces to the Center Region do not seem as set as the U.K.'s. A ranking Belgian military official told us that Belgium, more than any other NATO nation, realized that its forces have no reason to exist other than to fulfill NATO military requirements. He noted that the Belgian government relied heavily on the major NATO commanders' force goals to structure Belgium's armed forces. He strongly suggested that these commanders should be more selective in establishing priorities and more forceful in promulgating doctrine and tactics. His point was that the smaller nations had no choice but to follow the lead of the larger nations, and unless SACEUR and SACLANT settle the differences between the larger nations, the smaller nations would be caught in the middle.

(S) Netherlands officials we talked to supported AAFCE but were adamant that it be collocated with AFCENT. They also stressed the need to collocate Army Group and ATAF headquarters, but it was evident that they saw the function of all these headquarters as being planning rather than operational in nature. U.S. concepts of interfacing offensive and defensive operations and of timely deployment of available air assets to any point in the Center Region through modern C^3 arrangements were either not fully understood or deemed infeasible. Nor are they likely to be until elements actually are placed into operation.

(S) Given this ambivalence, Dutch insistence that AAFCE be colocated with AFCENT is more readily understood. We also have to remember that the Dutch accepted AFCENT reluctantly against some internal

resistance. A NATO headquarters commanded by a German general was not a welcome neighbor to many who remembered World War II occupation days. Now that it has been established at Brunnsum and is contributing to the local economy, there is a natural resistance to actions that may endanger its future. The Dutch have an economic and political investment to protect. How would the Dutch government explain that the headquarters needed so urgently in 1967 was no longer necessary? The familiar Congressional pressures generated by base closures in the U.S. parallel those the Netherlands would face. These domestic political problems, coupled with their military's position (including top air force officers) that army and air headquarters be collocated are the basis for Dutch insistence that AAFCE be located at Brunnsum. We believe these obstacles are real, but that they can be overcome, partly by locating a new AFCENT LOC Command at Brunnsum (see Chapter V).

(S) The Canadians have already relinquished the nuclear-strike role and committed their three squadrons (36 aircraft) based in the FRG to the attack mission. They not only lack the C^3 to act independently, but are too small a force to survive except by coordinated operations. They can function only in conjunction with other allied air forces and must rely on 4 ATAF or AAFCE for direction — or sit out the war in isolation.

(S) The FRG's problem in supporting a strong and capable AAFCE is a political one. GAF leaders long ago realized that the artificial boundary between the 2 and 4 ATAF was an unnecessary handicap to the forward defense of West Germany. With the adoption of MC 14/3, this separation became a painful burden. A comparatively inexperienced, expanding German air force was trying to shift to complex F-104G aircraft and was sustaining unacceptable losses of aircraft and pilots during training. These losses were high enough to threaten the political future of any FRG government and were devastating to Luftwaffe morale. When MC 14/3 added the burden of training for the conventional attack role, the GAF had to face the differences in doctrine and tactics between the two ATAFs. In light of their F-104G transition problems, GAF leaders were bitter over these differences. However, both the military and political leaders realized the U.K. sensitivities noted above. Their forbearance

under these circumstances is a remarkable indication of the FRG's desire to be a good NATO partner. Now that the issue is in the open, AAFCE needs their full support to avoid a confrontation with the U.K. and other European allies.

B. MAKING THE AAFCE CONCEPT VIABLE

(S) *How can we overcome these obstacles and organize NATO's national air forces as a rational and fully coordinated force under AAFCE command and control?* The answer seems to lie in a series of incremental steps -- within NATO channels when necessary, but preferably by bilateral or multilateral agreements and informal arrangements. If we go the formal NATO route, we will run headlong into the doctrinal and parochial views that held up AAFCE's organization for two and one-half years. Pride and prestige could prevent changes in national positions and stall progress. Nor can we get the job done by waiting on inputs from national military and political staffs to their international counterparts. If we do, we will also run headlong into the question of who pays and how much and end up arguing over cost-sharing formulas for another two years. Where possible we would be well advised to seek bilateral and multilateral agreements and arrangements. There are also a number of air-force-to-air-force arrangements that can be implemented and we will suggest some later.

(S) *But first and foremost of all requirements is for the United States to think NATO.* We need to be better partners to our NATO allies and seek means to bolster their confidence in interdependence to overcome their feelings of impotence against a Pact attack. One of the best ways to increase allied confidence in interdependent air forces is to make AAFCE a strong operational headquarters in peacetime. NATO does not need another administrative layer added to its peacetime structure; it does need an operational headquarters to command and control the air resources it now has.

(U) The creation of AAFCE is only a first step; hard work and firm bargaining remain to be done before it will have the authority and the wherewithal to command its component air forces effectively. In a sense, AAFCE has become a test case. If we fail to make it a viable command, it will be a major blow to further efforts to improve NATO's overall conventional capabilities.

(S) What is needed now is to make AAFCE a strong and viable operational command in peacetime, capable of using Center Region air power to full effectiveness and with optimum flexibility. This requires more than a vigorous new headquarters. It requires far better command control, and communications (C^3) than NATO now has.

1. AWACS Can Be a Powerful Lever to This End

(U) The technological breakthrough offered by an airborne warning and control system (AWACS) may be precisely the device needed to justify welding the Center Region air forces into an operationally unified whole. As envisaged by the U.S., it would be capable of providing real-time warning and control of the air battle over the entire central front. Thus, an AWACS in the hands of CINCAAFCE would be a powerful instrument for unified command and control, and would also greatly facilitate rationalization and specialization of national air forces.

(U) The crux of the problem, as always, is how to fund and man AWACS in the NATO context, for it is extremely expensive. The temptation will be to try to fund it as a NATO program, and this method may entail inordinate delay and ultimately a less satisfactory system. Therefore, we propose on pp. 125-126 that the U.S. provide AWACS as part of a trade-off package in return for allied assumption of present U.S. air-defense tasks in Europe.

2. Adequate Communications Are Needed for Effective C^3

(U) NATO now lacks the communications system to receive real-time intelligence of enemy operations and to direct a coordinated response that utilizes all available allied resources. Nor can we realistically expect that NICS, or any other system that NATO may support, will meet AAFCE's needs in this decade. But economy, as well as operational efficiency, dictate that we cannot fight a war with independent national communication systems. Therefore, AAFCE will have to start with what is currently available from NATO sources and what can be generated by bilateral and other arrangements with interested allies. Although it does not provide an interface for defensive and offensive operations, there

is a NATO air defense net that links the Center Region air forces. Moreover, the FRG has a national network of communications throughout the forward area, and USAFE, USAREUR, EUCOM, and the Defense Communications System all have extensive fixed and some mobile assets. AAFCE will have to use elements of these combined assets as a foundation for its communications network in the near term. The FRG's CIP-67 network of fixed and mobile microwave stations has been accepted as part of NICS; it will be completed far earlier than the overall NICS system and can play an important part in resolving AAFCE's communications problems. If the FRG and the U.S. agree bilaterally to interconnect their communication systems, it will be easier for AAFCE to begin to demonstrate the flexibility of air power and to justify further C^3 improvements in NATO circles.

3. Joint Peacetime Air Operations Are Needed

Here is where "thinking NATO" can pay off. To help AAFCE, we recommend that day-to-day USAFE and GAF cooperation and joint flying operations begin before or as these interconnections are made. If we intend to make AAFCE a strong peacetime headquarters, we are going to have to exercise it — slowly at first, but continuously and on an ever expanding basis. USAFE forces can gear their operations to fit AAFCE's expanding role and provide proof that with adequate C^3 NATO's air forces do have the flexibility to meet a wide range of threats on a timely basis. *We have to convince our allies that it makes little sense to maintain our defensive and offensive air forces on a continuous alert unless the headquarters directing their operations is at that same level of readiness.* If we can routinely use joint operations and exercises to demonstrate that Boerfink meets NATO's needs for peace and war, then we can quietly deflate some of the pressures for a peacetime location at Brunnsum.

Involving USAFE forces to sell the flexible use of NATO's air forces has other advantages. Two of our biggest problems are overcoming resistance to change and introducing new technology. Allied aircrews and younger staff officers may well be our best salesmen in both fields. By introducing USAFE squadrons/crews into the 2 ATAF area, we can match U.K. and U.S. doctrine and tactics and let allied air and ground forces

compare the efficiency of the two operations. We can also give allied aircrews firsthand exposure to PGMs. This would whet their appetites for laser and electrooptical guided weapons and put pressure on senior 2 ATAF officers, who have shown little interest to date, at least to consider the efficiency of PGMs in their planning.

(S) To get the program under way, we could seek FRG agreement for limited but routine peacetime use of German bases in northern Germany. Our objective would be to begin eroding the artificial boundary between the 2 and 4 ATAF. Flights of USAFE aircraft based in the FRG could deploy to German bases for one or two days of air operations with the GAF. USAFE forces in the U.K. have practiced close air support with CENTAG forces from their U.K. bases and could do the same with NORTHAG forces. By beginning to use GAF bases on an intermittent basis we would be setting the stage for future "bomb, gas, and go" operations, promoting interoperability, and putting a few more breaks in the fence between the 2 and 4 ATAF. The initial purpose of these operations would be for USAFE familiarization, but subsequently AAFCE could request such movements for specific training purposes. In later stages, AAFCE could incorporate such operations into exercises and eventually work up to a full-scale exercise that tasked all of NATO's air power against a combined air and armor attack by the Warsaw Pact.

(S) There are obvious objections to proposals such as these. Poor communications and differences in tactics will cause problems. We are going to have to demonstrate that flexible deployment is possible and that the shortcomings need not be all bad -- specifically, they will, at least, highlight the communications that we need and permit AAFCE to take a position on the doctrine and tactics to be followed. (A word of caution here: We need doctrine and tactics for a NATO scenario, and differences in U.S. service doctrines have no place in this debate.)

(S) The constraints on demonstrating this ability probably will be the O&M costs involved, increased TDY funds for aircrews, and flying-hour limitations brought on by the enemy crisis. But in this case, the costs are negligible compared to the benefits. *We recommend a budget supplement to support increased TDY for USAF crews and an increased*

allocation of flying hours — when TDY and flying are in support of AAFCE objectives.

These actions are not likely to create a dramatic change in the U.K. attitude toward AAFCE or alter its basic thinking on NATO's strategy. On the other hand, it would be difficult for the U.K. to raise vigorous objections to obvious improvements that cost them nothing. In fact, the new military organization solves some of their problems vis-à-vis the FRG. Having gained command of the 4 ATAF, the GAF now has a billet more in keeping with its contribution. The RAF still maintains command of the 2 ATAF and has gained the key position of deputy for operations in AAFCE.

(U) We also need to build on the USAFE and RAF special relationship that extends back to World War II, to assure the RAF and the U.K. that our efforts are not designed to reduce their influence in NATO. We must also keep the U.K.'s economic difficulties in mind and seek improvement programs that are realistically within their means. For example, PGMs must be introduced into NATO's inventory; we suggest that a Maverick program (see Chapter VI, pp. 268-269) is the type we should offer the U.K.; otherwise, we will embarrass them and generate opposition rather than cooperation.

(U) Incremental actions such as those outlined above are not going to make any headlines and are not going to solve AAFCE's problems overnight. However, NATO now has under way several air force improvement programs whose potential goes far beyond their basic reason for implementation and whose final value can exceed their basic cost. There is an interrelationship between these programs and rationalization that deserves explanation to insure full U.S. support. We will look at actions to improve force survivability first, because we believe it is one of NATO's most important requirements. If NATO nations can become confident that their air forces can survive a conventional attack even without tactical warning, then they can be motivated to make further improvements.

C. USING COLOCATED OPERATING BASES TO SUPPORT RATIONALIZATION

(U) NATO has too many aircraft for too few bases, especially after massive U.S. augmentation forces are deployed. This makes allied air power unduly vulnerable to WP air base attack. But bases are almost as expensive as aircraft, and availability of real estate for new ones is limited. The answer to this problem is optimum flexibility and dispersal on the bases NATO does have. This is a particularly serious problem for the U.S.

(S) U.S. bases in the Center Region, even now in peacetime, have far too many aircraft per base, and many more than other NATO nations. The situation would worsen greatly in the event of a WP attack when committed aircraft began to arrive by M+3; the subsequent arrival of reinforcement aircraft would further exacerbate the problem. U.S. base loading in the Center Region runs from an average of about 50 aircraft at M+3 to more than 100 per base after planned reinforcement aircraft arrive.* This is in stark contrast to the approximately 36 aircraft per allied base. Both seriously increased vulnerability and hampered operational effectiveness must result from this saturation of U.S. bases: The few heavily loaded bases are particularly attractive targets; runway damage would block large numbers of aircraft; and except in good weather and with no damage there will be traffic-control problems.

1. The Best and Cheapest Way to Attack This Problem Is to Colocate U.S. Units in Existing Allied Bases

(S) The U.S. has long since proposed the concept of colocated operating bases (COBs) on which USAF munitions and fuel are stored in peacetime and to which USAF units can disperse in wartime. The current U.S. "requirement" is for about 45 bases in addition to presently occupied USAFE bases. These are intended (1) to permit bed down of forces earmarked for prompt deployment and (2) to provide for additional squadrons not now formally committed to NATO. The U.S. has identified potential locations in England, Germany, Greece, Italy, the Netherlands, Norway, and Turkey.

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*(U) This does not include airlift, special operations, or air-sea rescue aircraft.

Authorization to negotiate COB arrangements (COBAs) has been given for 28 bases, and nine arrangements have been approved at the working level to date.

(S) U.S. proposals for COBs made very little progress until quite recently. Part of the delay in consummating COB arrangements has been normal bureaucratic red tape here and in Europe, but a large part can also be attributed to U.S. reluctance to assign additional forces to NATO. If we can't tell NATO what aircraft are coming and their estimated time of arrival, then we cannot expect allies to place full credence on their being available in the event of a Warsaw Pact attack. This is deplorable, because the U.S. could saturate Europe with reinforcement aircraft. We did it during the second Berlin crisis with Air National Guard (ANG) units. During October and November 1961, 11 squadrons with more than 260 aircraft were mobilized and bedded down in European bases. Over 200 aircraft flew to various bases in Europe in a single, accident-free deployment, and 60 F-104s were airlifted. We can do it faster today with either active or ANG units, and we ought to advertise this capability in our DPQ submission. It is a matter of building confidence.

(S) Another early obstacle to COB arrangements was the U.S. position that host countries should finance construction, maintenance, and security, costs of munitions- and fuel-storage facilities, and in addition provide such normal base operating support as base operations, crash and rescue, security, and aids for navigation. The facilities costs for providing munitions and fuel storage will vary from base to base, but are estimated to run between $200,000 and $500,000 per base. At the same time, we declined to make firm DPQ commitments beyond our M+3 forces (the procedure normally taken to inform NATO of the type of aircraft they can expect and when they would arrive). If the U.S. were to make specific commitments in its response to the DPQ, these costs would become eligible for infrastructure payment and other allies would share the bill with the host nation. The U.S. recently briefed NATO political and military leaders on our COB plans and designated seven additional fighters and one additional reconnaissance squadron to SACEUR's Strategic Reserve in DPQ74. But we lost a few years in the debate over whether to earmark forces and who should pay the bill.

(S) Furthermore, until we complete each COB arrangement, we cannot begin construction of aircraft shelters for our Rapid-Reactor squadrons, although NATO has agreed to make them eligible for infrastructure funding. The case for a concerted U.S. push to complete COB arrangements could stand on the above: survivability by dispersal, an increase in aircraft shelters, enhanced operational capability because of reduced aircraft density at each base, better geographic distribution, increased confidence on the part of our allies, and firm plans for their employment. But there are additional benefits that add further weight to the case for COBs.

2. COBs Are a Foot in the Door

(S) They can help break down the fence between the 2 and 4 ATAF. We suggested earlier (p. 97) that USAFE should gear its operations to fit AAFCE's expanding role by routine deployment to GAF bases for joint USAFE-GAF operations. Having COBs in the 2 ATAF area provides sound rationale for such operations. Periodic USAFE visits are needed for familiarization flights to check local flying regulations and traffic patterns, to develop joint operations procedures, and at a later stage to inspect and exercise the WRM equipment in storage. Such visits would provide opportunities to practice interoperability by giving GAF ground crews experience in refueling and starting USAFE aircraft. With GAF cooperation, this could be gradually extended to practice weapons-loading exercises from the prestocked munitions. USAFE could designate a specific squadron to work with each of the COBs to develop rapport and pave the way for the CONUS-based squadron to be deployed there.

3. COBs Can Help Link TAC with NATO

(S) While the U.S. Air Force is now thinking NATO (AAFCE looks at TAC as a rear headquarters of USAFE, and TAC thinks of USAFE as its advance war headquarters),* it is equally important for NATO to think of

*(U) This is another argument for earmarking more CONUS-based squadrons to NATO in our DPQ submission. Once they are so designated, USAFE can insist that AAFCE make definite plans for their wartime employment and that they be counted and used during command post exercises and war games. High-level TAC representation at AAFCE exercises would be another confidence-building measure.

TAC's CONUS-based squadrons as readily available resources. TAC is designating CONUS-based forces for each European location and training them for primary and secondary roles. If the USAFE squadron periodically exercising the COB and the CONUS squadron to be deployed there each had the same type of aircraft and primary mission, the situation would be ideal. This may not be 100 percent possible, but it can be a goal. USAFE's main operating bases could then receive and deploy the CONUS squadrons that are equipped with aircraft types not now based in Europe.

(S) This TAC emphasis on training for Europe needs to be supported fully by DOD and State. The squadron designated for a COB should have the opportunity for a firsthand visit for familiarization, but this would call for sizable increases in TAC's exercise budget. If this is not possible, there is an alternative. Crested Cap calls for the return of the four dual-based squadrons (96 aircraft) each year. TAC is used to routine deployments of flights of aircraft under either the squadron commander or his operations officer. We recommend that, once a CONUS squadron has been assigned to a COB, a flight of four aircraft be substituted for four of the Crested Cap aircraft. True, the "dual-based" squadrons would not be at full strength, but we would have fulfilled the requirement to return 96 aircraft — and more — we would have exercised the COB concept and demonstrated the U.S. capability and willingness rapidly to reinforce the entire NATO defense area. In addition, we'd like to see the squadron commander or his operation officer visit their COB every six months.

4. COBs Facilitate Deterrent Deployments in Time of Tension

(S) We should not overlook the deterrent value and mobilization flexibility of COBs. They offer the political advantage of a range of responses based on our own and the host nation's interpretation of intelligence without waiting on a NATO decision in times of increasing tension. On a low-key basis, we could dispatch flights of four aircraft to each of the COBs without fanfare. Supporting manpower could accompany or follow by regular civilian air travel to the nearest civil airfield. This advance echelon could then begin to break out the prepositioned WRM and to prepare with the host nation for the reception of the rest of the squadron.

We would then have more "warm" bases ready for the deploying force and would be placing less of a surge requirement on critical tanker and airlift resources. Such movements are subject to enemy surveillance, but no more so than any CONUS augmentation of U.S. air bases in Europe, particularly if USAFE has previously established a pattern of frequent visits for joint operations.

(S) A strong argument for detailed plans to implement this low-key response is the fact that NATO's alert system is complex and subject to delay while political decisions are debated (see Chapter VII). We would need only host-nation agreement to begin dispatching advance flights to our COBs. If, on the other hand, we should decide on a full-scale buildup on the basis of more clear-cut warning, we'd be better prepared to receive and ready the force for combat because the COBs had been routinely exercised and the CONUS squadrons made familiar with their European base and trained for their primary NATO mission.

5. COBs As Alert Bases

(S) Yet another but more expensive way to develop the COB potential would be for USAFE to disperse currently assigned aircraft to COBs in peacetime. While the cost to USAFE would be considerably higher as a result of such a step, the immediate improvement in survivability against attack without warning could warrant this cost. And the additional costs could be minimized by having COBs used for alert aircraft, with USAFE's regular bases carrying most of the training load. In addition to the immediately reduced vulnerability of aircraft, greater initial capability should result from reduced congestion at individual bases and from ready availability of more conventional munitions (the COBs would have their own WRM stocks). A final advantage of greater peacetime dispersal is that it eliminates the initial need to disperse as a premobilization action, a factor that may be important in keeping a low profile during negotiations aimed at preventing the outbreak of hostilities.

6. COEs Reduce Vulnerability of USAFE's Conventional Munitions

(S) In Chapter VI we discuss NATO's overall munitions problems and suggest creating a SACEUR reserve and introducing PGMs into NATO's inventory. But USAFE's munition-storage problems warrant discussion here because COEs can help solve them. A recent Rand report found that:

> Current and planned munition support for U.S. Air Forces in Europe is dependent upon vulnerable depots and resupply. The U.S. airbases in the FRG and the United Kingdom have nonnuclear munitions-storage capacity for only about 15 days of a war. Over 80 percent of the 60-day prepositioned stocks will be located at two central storage sites, Morbach in the FRG and Welford in the United Kingdom, and transported to the airbases by truck.
>
> The resupply plan calls for these munitions to start flowing from the depots to the airbases 15 days prior to D-day. Our study of "munitions support" indicated that should the flow not start until D-day -- because of lack of warning or for any other reason -- there would be a 30 percent degradation in operational capability by Day 20 of combat. And this could happen without an attack on the storage or resupply systems.
>
> However, the munitions storage sites, both at the depots and on the airbases, are vulnerable to enemy attacks. At Morbach, the large percentage of the total theater munitions which are to be stored there are located in open bunkers, lined up like ducks in a shooting gallery.
>
> A bombing attack down one of these lines, even if it failed to destroy the munitions, might damage or litter the access road enough to seriously delay the movement of munitions.*

(S) Each COE we obtain will help alleviate USAFE's munitions vulnerability, because NATO criteria will permit prefinancing infrastructure funding of storage facilities for seven days of munitions for each earmarked squadron. This will provide wider dispersal of stocks now held in the central storate sites and increase the days of on-base supply available to aircraft on U.S. air bases (as the number of assigned aircraft goes down, the days of supply per aircraft will go up). In addition, we favor two more actions:

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*(U) P. M. Dadant, *Findings from Rand Studies of General Purpose Forces: A Briefing* (U), The Rand Corporation, R-1460-PR, June 1974 (Secret).

a. Diversify the types of munitions at each base to permit maximum flexibility in combat operations. Currently, most munitions appropriate to close air support of ground troops are at the depots, with the bases stocked largely for counterair and interdiction missions. This is, of course, inconsistent with any plans to use air to counter early Pact armored penetrations.

b. Increase the number of days' supply at each base to permit a longer period of transportation or weather disruption without adverse effect. (This is really a corollary of the first action [a. above].) Make such provision at the time COBs are acquired, if possible, to reduce additional costs to a minimum. COBs are not the total answer, and Rand and the Air Force are continuing to investigate solutions.

7. Using COBs to Develop a Gap-Filler Force

(S) We discussed earlier (pp. 87-88) the need for NATO air forces to act as a gap filler against a WP armor attack. This concept has much in common with views expressed to us by FRG officials. They felt that NATO ground forces could give a good account of themselves against the first wave of a WP armor attack, if they had protection from enemy air. They were, however, deeply concerned with keeping the WP's second wave of armor from reaching the battle area before NATO forces could recover from the first attack. They felt that this could be more important than close air support in the initial days of conflict and suggested that NATO air forces should develop a *close-in* interdiction capability. The USAF has traditionally considered *close-in* and *deep* interdiction to be one and the same in doctrinal terms. The air staff has also been studying tactical counterforce concepts. We suggest that the FRG and USAF differences may be largely semantic, if we "think NATO" in terms of NATO's problem in the Center Region. The point is that the number of avenues of attack open to WP armor is finite, and NATO can make plans in peacetime to interdict these approaches. These plans can be exercised, tactics tested, and weapon loads projected for day, night, and bad weather conditions. We might not predict 100 percent of the approaches but we should come close.

While national air forces, except for the USAF, could not execute these plans with current resources, they could be upgraded for the purpose. For example, laser-guided bombs (LGBs) offer great potential for a gap-filler force trying to interdict an advancing WP armor attack. Our SEA experience indicates that in 1500 attacks with LGBs almost 60 percent of the bombs were reported to have destroyed or damaged the primary target, only 13 percent were reported as definite misses, and for about 28 percent, the results were not observed. LGBs scored 30 to 70 percent success against bridges, 70 percent against tanks, and 80 percent against AAA/SAM. Another interesting finding of significance to a gap-filler force is that the mission success rate with LGBs appeared to be completely independent of the number of bombs used in the attack.* Therefore, the number of aircraft required for a gap-filler force can be limited. Laser designators are expensive, however, and are still the subject of intensive research to improve their all-weather capability. NATO has been briefed on the U.S. family of PGMs, but because of the cost and the chance that present systems may become quickly outmoded, our allies have not been pressured to purchase airborne laser designators. However, the kits to modify general-purpose bombs for laser delivery are not expensive.

The number of laser designators that can be made available to USAFE is not known; the total of those available to USAFE and TAC should soon be enough for a joint USAFE-GAF attempt to develop an antiarmor force designed to delay or stop a WP attack at or near the political border. We suggest a USAFE-GAF cooperative effort in the 4 ATAF area, with USAFE supplying the laser designators and the GAF carrying the bombs. As designated GAF units develop the necessary expertise, the FRG could purchase and stockpile laser modification kits for general-purpose bombs on their bases. USAFE could then switch to training with GAF units in the 2 ATAF area, where we have COBs. Modification kits could be stockpiled there for use by CONUS base units assigned to those bases and for the GAF units trained in their delivery. Numerous variations of this proposal can be

*(U) Ibid., R-1460-PR, p. 29.

developed with the aim of giving our allies confidence by demonstrated ability, introducing PGMs into their air forces on a systematic and economical basis and stockpiling modification kits at a number of bases. If the USAFE-GAF effort proved successful, the GAF could purchase its own laser designators, and then the USAFE or GAF could begin similar programs with Benelux and RAF-Germany air units. In sum, NATO air forces, like professional football, need some speciality teams, and we suggest that USAFE specialize in "designating targets" for our allies. Once allied aircrews are trained to deliver LGBs and have modification kits stockpiled on their bases, they will soon push for designators as well. A complementary program could be the development of a loran and sensor system along the lines demonstrated by the U.S.-FRG Mystic Mission exercise.

D. OTHER CONFIDENCE-BUILDING MEASURES

1. NATO Needs to Expand the Aircraft-Shelter Program

(S) The current NATO program now nearly complete calls for hardened shelters for about 70 percent of the DPQ-committed aircraft, including U.S. dual-based squadrons. It has been extended to include U.S. Rapid-Reactor squadrons, but construction cannot start until firm bed-down plans have been made. Thus, about 30 percent of all non-U.S. combat aircraft still have no shelters as of M+3, and no U.S. reinforcement aircraft arriving between M+3 and M+30 have shelter provisions.

(S) Any shelter program to increase survivability of U.S. forces must be preceded by action in the COB program, since it simply does not make sense to build still more alert shelters at already saturated air bases. Our allies, however, should begin promptly to increase their shelters, as numerous analyses have indicated that 100 percent sheltering is cost-effective, even if the enemy has shelter-busting munitions.*

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*(S) A recent Rand study concluded that the case for sheltering will be strengthened as improvements in air-to-ground ordnance are introduced, especially improvements in Pact air-base-attack munitions and NATO close-air-support (CAS) munitions. It predicted that when precision-guided CAS weapons become available for ace NATO aircraft, the value of shelters for all NATO aircraft will be substantial, if not critical. See E. Dews, P. M. Dadant, F. Kozacka, J. K. Seavers, J. A. Wilson, and R. A. Wise, *Tactical Airpower in a Mid-Seventies NATO Defensive Contingency (NATO Alpha)* (U), The Rand Corporation, R-1192-PR, October 1974 (Secret).

With sheltering, the WP may find it too costly to attempt destruction of aircraft on the ground. During the 1973 Arab-Israeli war, the Israelis got 334 kills in the air versus 22 on the ground. For the U.S. air forces, given gradual progress in the COB program, added shelters should be programmed to permit 100 percent sheltering of assigned, earmarked, and reinforcement aircraft programmed at each particular base.

We noted (p. 92) that the British have recently agreed to sponsor shelters for USAF aircraft based in the U.K. However, SHAPE requirements make infrastructure funding of shelters dependent on either the host or user nation agreeing to provide active air defense (SAMs, AAA, etc., including some AWX capability). The U.K. *has not* agreed to furnish the required active air defenses. The RAF prefers to concentrate on intercepting enemy aircraft over the water and would rather see funds devoted to airframes than to ground air-defense units. The U.S. position has long been that air-base defense should be a host-nation responsibility, and we are not in a position to deploy ground-defense units to the U.K. — nor would it be a rational use of resources if we were. On the other hand, we should not have to bear the costs of shelters without infrastructure support, particularly since the EUROGROUP EDIP program provided $420 million for shelter construction. To overcome this remaining obstacle, we recommend that the U.S. propose a joint U.S.-U.K. approach to SACEUR along the following lines:

- RAF units will attain an increased level of survivability by dispersal to stand-by bases.
- USAF forces will improve survivability for M+3 forces via SACEUR's airfield survivability program.
- To improve U.K. air-defense capabilities, the U.S. will *assign* an F-15 squadron to U.K. bases, even though the squadron's peacetime base may be in CONUS. (Under MC 54/1, air-defense assets are assigned to SACEUR in peace and war. Thus, SACEUR would have the right to call for the squadron's deployment to the U.K. However, a trilateral U.S./U.K./SACEUR agreement could be devised to cover circumstances under which SACEUR would actually

request the deployment. There is a precedent for this proposal: The U.S. withdrew two air-transport squadrons from France in the early 1960s under a similar arrangement.)

- The U.K. would provide increased active air defense of air bases by assigning territorial forces equipped with AAA and SAMs.
- In view of the range problem faced by the WP air forces, the improvement in survivability gained by RAF dispersal and USAF sheltering, and the increase in active air defense provided by the assignment of the F-15 squadron and territorial forces, SHAPE should waive the requirement for all-weather ground defense for U.K. bases.

This proposal does require SACEUR to compromise his criteria for infrastructure financing of shelters. However, SHAPE added the requirement for active AWX ground air defense as a goad to improvement. The usefulness of the goad has run its course with the U.K., and some compromise is in order. Turkey and Greece might then ask for equal consideration with the U.K., and we would argue for granting them exceptions also, for two good reasons: (1) Aircraft shelters will increase survivability and enhance deterrence against the WP, even without defenses; (2) they will serve equally well to deter NATO and WP air forces from attacking each other's airfields.

2. Provide Shelter During Aircraft Turnaround

All U.S. combat aircraft (we do not know about the aircraft of our allies) must spend approximately one hour outside their shelters being refueled and reloaded with ordnance, operations that cannot be performed inside the shelters in use at present. Furthermore, with the limited number of *maintenance* shelters at each base (as contrasted with *alert* shelters) either most maintenance will have to be performed in the open or in unprotected hangars, or there will be lengthy delays while waiting for access to maintenance shelters.

(S) Shelter design, therefore, needs careful review. Most shelters currently in use are basically intended to house alert aircraft only, and are of prime importance just prior to hostilities. But their value is limited during conventional combat, since as noted above, they permit neither refueling or rearming immediately after a combat sortie, nor easy turnaround maintenance. More important, current shelters cannot accommodate the A-10, F-15, or loaded F-111 aircraft, any or all of which may need to operate from these bases in the future. What is needed is a new type of hardened shelter that can be constructed in sufficient quantity at each base to permit (together with existing shelters) 100 percent sheltering of aircraft during turnaround servicing and maintenance. This would also protect critical maintenance personnel and some supplies and equipment. Such shelters will, of course, be more expensive than the current design (which cost about $250,000 each, including access ramps, etc.). Perhaps the cost of shelters to house two aircraft each and including the other necessary characteristics cited above could be kept within $500,000 each; this would keep the cost about the same, and total aircraft vulnerability while in shelter would increase only slightly — clearly, though, the vulnerability would be *much lower* than under the present circumstances.

(S) We need to protect maintenance and supply personnel and facilities. As noted earlier, current (and planned) provisions for hardened shelters include only alert aircraft and their aircrews (except for about two maintenance shelters per squadron). Maintenance shops, technical spare part warehouses, and their skilled personnel are not protected from attack. The redesigned shelters described above would do much to remedy this difficulty. Because there has been no recent U.S. experience with nonsanctuary bases in the kind of heavy conventional combat that must be allowed for in the European theater, we have been slow to realize the need for such protection.

3. Reduce Turnaround Time in General

(S) In addition to increasing shelter during turnaround, we need to cut turnaround time. Current USAFE and U.S. planning is for a low sortie rate compared with intelligence estimates of Warsaw Pact capabilities

(and known capabilities of the Israeli Air Force). This low rate is the result of a relatively long turnaround time and a planning restriction on the flying hours per month of combat crews. It is desirable that such aircraft be made available for their next combat missions in minimum time, regardless of whether sheltered during turnaround, and especially until such shelter is provided. An important way to increase initial capability and, indirectly, survival is to *increase sortie rate by reducing turnaround time*: The more sorties that can be flown during the first few days against enemy aircraft and enemy air bases, the fewer attacks against our own aircraft and air bases; and the less time our aircraft spend on the ground undergoing maintenance, the less likely they are to be damaged in such an attack. Thus, it is particularly important to take steps *now* to minimize turnaround time.

Analyses have shown that U.S. aircraft *can* fly at surge rates equivalent to those estimated for Warsaw Pact aircraft -- 3 to 5 sorties per day for 5 to 10 days at a time, with full recovery in 2 to 3 days of stand down. A recent Rand study shows that an early surge capability of far less than we suggest has a marked influence on the ground battle. Over 15 days, the lower surge sortie rates of the Rand study increased CAS sorties by 64 percent and reduced area lost by 43 percent.* But if this capability is to be attained, it must be planned for *and practiced with some frequency*, consistent with peacetime safety criteria. Moreover, if we want to increase our allies' confidence in their ability against the WP, we should insist that they, too, practice surging. It does not build confidence to credit WP air forces with a surge capability and to keep NATO's equal capability as an "ace in the hole."

There are several key ways -- used by the Israeli Air Force in 1967 as well as in 1973 -- in which turnaround time for combat aircraft may be reduced:

a. Noncritical Maintenance Can Be Deferred. This means the postponement of all periodic or phased inspections during periods of heavy flying, until bad weather or temporary cessation of flying is dictated

*(U) R-1192-PR.

by the progress of the war. Much of the maintenance normally carried out in peacetime is not necessary before the mission and also can be deferred.

b. Some Normal Peacetime Safety Precautions Can Be Waived. U.S. regulations prohibit simultaneously refueling and reloading aircraft with weapons. The Israelis perform these functions simultaneously in combat, and have modified their aircraft to permit pressure refueling in 15 minutes or so, instead of the 30 to 40 we require.

E. ACTIONS TO PROVIDE MORE RAPID REINFORCEMENT

(U) Next in importance to the survivability of in-position forces and the ability to use them flexibly is the ability to augment -- and resupply -- those forces rapidly. One reason for the overriding importance of more rapid reinforcement is the possibility of attack without warning. Another is that a demonstrated and advertised capability to increase markedly the size of NATO's forces in a shorter time than heretofore would be a strong additional deterrent. Since the U.S. is the chief provider of augmentation aircraft to NATO, this section focuses on augmenting USAF forces. We suggest a number of steps that would permit much greater capability earlier, and in advance of NATO alert if desired.

1. Augment Existing Squadrons Before Adding Earmarked Squadrons

(U) What is needed for augmentation is a number of combat-ready aircraft with their aircrews and the necessary tanker support to permit their being ferried into the theater. To gain maximum benefit from this action, some units of each type of aircraft planned for use in the theater should already be in place; at present there are no A-7Ds (or A-10s)* assigned, although a number are earmarked, so we suggest assigning some A-7D units, even at the expense of some F-4D units, for instance. This would complicate *peacetime* logistic support somewhat, but it sets up the infrastructure base for *wartime* reception of augmentation squadrons.

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*(S) Two A-10 squadrons are scheduled for assignment, but not until 1980.

The U.S. could then, in an emergency, simply increase the unit equipment (UE) and number of aircrews of existing USAFE squadrons. Given some practice, CONUS units should be able to send perhaps six aircraft each to join comparable overseas units within a matter of hours. The value of this action is that the receiving units then have an increased short-term capability almost as large as the percentage increase in UE aircraft. The remaining aircraft and supporting personnel can arrive at their planned destination later, in accordance with their M+3 schedule, and be joined by their advance unit. This exercise could then be repeated with aircraft from squadrons now scheduled to come over at D+10 and subsequently. Again *some* aircraft and aircrews from each designated unit should be ready for rapid deployment on receipt of the initial mobilization order. The concept could be extended to include Air National Guard squadrons. The limiting elements are units with which to join, and tanker support.

2. Adequate Tanker Support Will Improve Reinforcement and Combat Operations

(S) Tanker support for TAC and USAFE needs careful review: Current withhold policy may have to be revised to permit dedication of tankers to TAC/USAFE, with a secondary role of supporting SAC. In times of crisis, our national decisionmakers will be faced with the problem of what comes first — reinforcing NATO, or a higher level of SAC readiness. We suspect that full examination of all relevant facts will show a need for more tankers in our inventory, and/or conversion of some cargo transport aircraft to tankers, so that this element of our force does not become a bottleneck.

(S) We suggested on the preceding page ways of augmenting USAFE prior to activation of NATO's formal alert system by sending elements of earmarked squadrons to activate COBs and by increasing the UE of European-based squadrons. Indeed, our dual-based squadrons are pledged to be in Europe on M-Day. Making the political decision to begin early reinforcement could be difficult, but it would ease the tanker load. We should also seek U.K. agreement for RAF tanker support of USAF units deploying

to U.K. bases to alleviate the load and to speed up the deployment, as the situation may dictate. However, there is another valid reason to consider the desirability of additional tanker support for TAC/USAFE: The distance from U.K. bases to the political border limits the ordnance payload that can be carried. The efficiency of taking off with a large bomb load and low fuel supply, and then refueling in the air en route to the target, has been proven by air operations in SEA. Our crews are experts at it. In terms of ordnance that can be delivered on an assigned target, tanker support for USAF and RAF forces in the U.K. would probably be the most cost-effective action that could be taken.

(S) Yet another reason for additional tankers is the possibility that much of the air interdiction effort will have to be flown from U.K., rather than German and Benelux, bases. For example, early reverses might drive allied forces westward, resulting in the loss of some of our current bases. Or, the need to make full use of the continental bases for close air support of the ground forces might make it desirable to fly interdiction missions from the U.K. Some additional KC-135 tankers permanently stationed in Britain, or 747-type tankers dual-based in CONUS, could provide this added capability. Consideration should be given to the U.K.'s providing some of this tanker capability. Over the years, the USAF and the RAF have periodically conducted joint exercises to ensure the interoperability of our tanker and fighter forces. Under the Total Force Policy, it would make sense to develop and exercise contingency plans for RAF Victor Mark I tankers to support RAF and USAF aircraft assigned to interdiction missions.

3. More Airlift for Air Force Personnel and Equipment

(S) To expedite the arrival of the full units of USAF augmentation, consideration also must be given to more airlift. Current plans call for the initial air force units to be the first to be airlifted -- while army units are made ready. Some of the later USAF units probably could be moved earlier than now planned, inasmuch as the early readiness of some army units is suspect. Since steps are being taken to overcome the army shortcoming, additional airlift may be required. An economical

alternative, as COBs are satisfactorily worked out, is to preposition some of the bulkier squadron/wing equipment, so that the major airlift task is transportation of personnel. In this case, Civil Reserve Air Fleet (CRAF) aircraft can handle most of the load.

4. More Airlift for Army Units

(S) The airlift of units into the theater is not as easily arranged for the Army as for the Air Force (and getting USAF units out of the way by the expedited action suggested above doesn't ease the Army problem a great deal). Army divisions require substantial amounts of outsized cargo to be deployed. Some of this can be carried only in the C-5A. Much, however, can be carried in modified wide-body aircraft — the B-747, L-1011, and DC-10 — as well as in MAC's C-141 aircraft. Preliminary analysis indicates that adding about 100 modified wide-body aircraft to the transport fleet would still permit combat-unit integrity. If the Army is able to make ready its divisions in less time than currently programmed, then it would be desirable — in the view of an unpublished Rand study — to make CRAF-type arrangements for substantial numbers of these aircraft. About 100 extra modified 747s (or their equivalent) could reduce by nearly 50 days the time planned to deploy nine reinforcing U.S. Army divisions (from M+85 down to M+36).

(S) U.S. carriers now own, or have on firm order, more than 380 of the three types of wide-body aircraft cited above; NATO carriers (excluding Air France) have more than 100 owned or on order. An extreme suggestion would be to have the NATO carriers modify these aircraft and put all or most of their aircraft into a CRAF fleet; perhaps a more reasonable approach would be for the U.S. to allocate about 50 modified aircraft to the fleet, and the NATO countries an equal amount. Five-year cost per aircraft for necessary modifications and reimbursement to the airlines for revenue lost during modification and slightly increased operating costs for the heavier aircraft are estimated at about $7.5 million per aircraft. Costs thereafter would be negligible.

5. Create a European CRAF As a No- or Low-Cost Improvement

(S) As we try to expedite the deployment of air and ground augmentation forces to Europe, airlift requirements will rise proportionally. As noted above, our European allies now have a sizable air fleet of wide-body aircraft. While lift for outsize cargo is a handicap that needs to be overcome, there is no reason for any delay in the deployment of personnel assigned to divisions having prepositioned equipment in Europe — the Reforger and 2+10 units. Furthermore, we have pledged that the Reforger units would be back in Europe before M-Day and have insisted that they be considered M-Day forces in NATO planning. The U.S. military have cautioned that failure to make the political decision to return dual-based forces prior to M-Day would result in delays for other CONUS-based earmarked divisions because of conflicting airlift requirements.

(S) The creation of a European CRAF — even with unmodified aircraft — would enable us to deploy air and ground units faster and cost us nothing. Our allies have expressed doubts about our reinforcement capabilities; thus, involving them in the planning could give them more confidence. For example, the allies have asked us to define more clearly the circumstances under which we would be prepared to return the Crested Cap and Reforger forces — an action the FRG would like us to take early on. We could answer this question — and demonstrate NATO solidarity to the Pact — "when we agree that there is a need for their return and you agree to activate a European CRAF to aid in their return." This proposal costs nothing in peacetime, increases our mobilization capability, and (since our allies are making transatlantic flights daily) is a proven capability. Moreover, allied involvement would focus their attention on our need for reception facilities and foster their participation in the forward movement of troops after landing. A European CRAF would be more useful if our allies would agree to a phased program to modify their wide-body aircraft as suggested above, but it may be more rational to push for a CRAF first and the modifications later — perhaps as a EUROGROUP initiative. *The EUROGROUP is seeking new initiatives, and a European CRAF with modified wide-body aircraft could be an acceptable one.* It would be a civil as well as a military improvement; since many European airlines are nationally subsidized, all the costs need not come from defense budgets.

6. Reception Facilities for CONUS-Based Reinforcements

Several kinds of action are needed by the host countries, if the expediting actions suggested above are to work. Since they would involve mostly earmarking existing civil facilities, they would be an ideal type of low- or no-cost rationalization measure. First, *aerial port facilities* and activities need to be expanded and made more efficient. Current peacetime military aerial ports of debarkation (APODs) are too few and would be far too congested under wartime conditions. In emergencies, we will have to use existing civil airfields, so NATO needs to make firm plans and peacetime arrangements for their use. But this does not mean that the U.S. should have to base peacetime cadres at these APODs or that valuable airlift and time should have to be devoted to bringing over 5000 CONUS-based forces over to activate the APODs.* Europe's peacetime infrastructure is geared to providing food, lodging, onward movement, and entertainment to millions of tourists. Surely, they can meet or help meet the emergency military requirements for reception facilities, if the U.S. in turn can improve force readiness and reduce deployment times. There is a need for some peacetime prepositioning of equipment; storage facilities for this equipment will have to be constructed. Here again we have a "which comes first" debate. Storage facilities are not eligible for infrastructure funding, unless the APOD on which they are built also has active surface-to-air defense units to protect it. Host nations object to bearing the construction costs by themselves, because the U.S. reinforcements will be defending all of NATO. They also refuse to provide the active air-defense units required by SACEUR's infrastructure criteria. As a consequence, firm arrangements have not been made, equipment cannot be prepositioned, and we are going to *waste warning time*. This is not a new problem — one of the authors of this Report worked on APOD arrangements in 1966-1967 — and the lack of progress is discouraging. We do not deny the validity of SACEUR's requirement for active air defense of APODs; we do question whether this all-or-nothing approach is in the best interest of the Alliance. Given

*(U) See *NATO Rationalization Potential*, op. cit., p. A-1-3.

any degree of warning, firm arrangements and prepositioned equipment would significantly improve U.S. deployment capabilities *before* active air defense was needed. The costs involved are low, and it is not rational for NATO to refuse this type of insurance. We suggest that APCRs be made eligible for infrastructure funding immediately and that host nations be requested to form reserve/territorial air-defense units for their wartime protection.

(S) Second, *more intracountry transport* needs to be made available for the increased early work load. *Both ground and air* transportation will be needed. The air portion might well be similar to our own LOGAIR operation, where a contract carrier flies a daily schedule between specific locations, carrying personnel and technical spares of high priority. The carrier might be a nation needing payments into his account because of particular expenditures, or alternatively, he might be working off some of his savings; the point is that this item is negotiable in working out rationalization expenses. Arrangements should be made both for the normal peacetime utilization and the heavy wartime work load expected during early days of conventional conflict.

F. USING TECHNOLOGY TO PROMOTE RATIONALIZATION

(U) We see a splendid case for using the modernization of NATO's air forces to promote rationalization. Indeed, as we suggested in Chapter I, rationalization will be indispensable to free sufficient resources for modernization in a period of severe fiscal constraints. Moreover, *strategy, doctrine, and tactics can be influenced as much by the weapon systems and technology made available to our allies as it can by strategic or doctrinal debates.* Here again, the "go it alone" policy and U.S. apprehensions over allied lack of security have delayed the introduction of modern weapon systems into NATO's air forces. This needs to be changed.

1. Make the NATO Electronic Warfare Program an Example of Successful Rationalization

(S) The U.S. overcame its reluctance to discuss its latest EW technology when it established the NATO Electronic Warfare Program (NEWP),

only to find that the sudden policy change aroused allied apprehensions that it was launching a gigantic sales program. The NEWP has made considerable progress under OSD's Electronic Warfare Policy Committee because this ad hoc body of Joint Staff, Service, and OSD representatives has been charged with making the program succeed, cutting red tape, and reporting progress directly to the Secretary of Defense. NATO representatives have attended annual conventions of U.S. industrial and military electronic experts, and Europeans have made presentations on NATO's electronic requirements and concepts. U.S. industry has cooperated with OSD to ensure a coordinated approach to European military establishments. The USAF has done an excellent job of helping allied air forces develop their individual EW programs, including training EW officers in its regular course at Mather AFB in California.

(U) The NEWP is an ongoing rationalization program. Electronic warfare is one area wherein the allies have agreed that a cooperative effort is mandatory, if they are not to end up jamming one another rather than the Warsaw Pact. There is probably more agreement on the need for interoperability and compatibility -- if not outright standardization -- in the EW program than in any other facet of NATO's defense. The NEWP gives us such a good opportunity to prove that cooperation can work to NATO's overall advantage that we cannot afford to have it fail. For if a program off to such an auspicious start falters, it is going to be difficult to generate similar programs in areas where there is a less demanding requirement for total compatibility.

(S) We are stressing the NEWP in this chapter because the USAF seems to have the lead in promoting the program and because EW is essential to the air battle. We need success here to promote confidence in other rationalization measures and confidence that NATO's air forces can succeed in conventional attacks, CAS, or interdiction, against the Pact's formidable ground-to-air defenses. We are not sure, however, that the OSD hierarchy beyond the EW community realizes how important it is to the rest of NATO's defense posture that their program succeed.

2. PGMs Can Also Increase NATO's Confidence

(S) We discuss a scheme for introducing laser-guided weapons into NATO's inventory on p. 107 and for introducing Maverick on p. 268. We also noted that U.K. resistance to the increased emphasis on conventional operations in MC 14/3 was due partly to the increased costs involved. The RAF is still thinking in terms of hundreds of sorties against one bridge or one choke point and is putting more emphasis on airframes than on weapons to be hung on its aircraft, in the belief that if it gets the platform, the munitions will come later. The cost-effectiveness of PGMs is being ignored. As Dr. Currie puts it:

> Despite the fact it costs $5000 for a guidance kit for a $600 Mark 84 bomb, it is cheap in the long run. The Mark 84 guided bomb had a Southeast Asia record of one kill for every two launches, or about 100 times better than older iron bombs, with only a 9 to 1 rise in cost.*

(S) The RAF Strike Command emphasizes "deep interdiction" (interpret this as tactical nuclear strikes), but with laser-guided weapons the group could be the nucleus of a gap-filler force against WP armor and interdiction points in the 2 ATAF area.

(S) Further, PGMs with special shelter-busting or airfield-destruction capabilities are urgently required by 1980, if not before. The Warsaw Pact aircraft are or will be sheltered, and this makes the air base-attack problem much more difficult. But to gain air superiority, one also must attempt to destroy aircraft on the ground, and this must be pursued early in the conflict if we, in turn, are to avoid heavy attrition, not only of our air strength, but of our ground forces.

3. So We Need a USAF-RAF Cooperation Program

(S) AAFCE would call on the U.S. F-111s based in the U.K. for attacks on WP air bases; they have been assigned this task in previous NATO exercises. We suggest a program of cooperation between our 3d Air Force and the RAF Strike Command. Strike Command would agree to furnish

*(U) *Aerospace Daily*, May 14, 1974, p. 77.

X hours of tanker support for peacetime training and for deployment of our Crested-Cap and Rapid-Reactor units bound for the U.K., as well as combat support to designated 3d Air Force units. Strike Command would also agree to joint planning for a part of its force to be used in gap-filler operations and airfield attacks. The 3d Air Force, in turn, would supply Strike Command with X laser designators on a hand receipt; ownership would remain with the U.S. The payoff for the U.S. would be twofold: tanker support (which the RAF would otherwise be holding in reserve for their strike plan) and increased RAF involvement in conventional operations. We'd be letting equipment drive them towards more rational concepts and tactics. Bureaucrats can find reasons beyond the costs involved as to why this cannot be done. We are convinced that the obstacles can be overcome if OSD has the will to do so, because there are similar programs in effect today.

SHAPE, with the U.S. leading the way through AAFCE channels, needs to expedite research into further application of PGMs and sensor weapons in postulated NATO conventional conflicts. There is some urgency in expediting such research. Beyond being cost-effective in terms of target destruction per weapon launched, PGMs reduce the emphasis on load-bearing capabilities of tactical aircraft. USAF and RAF aircraft in the U.K., as well as aircraft on the continent, equipped with PGMs can load out with higher fuel loads for longer loiter time and greater ranges. NATO is ahead of the WP in PGM development at this time, but if the WP achieves a PGM capability ahead of NATO, then NATO's current advantage in terms of payloads and range against WP aircraft will be lost. There would also seem to be excellent opportunities for cooperation or specialization in the RD&P of improved air-delivered weapons. For example, the U.S. could specialize in LGBs and EOBs; the U.K. in runway cratering and airfield denial weapons, and the FRG in the Jumbo- and Stilbo-type weapons. In this connection, a forthcoming Rand study, *Modern Precision Weapons: Assessing Their Implications for NATO*,* would be a good vehicle to foster interest in NATO and in allied capitals if it were released in NATO channels.

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*(U) R-1532-ARPA, by J. F. Digby (Secret).

4. Remotely Piloted Vehicles (RPVs)

(U) Secretary of the Air Force McLucas told the National Association for Remotely Piloted Vehicles that the U.S. Air Force is seriously considering RPVs, having flown over 2500 combat sorties in Southeast Asia, and that "in general, the results have been outstanding."* He noted also that RPVs can be used to reduce manned aircraft attrition in very high threat environments and that they would be most important in the future to achieve significant cost advantages over comparable manned aircraft systems. General Jones, Chief of Staff, USAF, said subsequently that a current USAF-wide mission analysis of future roles for RPVs leaves little doubt about their increasing importance. Both officials were quoted in the October 1974 issue of *Air Force Magazine*, which went on to say that there is evidence that expendable drones proved highly effective in sucking up great quantities of Soviet-supplied Arab SAMs in the October 1973 Mideast war. Such authoritative statements are bound to whet our allies' appetites for more factual information and to raise questions as to why they have not been included in, or informed of, the U.S. RPV program and our (or the Israeli) experience. Here again, we need to "think NATO" and bring the allies into our planning at the earliest practical stage.

(U) This should include the possible use of PGM-carrying RPVs, controlled by manned aircraft or from the ground. If this sounds too innovative, consider NATO's reaction should these devices enter the Warsaw Pact's inventory and NATO were faced with the problem of countering them. Given the gains in understanding and cooperation achieved by allied attendance at the U.S. military and industrial electronic-warfare symposiums, we recommend they be invited to future discussions of the National Association for Remotely Piloted Vehicles. Moreover, if we wait too long before introducing the U.S. RPV program into NATO channels, we face the prospect that any U.S. proposals will be looked on as another "buy American" campaign -- witness the NATO Electronic Warfare Program and initial allied reaction to the U.S. rationalization proposals.

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*(U) USAF News Release, No. 1774, April 30, 1974.

(C) Since the Army and Navy are also involved in RPV development, we suggest that OSD consider a NATO RPV program and the formation of an OSD RPV Policy Committee, organized along the lines of the NATO Electronic Warfare Policy Committee, to implement the program. Since the USAF has the greatest experience, they would have to take a leading role.

G. RATIONALIZING NATO'S AIR FORCES REQUIRES SOME SPECIALIZATION

(U) We believe that the Dutch specialization proposal described in Chapter I is sound in principle. Most allied air forces are trying to do too much with too little. The smaller allies simply cannot afford balanced national forces, especially expensive multimission air forces. U.S. planners often forget that the population of eight NATO nations is less than, or only slightly larger than, that of metropolitan New York City. These countries simply cannot individually equip and train air forces with the full range of capabilities required to meet the WP air threat, especially at a time of severe fiscal constraints. Yet the U.S. has often given military advice that has led our allies to pattern their air force structure after our own.

(U) Fortunately, the advent of AAFCE and AWACS and the need for unified C^3 will facilitate specialization of the smaller NATO air forces at the same time that budget pressures drive them toward it. But the corollary is that the larger NATO air forces must assume certain functions on behalf of the smaller: The U.S., U.K., and FRG air forces are going to have to fill the gaps, with the USAF playing the largest role simply because of its greater capabilities.

(U) If the rationalization and specialization of NATO's air forces are to succeed, the USAF will have to expand its leadership role. But this in turn poses problems, because the USAF must be involved in every mission assigned to NATO's air forces in order to drive NATO toward needed improvements. For example, we will never win the CAS debate with the British if we do not actively contribute aircraft for the CAS role. Finding the right balance for the USAF contributions will be difficult, but the criterion should be a balanced NATO posture, rather than a balanced USAFE posture. This is important for several reasons. First, specialization

is suspect, by both military and political leaders. They pointed to France's withdrawal from the integrated military structure as an example of what could happen; now they can add Greece. The Netherlands' inability to find an alternative to the Lance mission, which it declined and which the FRG accepted, is another example of the difficulties specialization must overcome. The military, in particular, have good reason to be afraid of NATO's cumbersome alert system and what would happen if a specialized force were withheld while national political authorities debated the accuracy or validity of warning indicators. Finally, there is the yearly cycle of proposed U.S. withdrawals by Congressional critics of the U.S. force posture in Europe.

(U) Despite these drawbacks, the economic facts of life dictate a greater degree of NATO air specialization than now exists. NATO has two choices: Either we plan the best use of available resources, so that the sum is greater than the individual national contributions; or we continue uncoordinated, with a total capability that is less than the sum of the national forces. Trade-offs are essential. We suggest several below.

1. Accept AWACS As a U.S. Responsibility

(S) If we want an AWACS in Europe before 1985, we must accept the fact that it will have to be a U.S. program. Our logic is simple. That the U.S. is buying AWACS aircraft is common knowledge among our allies. Once they are purchased, there is no more logical place to deploy them than in Europe. Europe's defense is our most urgent requirement, and AWACS aircraft could be deployed to some other trouble spot as quickly from Europe as from CONUS. If we want a cooperative production program, then we can expect several years of debate, first on a cost-sharing formula and then on a coproduction formula. Given the difficulty NATO is having in developing an agreed infrastructure budget for the next five-year period, we find it hard to believe that our European allies will jointly fund an AWACS made in the United States. On the other hand, it doesn't seem to make sense to waste time and money on developing a NATO AWACS when the U.S. has a system already under production. Moreover, given the U.K. view on NATO strategy (p. 91), we would forecast their continued insistence on emphasizing the early-warning and low-altitude-detection aspects of a NATO

AWACS and de-emphasizing the control aspects. This is another instance where giving NATO the capability can drive the doctrine and tactics. We ought to take advantage of it.

2. Make Air Defense a European Responsibility in Return for the U.S. AWACS

(S) This does not mean that AWACS is not good trading material, or that the U.S. should give it away. For years the U.S. has been trying to get the FRG to take over the operation of 412-L radar sites still manned by USAFE personnel, as well as fixed Hawk and Nike defense SAM sites.* No other free world nation is as dependent on others for its air defense as the FRG. This made sense in the early days of NATO and before the FRG's rapprochement with the Warsaw Pact nations. Now there is less reason for this dependency. It makes little sense for the U.S. to send radar technicians to man radar sites on German hilltops when we could be making more valuable contributions. Part of the problem lies in the fact that the GAF conscript does not relish duty at these remote sites. Moreover, we question the need for USAFE forces to participate in the peacetime interception and identification of aircraft intruding into allied air space. This task, also a holdover from post-World War II occupation days, has lost its validity. For example, USAFE has been required by SACEUR to assume the air-defense responsibilities formerly filled by the French air force in southern Germany. This task could now be more logically assigned to the GAF, and USAFE squadrons relieved of the peacetime requirement for policing the FRG air space. This is not to say that USAFE's F-4Es would not be available to AAFCE for air defense; on the contrary, these multi-capable aircraft squadrons would become available for any role in any sector of the Center Legion. Moreover, FRG assumption of air-defense responsibilities — radars, air-to-air interceptors and SAM sites — will not create alarm on either side of the curtain that the FRG is seeking a dominant military position vis-à-vis its allies or the Warsaw Pact.

(S) While the case for FRG takeover of U.S. 412 and Nike sites is compelling, the U.S. simply must face up to the key FRG objection — that

*(U) See *NATO Rationalization Potential*, op. cit., for further information on SAM sites.

taking over these functions would divert too many men and too much money from other Bundeswehr programs. One solution would be for the FRG to man the Nike sites with reservists on the U.S. National Guard model.* But more important, we have to offer the FRG an adequate quid pro quo. U.S. provision of AWACS might serve precisely this purpose, and we urge that the two be packaged together.

(U) Indeed we would go further and suggest that a sound form of rationalization would be for the U.S. to propose that in return for AWACS the allies in general take over air defense. This would involve greater specialization in air defense -- both SAMs and interceptors -- for the Benelux countries, and to a lesser extent the U.K. and FRG. This is a logical role for them in any case; we develop it further on pp. 131-133. What is needed is a sensible five-year plan to phase in AWACS as the allies gradually take over more air-defense responsibilities.

3. Accept Electronic-Warfare Support (EWS) As a U.S. Responsibility

(S) Here is another role in which the U.S. might logically specialize. Electronic-warfare support activities require sophisticated aircraft and a high degree of scientific skill, coupled with great flexibility in adapting to rapid changes in the threat. This argues for one-country management in the face of an equally single-minded enemy. The U.S. is the only NATO nation with the technological base to fill this role in the foreseeable future. Moreover, since worldwide U.S. concerns will drive us to develop an EWS capability anyway, it is only rational that we use this capability to fill the NATO requirement as well.

(S) The NATO Electronic-Warfare Program's emphasis is on integral self-defense and ECCM. NATO lacks specialized aircraft for the EWS role, and SACEUR has listed this as a major deficiency. According to Secretary Schlesinger, the Middle East conflict demonstrated that our tactical air forces should be prepared to operate in an intense air-defense environment. To do so effectively, the Air Force needs an airborne jammer with much

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*(U) This option was suggested in R-1231, op. cit., p. 125, and is further developed in greater detail in *Nato Rationalization Potential*, op. cit., pp.

greater capacity than can be fitted into an F-4. Our EF-111A, equipped with an ALQ-99 jammer of the type used in the Navy EA-6B, is intended to fulfill that requirement.* The EF-111A can also fulfill the NATO requirement; this capability, coupled with progress in the NATO EW program, can provide NATO with far greater confidence in its ability to penetrate and suppress WP air defenses. The EF-111A does not have to stand off, as does the EA-6B, but has the range and speed to escort penetrating forces. Drone aircraft (RPVs) can be fitted with "enhancers" to give them the appearance of penetrating fighters and can be further equipped with chaff and jammers to dilute the WP air-defense network of radars, SAMs, and interceptors. We recommended a NATO RPV program above (p. 118); here we recommend a trade-off whereby the U.S. would provide the EF-111A and allied nations in return would develop RPV units to aid in the electronic-warfare support mission.

4. Reduce USAFE's Peacetime Reconnaissance Contribution

(S) Adding AWACS and EWS would increase USAFE manpower needs, but overall increases in USAFE's personnel authorizations are unlikely. Thus compensating reductions will have to be found. Some of these spaces would come from the FRG's assuming greater air-defense responsibilities, but this will not satisfy all the personnel requirements. We suggest a reduction in USAFE's peacetime force of RF-4s, for several reasons: The RF-4's capability has been found to be greater than originally anticipated; the FRG has additional RF-4s that are not earmarked in their DPQ submission; and the other Center Region nations also have reconnaissance capabilities and are unlikely to relinquish them entirely. We suggest that the RF-4s returned to CONUS be earmarked as Rapid-Reactor units or be programmed for as early return as possible. Furthermore, since there is an imbalance in overall reconnaissance capabilities between the 2 and 4 ATAF (because of the U.S. RF-4's traditional assignment to 4 ATAF), we recommend earmarking CONUS-based RF-4 squadrons to COBs in the 2 ATAF area. In turn, the Dutch and the Belgians would then not need reconnaissance squadrons and could use the funds released to meet other critical needs (see pp. 131-133).

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*(U) *Annual Defense Department Report, FY 1975*, p. 153.

5. The MRCA Versus a Mix of F-15s and YF-16s/17s

(S) OASD(PA&E) rationalization study discusses the joint British/German/Italian development and production of the MRCA and recommends a less expensive aircraft.* PA&E takes the position that increasing numbers of U.S. F-15s and F-111s should provide NATO with adequate sophisticated interdiction capability to which the MRCA would have contributed. PA&E notes also the MRCA program is in difficulty and that escalation could drive the cost per aircraft to $22 million by FY 1978. At the same time, the U.K. and Italian economies are in deepening trouble and inflation continues (estimated by some economists at over 20 percent in the U.K. and higher in Italy). The FRG recently had to make sizable loans to the Italian government to stabilize its economy. The U.K. is about to cut its defense budget. Therefore, if the MRCA program is to go forward, it will have to be subsidized by the FRG. But even if the FRG elects to build these planes, the number that can be procured is going to be less than the 1000 originally planned, since the unit cost will have almost quadrupled from the original $6 million estimate.

(U) The U.K. seeks an air-superiority fighter in the MRCA, while the FRG is interested in CAS and interdiction. At the same time, four other NATO nations are also seeking a "lightweight" fighter replacement for the F-104G; and the U.S. SecDef and CSAF have agreed that the USAF cannot afford, and does not need, an all high-capability fighter force in the U.S. Air Force. Thus, NATO may never have a better chance to make a rational effort at a cooperative program. Six nations (the U.S., FRG, the Netherlands, Belgium, Norway, and Denmark) seek a lightweight fighter, and three (the U.S., U.K., and FRG) need an air-superiority aircraft -- which the U.S. has in the F-15.

(S) Scrapping the MRCA program would be a traumatic exercise for the participants, but the odds are at least even that it will happen anyway. And NATO has survived other similar traumas -- witness the U.S.-U.K. Skybolt, the U.S.-FRG VTOL, the U.S.-U.K. Thor, and the U.S.-Italian and U.S.-Turkish Jupiter Programs, and the U.S.-FRG main battle tank.

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*(U) *NATO Rationalization Potential*, op. cit., pp. C-1-1 and D-2-1.

(S) Therefore, we recommend the U.S. discuss with the FRG and the U.K. a program to purchase a hi-lo mix, with the U.S. F-15 fulfilling the high side. If one of the U.S. candidates for the low side of the mix were chosen, it would be necessary to expand the coproduction formulas presented to the original four nations seeking a "lightweight" replacement for the F-104G — Belgium, Netherlands, Norway, and Denmark — and this coproduction formula should extend to sharing in the production for other nations who may become interested in the aircraft at a later date.

(U) We further suggest that the FRG agree to help the U.K. through its economic difficulties in upgrading its defenses. We have in mind FRG agreement that the 2250-million-DM loan made to the U.S. at 2-1/2 percent interest for seven years as part of the U.S.-FRG BOP agreement be loaned in turn to the U.K. for its unexpired term to permit the U.K. to spread the acquisition costs of F-15 aircraft over a longer span of defense budgets. There might be opposition to this by the U.S. Treasury; however, the FRG loan is related to offsetting deficits caused by our defense expenditures in the FRG. Using it to finance purchase of U.S.-produced defense equipment is offset in the purest sense of the word, whereas the loan only postpones the time when defense-related deficits need to be balanced. The U.S. loss of the interest that would accrue each year would be a small price to pay for the overall improvement in NATO's defense and might well be further offset by the decrease in cost of F-15s to the U.S. as the number to be produced expanded.

(S) At any rate, the time is at hand to consider a high-level U.S. initiative to bring sense to the MRCA and the lightweight-fighter programs. Otherwise the number of F-104Gs that are replaced is going to decline further, and there is a definite limit as to how often increased quality can compensate for decreases in quantity. On the other hand, both an F-15 and a lightweight fighter could be bought for the cost of one MRCA.

(S) In Chapter V we discuss in more detail methods to overcome the political and economic roadblocks to such proposals. But one point is worth making here. The lifetime costs for spares, maintenance, and modifications of modern aircraft are as important as the purchase price. The

F-15/LW fighter combination would also make economies of scale in life-cycle costs possible. Since the life-cycle costs often nearly equal the purchase price, U.S. agreement to establish and rely on a European maintenance and supply center for all F-15s and LW fighters based in Europe could at least partially offset the economic and political impact of cancelling the MRCA. Since the FRG will have to subsidize the MRCA program if it continues, we suggest bilateral conversations with them, and then with the U.K., to determine their reaction to such a proposal.

(S) If, as some critics feel, this proposal is too politically sensitive for the U.S. to advance, we suggest a contingency study be made so that the U.S. will be prepared to react quickly in the event that the MRCA program founders. There is always the possibility that the U.K. and the FRG are looking for a face-saving way to bail out.

6. Changes in Allied Air Force Contributions

(S) *The RAF mix* would not be altered by our proposals except to make more rational use of available assets. We would use RAF tankers to speed deployments of USAF CONUS-based squadrons to Europe and to refuel U.K.-based RAF-USAF attack aircraft to increase payload and range. We also propose the RAF increase its attack capability by acquiring PGMs for the aircraft it has designated primarily for the strike role. The F-15/LW fighter mix that we have proposed as a replacement for the MRCA would not have the same deep-strike capability as the MRCA, but the LW can be configured for the nuclear role and would provide the U.K. *with more aircraft* and a more balanced force than would acquiring the MRCA.

(S) *The FRG's Luftwaffe* would also maintain a balanced force with a full range of capabilities. The F-15/LW fighter mix would actually better fit her stated needs for air defense, air superiority, and the attack role and would provide the Luftwaffe more flexibility than the MRCA. Acquisition of PGMs for attack aircraft should begin now; they can be used on current as well as replacement aircraft and would be the nucleus of a gap-filler force against WP armor in the event of a surprise attack or against WP second-echelon armor forces as they approach the battle area.

(S) *The Netherlands air force* has stated a requirement for LW fighters, with emphasis on air-defense and conventional operations, but with

a secondary capability for the nuclear-strike role. NATO has agreed. However, the Dutch intention to keep a RF-104G reconnaissance squadron and an air-transport squadron seem questionable from a rationalization viewpoint. We would recommend that NATO's recce requirement be met from U.S., U.K., and FRG resources and believe that centralized control under AAFCE would make this possible with fewer reconnaissance aircraft — particularly since the RF-104G's capability is far less than that of the U.S. and FRG RF-4s and the U.K. Phantom.

(S) Nor do we see much utility in the Dutch air force's maintaining a single squadron of transport aircraft unless they are combined into a NATO transport command along lines we recommended in a previous study.* Alone, and not assigned or earmarked for SACEUR, they add little to NATO deterrence or defense. Combined with the transport capabilities of their allies and made available to SACEUR for forward and lateral movement of forces, they could play a more realistic role. We would recommend that the Dutch convert their recce and transport squadrons to LW fighters by replacing them on a one-for-one basis as an add-on to their F-104G-replacement program.

(S) *The Belgian air force* requirement for an LW fighter is similar to the Dutch, but places equal emphasis on conventional and nuclear operations and air defense. These are rational roles for the Belgians. But, as in the Dutch case, we question both the Belgian need for an independent recce capability and the value of a single squadron of C-130 transports, unless it too is merged into a NATO transport command. Again, as with the Dutch, we would recommend converting these units to an LW-fighter role. The Mirage V and C-130 squadrons are comparatively recent acquisitions, but since the LW fighters will be entering the Belgian air force over an extended period, the transition could take place at the end of the F-104G-replacement program.

(S) If the foregoing changes were accepted by the nations concerned, *NATO air forces would generate a total capability far greater than exists today*. NATO would have AWACS and EWS for defense suppression, an improved

*(U) Rand Report R-1231, op. cit., p. 297.

air-superiority capability in F-15s, and an increased conventional capability in terms of numbers by the U.K.'s and FRG's purchases of LW fighters and by the Dutch and Belgian's converting their recce and transport squadrons to LW aircraft. Moreover, standardization on one aircraft for attack will provide a degree of flexibility far beyond today's mix. And NATO would have achieved a more balanced capability without detracting from the sovereignty of any nation. USAF forces in Europe might be unbalanced in peacetime by the actions we recommend, but this balance could be quickly regained by the flow of CONUS-based aircraft to Europe -- particularly if our proposals for more rapid augmentation were implemented. These proposals would require interdependence in combat, but that requirement already exists. Moreover, our proposed adjustments of missions does not require immediate or major changes in any nation's overall force structure -- nor are they more costly. Procurement of aircraft for all the roles outlined above is already planned; what we are suggesting is changing national plans to buy more of this and less of that so that by the 1980s NATO will have a more rational air force posture.

7. Promote Joint Training

(C) EUROTRAIN was established in 1970 to devise joint solutions to EUROGROUP's training needs. Its Chairman, MOD Leber, noted that EUROTRAIN's cost-saving achievements had been disappointing, and suggested that the real barriers to progress were to be found in the various defense ministries, rather than at the ministerial table. We agree. The U.S., and particularly the USAF, ought to support EUROTRAIN in every way possible for several reasons beyond the economic savings involved: It promotes unity and standardization, leads to common doctrine and tactics, and tends to break down the language barriers.

(U) However, the U.S. representatives at EUROTRAIN conferences were selected ad hoc, have lacked instructions as to U.S. objectives, and have been merely observers. No single agency in OSD has been given the responsibility to ensure full U.S. cooperation with EUROTRAIN. There should be such an agency if for no other reason than to support MOD Leber and thus promote U.S.-FRG cooperative efforts.

(U) The USAF, in particular, has sound reasons for full-scale cooperation. Training aircrews and aircraft maintenance personnel takes a significant part of NATO air force budgets. In addition, the cost of aircrew training is considerably affected by weather, as are training casualties and accident rates. For these reasons, Germany has found it desirable to conduct both undergraduate pilot training (UPT) and much of its operational training in the southwestern United States for most of the last decade. Reduced training time as a result of good weather offsets, to a considerable degree, their travel and TDY costs. The success of this program indicates that a NATO undergraduate pilot training program in the CONUS should also be highly successful. EUROTRAIN has recognized the advantages of joint training, as well as the fact that European weather and geography make a European-based UPT facility impractical, but the U.S. has not offered a CONUS-based program.

(U) In the U.S., the total cost of DOD individual training is more than $6 billion per year, and 15.8 percent of our manpower -- students, instructors, and support personnel -- are engaged in training and therefore unavailable for duty in operational units.* This is driving the U.S. to joint service training. The Chairman of the JCS recently noted that a joint UPT program for all U.S. services might have to be considered because of declining defense budgets. As Senator Barry Goldwater, one of the strongest supporters of air power, put it: "We are the only nation in the world that has four air forces. Can't they be trained by the same source?"** If the U.S. needs this type of "economy of scale," the Europeans need it far more. Moreover, the USAF learned in Korea and in SEA that a hot training base is invaluable and cannot be built up overnight. A NATO UPT base in CONUS would give the U.S. and NATO a wider training infrastructure; it could also prevent a base closure or help preserve separate UPT service programs. It seems ironic to us that Japanese Air Lines can start a commercial UPT in California because weather and geography make it more practical than training in Japan, whereas the U.S. bureaucracy cannot solve NATO's UPT problems.***

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*(U) *Annual Defense Department Report, FY 1975*, p. 197.

**(U) *Air Force Magazine*, October 1974, p. 78.

***(U) *New York Times*, October 18, 1974, p. 10.

(U) Moreover, the U.S. has recently launched research programs for flight simulators to include air-to-surface and air-to-air combat. This is a major improvement, but our smaller allies will find it economically difficult to keep up with the state of the art on these simulators on an individual basis. Despite savings in aircraft flying hours and reductions in accident rates, the costs of these simulators for a limited number of pilots could be prohibitive. Therefore, we recommend consideration of a NATO air-combat-tactics school in Europe where live and computer-simulated combat operations can be practiced. At the Tenth Euro/NATO Training Conference, the RAF representative made an impressive case for an air-combat-training facility in Europe and a NATO air-combat training squadron along the lines of the USAF's aggressor unit.* We feel that strong European support could be generated if the U.S. were forthcoming in offering assistance.

(S) We would recommend Tymbakion, site of the NATO Weapons Training Center, as the European location. It would give us and NATO a vehicle to continue cooperation with Greece as they work their way out of the Cyprus situation. Moreover, it increases the U.S./NATO presence in the eastern Mediterranean. An alternative location would be Zaragoza, but Spanish approval is not likely to be forthcoming until Spain is admitted into NATO, an event that probably will not take place until some time well after a change in Spain's current government, because there is no certainty that the post-Franco government will be acceptable to all NATO nations. To introduce the proposal now might be detrimental to the U.S.-Spanish base negotiations just getting under way, because there is no NATO quid pro the Spanish quo. At any rate, there is economic urgency to solving the UPT program and a political need to support MOD Leber's efforts in EUROTRAIN in return for the support that the FRG has given other U.S. efforts in NATO forums.

(U) Technical training, likewise, could benefit from centralization and standardization, especially if NATO nations select a U.S. aircraft as a common replacement for the F-104G. But beyond the costs involved, the

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*(U) *Report on Tactical Leadership Training*, Minutes of the Tenth Euro/NATO Training Conference, June 1974 (Confidential).

major advantage of joint training, particularly flying training, is in the longer-term gains in standardization of tactics and doctrine, increased interoperability, and development of a common language for C^3.

IV. RATIONALIZING NATO'S NAVAL POSTURE

(U) Any serious look at NATO's naval posture shows the same kinds of problems that we raised in the ground and air chapters. NATO does not really have a balanced collective naval posture, but rather a collection of 13 national postures (including France). In fact, the go-it-alone syndrome seems even stronger in NATO's navies than in its ground and air forces, though the seriousness of this problem is somewhat mitigated by the fact that the U.S. Navy so dominates the NATO naval picture.

(U) But the same technical and economic squeeze that affects the rest of NATO's capabilities is operative in the case of NATO's navies. As a result of this resource bind, the gap between the requirements set by NATO commanders to meet present missions and the resources available to overcome the deficiencies is simply too great to be bridged. Hence, there is no viable alternative to modifying present naval missions. Tough choices will have to be made, since force improvements deemed essential will have to be funded more through trade-offs rather than add-ons. There is also the question of how well NATO's sea power fits NATO's priority needs under its present strategy. And finally there is the question of the relative priorities to be given to sea versus land and air power in a period of severe resource constraints. All this means that NATO's navies cannot be exempted from the rationalization process.

(U) In saying this, we are fully aware of the political bureaucratic and other obstacles entailed. Strong naval traditions and the pull of non-NATO missions will make otherwise rational trade-offs difficult to achieve. In particular, the U.S. Navy, the most powerful in NATO, cannot be configured primarily for NATO missions because of its truly global role. But, in other NATO navies this caveat is far less compelling, and trade-offs less difficult to justify.

A. THE CASE FOR NAVAL RATIONALIZATION

1. The Technical and Economic Squeeze Precludes Fulfilling Present NATO Naval Missions

(U) Roughly about 28 percent of allied defense expenditures and 18 percent of allied manpower (excluding French) were devoted to naval expenditures in 1974 (see Table 1). But excluding U.S. naval outlays, the remaining allies spent only about 15.6 percent of their budgets and allocated only about 12 percent of their manpower. Given the resource bind, it is hard to see how these levels could be significantly increased.

(U) Yet rising costs of sophisticated modern equipment are squeezing navies even more than other services, because the former require more capital investment. Moreover, generally longer lead times are involved. Hence, most European allies have been unable or unwilling to support adequate operating expenses or modernization programs for navies of the size they currently have. Some have chosen to maintain current size in terms of the number of ships, increasingly becoming technically obsolescent. Others are opting for smaller navies with attempts at modernization. Hence the tendency has been for European NATO navies to survive from year to year with *declining effectiveness*, either from obsolescence or reduction of numbers, while nevertheless spending an average 15 percent of the national-defense budgets. The foregoing process is accelerating the trend toward smaller navies. It is doubtful that these more-or-less-unilateral force cuts are being made with sufficient view to minimizing damage to or possibly improving overall NATO capabilities. Rather, they seem to be arbitrary responses to inflationary and budgetary pressures, as noted in Chapter I.

(U) Meanwhile the gap between traditional NATO (and national) statements of force requirements versus existing capabilities has continued to grow. As the Military Committee commented in its report on 1975-1980 force proposals:

> Unless critical deficiencies in NATO's maritime forces in survivability and ASW are corrected, there would be a grave risk of heavy losses at sea, in consequence, the ability to timely resupply Europe would be seriously endangered.

(C) Table 1

ESTIMATED NATO TOTAL DEFENSE AND NAVAL EXPENDITURES AND MANPOWER IN 1974 (U)

	Expenditures (in millions of dollars)			Manpower (Approximate)		
	Total Defense	Navy	Navy as % of Total Defense	Total Defense	Navy	Navy as % of Total Defense
Belgium	990	46.5	4.7	89,600	4,400	4.9
Canada	2,141	428.2	20.	83,000	14,000	16.9
Denmark	568	109.6	19.3	39,800	6,460	16.2
Germany	11,083	997.5	9.	475,000	36,150	7.6
Greece	580	69.	11.9	160,000	16,900	10.6
Italy	3,964	594.6	15.	427,500	43,600	10.2
Netherlands	2,102	414.1	19.7	112,200	18,900	16.8
Norway	665	153.	23.	35,400	8,600	24.3
Portugal	425	87.1	20.5	204,000	19,500	9.6
Turkey	812	91.8	11.3	455,000	39,500	8.7
United Kingdom	8,673	1,986.1	22.9	361,500	83,000	23.
United States	82,768	26,620.	32.2	2,253,000	564,400	25.
NATO less U.S.	32,003	4,977.5	15.6	2,443,000	291,010	11.9
NATO Total	114,771	31,597.5	27.9	4,696,000	855,410	18.2

SOURCES: *DOD Fact Book*, OSD/PAE, 23 November 1973, and *The Military Balance, 1973-1974*, IISS, London, 1973. France is not included; her naval manpower of 69,000 is about 13.8 percent of her total defense manpower of 500,600.

(U) The magnitude of these deficiencies is shown in Table 2, which lists major elements of the ACLANT and ACE requirements and proposals, intentions to meet them, and related shortfalls from objective requirements. The "total requirements" column represents those force levels which, if achieved, would result in acceptable military risk. The "proposals" columns show what the NATO commanders believe to be within the capabilities of NATO countries, consistent with NATO ministerial guidance. The "earmarked" column indicates intentions for the years shown and the "requirements shortfall" column shows the difference between intentions and "total requirements." Figures for ACLANT are given for both 1973 to 1978 and 1975 to 1980 as an indication of changes that can occur in a two-year planning cycle. Moreover, Table 2 does not include the mass of qualitative improvements that were requested by the NATO commanders but would represent an additional budgetary strain if undertaken. And the numbers of units shown in the "earmarked" column provide an optimistic picture of allied naval data in terms of likely actual operational availabilities and individual unit effectiveness.

(C) These substantial shortfalls in NATO naval capabilities prompt us to examine the requirements expressed by the NATO commands. Although they have been reasonably objective in stating requirements with respect to traditional planning, i.e., tasks to be undertaken more or less simultaneously, some quantitative inflation is undoubtedly introduced by this practice. (SACLANT does allow for phased — successive or alternate — employment of some units.) The requirements are generated on the basis of functional task organizations, such as strike fleets, surface action groups, ASW groups, anti-SSBN groups, underway-replenishment groups, amphibious groups, and convoys (military and mercantile), with little indication in the documents examined of the linkage of the functions performed to NATO strategy or the timing and intensity of the hostilities presumably under way in Europe.

(C) Except for a key statement to the effect that one result of the shortfalls in ACLANT naval forces would be delays in the arrival of the strategic reserve for Allied Command Europe, SACLANT's evaluation, in his force proposals, of the impact of the shortfalls is almost entirely related to ASW problems. He noted the following:

(S) Table 2

NATO NAVAL REQUIREMENTS, PROPOSALS, AND SHORTFALLS (U)

	Total Requirements		Proposals			Earmarked	Requirements Shortfall	Proposals Shortfalls	
	1973-78	1975-80	1973-78	1975	1980	1975	1975	1975	1980
ACLANT									
CVA	6	8	7	7	7	7	- 1	0	0
SCS/CAH	6[a]	10	4[a]	0	8	0	- 10	0	- 8
CG	15	11	12	8	6	4	- 7	- 4	- 2
DG	64	90	45	55	71	44	- 46	-11	-27
DD/DE	476	386	197	162	178	156	-230	- 6	-22
SSN	92	142	53	54	80	41	-101	-13	-39
SS/SSC	83	72	62	47	47	46	- 26	- 1	- 1
MPA	432	444	289	257	282	242	-202	-15	-40
						Proposed 1978			
ACE (South)									
CVA	4				4	4	0		0
CVS	1				-	-	- 1		-
CG	5				6	5	0		- 1
DG	28				26	16	-12		-10
DD/DE	63				59	63	0		+ 4
SS[b]	36				44	30	- 6		-14
MPA/VAP	161				209	111	-50		-98
FPB/GM	66				47	25	-30		-22
FPB					11	11			0
Minelayers	12				10	10	- 2		0
Minesweepers	30				70	58	+28		-12

SOURCES: *ACLANT Force Proposals, 1975-1980*, October 1973 (NATO Secret).
ACE Force Proposals, 1975-1980, October 1973 (NATO Secret).

[a]CVS.

[b]Including SSN.

SECRET

a. Little midocean ASW capability.

b. Simultaneous surface escort supply only of strike fleets, underway-replenishment groups, and anti-SSBN, antisubmarine, and surface action groups. Surface escorts would *not* be available simultaneously with the above to protect the amphibious task force, strategic reserve convoys, Iceland convoy, mercantile convoys, or fishing fleets and oil rigs, because of excessive risk to strike fleets.

c. Submarine shortages preclude an optimum Atlantic submarine barrier, as well as simultaneous provision of submarines for mining, North Sea pickets, blockade of Russian ports or strike fleet escort.

d. The number of maritime patrol aircraft available would permit only 41 to be continuously on station. These could perform anti-SSBN tasks, but if so used, would preclude adequate protection for the strike fleet and underway-replenishment groups. No maritime patrol aircraft would be available for military and mercantile convoys until after the hostile submarine threat was well diminished (presumably by attrition, although no time factors were given).

e. Cruiser shortages would result in reduced antiaircraft and surface protection for carriers and inadequate gunfire support for the amphibious task force.

SACEUR's quantitative force proposals for 1975-1980* contain even less rationale. They are basically a statement of units desired, with minimum explanation. Of 572 specific proposals for qualitative improvement of ACE forces, only 71 relate to maritime modernization and replacement and only 14 to external reinforcements.

CINCCHAN's force proposals** are perhaps the sketchiest. For example, his rationale for ASW groups is:

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*(U) *ACE Force Proposals, 1975-1980*, October 1973 (NATO Secret).

**(U) *Presentation of ACCHAN Force Proposals, 1975-1980*, to the Defense Planning Committee, January 1974 (NATO Secret).

The number of ASW groups operating together with maritime patrol aircraft must equate to the number of enemy submarines estimated to be operating continuously in the ACCHAN area. This is assessed to be a maximum of six submarines in the Plymouth/Channel area and two in the southern North Sea.

(U) Two helicopters are also required for each group. Various numbers are given for ship requirements, depending on whether or not underway replenishment is available. No close escort for convoys is planned in the ACCHAN area.

(S) The force proposals of the NATO commanders are, of course, intended to influence the allocation of resources for defense by the allies. It is difficult to establish what attention has been paid to an optimum reconciliation of forces, resources, and strategy. In fairness, it must be said that quite a few defense ministers and their military leaders would be chagrined if the NATO commanders did not picture large force requirements and country shortfalls for NATO, since this would deprive them of important arguments in their dealings with the political and treasury officials who control national purse strings. Potential harm arises, however, if the shortfalls shown are so large that they discourage any improvements. This had become the case with the NATO goal and review system used before 1964. The current system, evolved between 1964 and 1967, appears to be in the same danger.

2. How Well Does NATO Sea Power Fit NATO Strategy?

(U) If the deficiencies of NATO sea power are such that it is hard put to meet even existing NATO requirements, it encourages us to ask how well these requirements fit into overall NATO strategy. Maybe NATO is trying to do too much with too little. While NATO land and air commanders are concerned primarily with how to contain conventionally an initial WP blitzkrieg, much of NATO's sea power seems to be structured on the basis of a longer war concept, with hostilities lasting well beyond 90 days.

(U) NATO naval commanders naturally stress the need for strong allied sea power (especially increases in the European segment) based on such factors as: (a) the growth of the Soviet Navy and its continuing

modernization; (b) the increasing maritime interests of the U.S. and the other allies -- North Sea and Middle East oil, particularly, are cited; (c) the reduced U.S. capability resulting from cuts over the past four years and the need for European gap fillers; and (d) the long lead times for naval system development and acquisition, underlining the need for immediately available forces rather than force potentials that could be realized only long after a need arises.

(U) In keeping with the foregoing, and with an emphasis somewhat different from that of U.S. globally based missions, NATO commanders see their main naval tasks as:

a. Protection of high-value U.S. military transits, e.g., CV task forces, amphibious forces, reinforcement transport (envisioned as primarily a U.S. task).
b. Protection of merchant, i.e., economic and logistic support, shipping (envisioned as primarily a multinational task).
c. Protection of intervention/interposition forces (envisioned as lower intensity confrontation with or without Soviet involvement). Presumably, other NATO naval force missions are subsumed without specific mention. These would include support of the land battle, minelaying, minesweeping, and coast and strait defense or closure.

(U) Hence, a major role of NATO sea power, by traditional Alliance-oriented thinking, is to ensure the reinforcement and continued logistic support of NATO Europe. However, if NATO Europe were to be overcome in a conventional war before such support was to arrive or became necessary, this role would be irrelevant. On the other hand, if the duration and intensity of hostilities were such that seaborne support became the critical factor in NATO success and this support could be cut off by the enemy prior to NATO success, NATO sea power would obviously have been found inadequate. Taking all current estimates into consideration, the probability of the first of these outcomes is much greater than that of the second. However, Alliance naval task definitions and force proposals (though

admittedly inadequate) appear to be aimed primarily at prevention of the second outcome. Despite other military estimates that NATO vulnerability in Europe could lead to early defeat, the Military Committee representative at the NATO Defense Planning Committee discussion in February 1974 of SACLANT force proposals said: "For the West, it was clear that in any future conflict resupply by sea would play as important a role as in the past."

(S) Since the importance of surface shipping carrying reinforcements, military resupply, and economic support to the outcome of a NATO/Pact war depends on the length and type of war, timing of M- and D-days, and shipping intensity relative to these factors, several U.S. studies have examined this issue. Although the studies vary in their timing of D-Day relative to M-Day, most agree that the first ships carrying Army equipment will not arrive at European ports before U.S. M+30 because of time spent in preparing for overseas movement and the voyage itself. If D-Day were to occur at U.S. M+23, consistent with current U.S. planning guidance, early seaborne reinforcement forces would not only arrive after hostilities had begun, but would be at sea when the Soviet submarine potential was highest.

(S) Most of these studies cover a 90-day period in which military-cargo shipping stays about level for each 39-day increment, but economic support shipping (starting at D+30) about doubles in total shipping intensity from D+30 to D+60 and doubles again for the final 30-day increment. Thus, the bulk of shipping is found to be at sea after D+30, while the shipping of greatest value toward "outlasting the Pact in the first phase of an assault" might arrive only after the assault was well under way. The word "might" is used since the studies agree that early shipping losses would be high against Soviet submarine opposition. For example, a 1973 study indicates that, between D-Day and D+30, the equivalent of two division sets — or 65 percent of the Army equipment moved in that 30-day period — is lost, while a total of three division sets — or 28 percent of the Army equipment moved — is lost between D-Day and D+90. Additionally, 27 percent of Army dry cargo is estimated to be lost by D+90.*

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*(U) S. K. Dedeyan, *Vulnerability Analyses, U.S. Reinforcement of NATO* (U), Johns Hopkins University Applied Physics Laboratory Planning Analyses Group Report 52-73, March 1973 (Secret).

(S) Study outcomes vary, of course, dependent on the assumptions and scenario details, but all are essentially in agreement on high sealift losses and lateness of arrival relative to D-Day. The relevance of sealift to war outcome would probably be even more questionable under the timing factors proposed in the NATO Military Committee for a NATO/Pact relative force capability study. Emphasis is proposed on three studies wherein D-Day would be: (a) Pact M+5, NATO M+3; (b) Pact M+10, NATO M+4; (c) Pact M+22 (full mobilization and forward reinforcement), NATO M+9. A fourth study (presumably to cover U.S. guidance) would look at Pact M+30, NATO M+23.

(U) In short, NATO's naval concerns seem out of kilter with its other primary military concerns about early NATO defeat on the continent. Defeating the WP submarine threat and keeping open the SLOC for resupply of Europe are a hedge against a longer war, not a major contribution to defending Europe in the first place. It is undeniable that keeping the sea lanes open would be essential if a NATO/WP clash lasted more than 30 to 60 days. This is a desirable hedge if NATO can afford it. But the real issue is different — it is whether, given the resource bind confronting NATO, we can afford to divert so many scarce resources to buying this hedge at the expense of other, perhaps higher priority needs. Moreover, as we saw earlier, NATO naval deficiencies are such that even the hedge mission will be difficult to perform.

(S) Thus the NATO navies are caught in a capability box — *they appear too small for a long NATO war and too big (in terms of their demands upon resources) for a short NATO war.* Nonetheless, most NATO naval force planning is still directed toward traditional "balanced" optimization of existing capabilities, not toward rational resource allocation in a system that takes account, on a total-force priority basis, of both needs and resources relative to perceived enemy capabilities. Yet existing naval shortfalls are so great that if the allies were to meet the total naval "requirements" set by the NATO commands, the resource allocations needed would impoverish their ground and air forces. Even filling the smaller shortfalls relative to the 1975 to 1980 "proposals" (last column in Table 2) would cause such strain as to affect ground and air force improvement programs.

(U) This raises basic questions about such traditional approaches as that of the NATO Military Committee comment in its report on 1975 to 1980 force proposals (cited on p. 138), which accepts timely resupply to Europe as a fixed requirement, and warns that: "Unless critical deficiencies in NATO's maritime forces in survivability and ASW are corrected, there would be so grave a risk of heavy losses at sea" that this would be endangered. If NATO can't meet such a requirement, shouldn't it be reviewed?

3. Some NATO Ground and Air Deficiencies Deserve Priority over Naval in Terms of NATO Strategy and the Perceived WP Threat

(U) For many reasons, NATO's naval posture has developed largely independently of NATO's overall needs. There has been little assessment of the comparative priorities in filling ground, air, and naval needs. However, even a cursory reading of AD-70 suggests that NATO's conventional shield deficiencies are even more serious than its maritime weaknesses.

(C) Moreover, NATO's deficiencies in ready ground forces have been reinforced over time by the adoption of a concept of forward defense and a strategy of flexible response, with increased emphasis on conventional counters to possible Warsaw Pact aggression. Logically, this should have led to greater allocation of resources, not arbitrarily, but on a relative priority basis, to ensure effective and ready ground forces and quickly available reserves, meshed with appropriate air and naval support.

(C) Other chapters of this study make a strong case that many of NATO's nonnaval deficiencies are more serious than its naval problems. This seems particularly the case with several smaller continental NATO allies. Netherlands, Belgium, Greece, Turkey, and even the U.K. and France have such critical gaps in their ability to meet high priority ground requirements as to raise serious questions as to whether they should be devoting so much of their total defense resources to less critical naval missions. If we accept the well-publicized assessment of NATO military authorities and most analysts that NATO has a conventional combat force inferiority in the European Center Region vis-à-vis the Warsaw Pact forces

structured for armored and air blitzkrieg, it logically follows that, unless NATO capabilities to contain or defeat a WP attack in its early days are improved, NATO conventional naval forces apparently postured for a replay of World War II could be irrelevant to the outcome.

B. OBSTACLES TO NAVAL RATIONALIZATION

(U) But any effort to resolve these problems will run into acute political and service obstacles. Strong naval traditions and the pull of non-NATO missions in many countries will make otherwise rational changes difficult to achieve. NATO currently lacks the centralized direction, authority, and ability to achieve the priority-ranked allocation of resources in accordance with an integrated Alliance-oriented policy. This lack would greatly hamper any appropriate diversion of resources from naval to other forces, or vice versa.

(U) The fact that two of the three major NATO commands are naval has tended to foster parochial service thinking throughout the years. Thus SACLANT and CINCCHAN, having almost nothing but naval forces under their commands, have done their planning through a blue-water filter. SACEUR, on the other hand, has focused primarily on ground forces and tactical air forces. The NATO Military Committee has not performed as an objective integrating review team (see p. 286). With the NATO Council and committees thus dependent on the major NATO commanders for specific military advice and force-level recommendations, this planning atmosphere has inhibited development of credible triservice plans and proposals.

(U) Many NATO countries have a long naval tradition, which would make their politicians and bureaucrats reluctant to call for the economies or increased effectiveness that could be gained through rationalization and specialization of their naval forces. Furthermore, national defense authorities would be reluctant to accept as part of an Alliance triservice concept the idea that their naval forces should be tailored to criteria of mutual support in order to make a more relevant contribution to deterrence or defense.

(U) A new complication is the desire of many allies for NATO/Warsaw Pact mutual force reductions. Some hope that MBFR will generate

defense savings. We agree with those who take the position that to have equal security any MBFR savings will have to be devoted to modernizing the remaining forces. Nevertheless, mutual force reductions might actually stimulate rationalization.*

(U) Another obstacle to naval rationalization is the special time factors involved, given the long lead times required for naval construction. Changes in NATO strategy and posture are governed by the rate of change in military technology — approximately a 7- to 10-year cycle. Changes in naval forces and posture are even more sluggish, since the larger ships have a 20- to 30-year platform life and represent a capital investment that governments find hard to ignore or discard. The drain on defense budgets increases if periodic modernization is undertaken, since it costs almost as much to update the equipment in ships as to buy them as pure platform.

(U) But perhaps the greatest impediment to rationalizing NATO's naval posture is the often inherent conflict between national and Alliance missions. The possibility of having to operate alone cannot be excluded, especially for the U.S. or for countries with residual overseas territories or obligations, such as the U.K., France, Portugal, and the Netherlands. Others, foreseeing a need to defend the sources and supply routes of POL or other raw materials, offshore oil rigs, fishery areas, etc. — whether or not the Soviet Union is a factor — also are reluctant to give up their balanced and independent naval capability. Greece and Turkey have special interests in maintaining independent naval capabilities, not necessarily consistent with NATO interests.

(U) For some Alliance members, the increased Soviet global naval presence is a main concern. They picture sea power as providing new leverage to the Soviets for attaining limited political/economic objectives by focused actions at sea. They rightly point out that through sea power, especially outside of the NATO area, the Soviets can exert pressure on one particular nation without apparent threat to the territorial integrity of the others in the Alliance, at the minimum a wedge to split the Alliance.

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*(U) See *NATO Rationalization Potential*, op. cit., p. 9, for additional views on rationalization and MBFR.

(U) So the traditionally conservative advocates of independent (as opposed to interdependent) naval forces argue that below the crisis level at which the Alliance is willing or able to react in concert, nations must be capable of deploying power on a national basis. They acknowledge that specialization within the Alliance for sea-based nuclear deterrent forces may be appropriate, since concerted action at that level is obviously involved. Varying, of course, with the needs of the individual nation, they hold that overspecialization in conventional naval forces could preclude national reaction and provide the Soviets with freedom of action, or at least leave a capability gap, which the Soviets could exploit.

(U) The fallacy in these arguments for fully independent naval forces is that essentially none of the allies (except the U.S. and, possibly, the U.K. and France) has sufficient unilateral strength to counter Soviet naval forces, especially in distant waters. None of them has adequate mobile support capabilities to sustain such a mission, even if able to deploy significant temporary combatant strength to a distant area. The naval forces of these countries become relevant in a contingency involving the Soviet Union only in the NATO mutual-support context. They become rational only if related to a priority ranking of NATO needs. Interdependence is a fact of life, however much it is ignored.

(U) Chauvinistic as it may sound, the U.S. is a major exception. It confronts a legitimate dilemma over how much to posture for NATO needs as opposed to other pressing concerns. But the U.S., too, faced with budgetary, personnel, and inflation problems, now also puts dependence on the Nixon Doctrine hope that military assistance will fill the gap between continued policy objectives and reduced U.S. capabilities. And under the total-force principle, which seeks through the concept of comparative advantage to effect cost-effective specialization of U.S. and allied forces, one stated objective is the restructuring of our own forces with the objective of complementing allied capabilities more effectively. NATO considerations dominate in U.S. declaratory policy and formal force planning. But because of its global role, the U.S., in the search for efficiency, must take care to avoid the worst situation,

in which it is left with significant gaps in its capabilities — gaps that are exploitable by any potential enemy, not just the USSR.

C. GUIDELINES FOR RATIONALIZING NATO'S NAVAL POSTURE

(U) If NATO's naval forces are too deficient to perform present naval missions, and if the resource bind prevents sufficient add-ons to remedy these deficiencies, there is a strong case for rationalizing NATO's naval posture.

(U) *The guiding principle for any comprehensive rationalization effort must be to acknowledge the interdependence of the NATO allies in the naval as well as other fields, and to restructure NATO's naval posture in accord with a total-force concept*, rather than through uncoordinated changes based primarily on individual national requirements. Only in this way are enough resources likely to be freed for trade-offs to meet essential naval as well as other needs. Consonant with this guiding principle are three broad categories of rationalization steps we see as needed:

1. Given the technical and economic squeeze confronting all NATO navies, meeting even minimal essential naval missions will require greater emphasis on cost-effectiveness, interoperability, [illegible] and trade-off of more marginal capabilities [illegible] meeting higher priority naval needs.

(U) [illegible] some smaller NATO navies in particular need to pull in their [illegible] into ineffectiveness. For example, in a more rational [illegible] of tasks, the main concern of larger navies would be the [illegible] of ocean sea lanes, while smaller navies would protect coastal traffic and counter local attacks coming from the sea. While over time this would eliminate the blue-water naval capability of many NATO navies, this evolution is under way in any event. The increasing costs and technological requirements discussed earlier preclude small or medium powers from ever again becoming global sea powers. Coastal defense and control of local waters with relatively less vulnerable and less expensive craft (e.g., missile boats, small submarines,

and minecraft) will probably be their maximum sustainable force capabilities.* Even the submarine, the traditional weapon of weaker naval powers, will follow this pattern, since only the SSN has an appreciable survival capability against modern ASW at long distances from home base. Similarly, only the large powers will be able to foot the bill for the large surface ships needed for overseas intervention forces, and even these ships are becoming increasingly vulnerable to coastal defense and interposition capabilities of small local navies as SSM, ASM, and shore-based missile systems improve.

(U) With these considerations in mind, NATO naval forces, especially those of the smaller allies, should be restructured on a regional basis to increase their effectiveness in coping with the local Soviet naval threat. Special attention should be given to eliminating or modifying those elements that are not relevant or significantly contributory to the NATO mission and strategy. Then, the resources freed should be reallocated either to improving the effectiveness of sea forces or to enhancing NATO ground and air effectiveness, depending on NATO priorities.

2. Since present NATO naval missions are beyond NATO capabilities, these missions themselves need changing.

(U) If NATO's naval capabilities are indeed larger than needed for a short war but too small for a longer war, then NATO naval thinking needs to be brought into conformity with the rest of NATO strategy. For example, a rationalized SACLANT mission would not call for so high a degree of sea control that it creates impossible naval requirements, as at present. Instead, NATO should adopt policies and take measures that reduce the need for sea control, projection forces, and sea lanes protection forces during the early days of a conflict. For example, NATO could plan to live on accumulated stocks in the first 30 to 60 days of a war to minimize shipping losses and the need for early convoys and their escorts. Similarly, NATO could plan on more use of sea-based or land-based prepositioning and airlift during the same critical period. Greater

*(U) See *NATO Rationalization Potential*, op. cit., p. D-1-1, for some specific force mix options for the FRG, Greece and Turkish navies.

stress could be placed on peacetime strengthening of the indigenous flank forces, rather than on costly and problematic post-D-Day amphibious intervention (see pp. 315-316). By such means, allied naval needs could be reduced during the critical early period of a conflict, while allowing time for ASW forces (especially barriers) to attrit Pact submarine strength. This is not inconsistent with the U.S. Navy's *sea control* mission; as Vice Admiral Turner has described it, sea control is the capacity for sea denial plus the capacity to assert one's own ability to use certain sea areas at chosen times.*

3. The relative priority to give to meeting naval as opposed to ground or air deficiencies, within a balanced total-force concept, needs review.

(U) If NATO's other deficiencies, especially for meeting initial defense needs, are even more serious than its naval deficiencies, then some resource shifts seem desirable, in accordance with the principle of doing first things first. We are not arguing that NATO is oversupplied with naval forces, but rather that it may be even more undersupplied with other high priority forces. However, a caveat is needed. No matter how logical a case can be made for such diversion of resources, the practical likelihood is not great. As Table 2 shows, only the U.K., Norway, Netherlands, and Portugal among the European allies are today devoting 20 percent or more of defense resources to naval forces. Thus, the room for additional cuts is limited. Moreover, naval resource allocations may not be fungible in terms of transfer to meet other competing needs. On the other hand, such countries as the Netherlands, Belgium, Greece, and Turkey have ground/air deficiencies which seem so much more serious than their naval deficiencies that the case deserves to be made.

(U) Admittedly, it is much easier to make a generalized case for rationalization of NATO's naval posture than to devise practical and politically acceptable ways to achieve the desired results. Utopian ideas such as apportioning defense tasks so that some countries would concentrate only on naval forces and others on air or ground forces are

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*(U) Vice Admiral Stansfield Turner, "Missions of the U.S. Navy," *Naval War College Review*, March-April 1974, p. 7.

hardly feasible, except possibly in the long run. More practical is to seek the convergence of the desirable and the feasible through incremental steps. Hence, we take such an incremental approach. Our aim is to move toward the three objectives set forth above via regional consolidation, better meshing of individual country defense efforts, and the elimination or modification over time of elements contributing only marginally to NATO's higher priority needs.

(U) For example, if NATO members other than the U.S. were able to reduce expenditures on elements marginal to NATO's priority needs by about one-third and drop from about 15 percent to 10 percent of total defense budgets, then according to Table 1, about 1.6 billion 1974 dollars annually would be freed for reallocation. If such savings were attainable, and if they were not lost to the defense area, the rationalization options in this and other chapters would certainly gain in feasibility.

(U) The remainder of this chapter offers specific suggestions for rationalization/specialization of NATO naval forces. Some may be mutually incompatible, or impracticable to apply simultaneously or in combination. No order of priority is intended, nor is there any assessment of cost, time factors, or political merit. In effect, we are suggesting a menu of options that would require further study in depth before being regarded as feasible.*

D. MODIFYING CONTINENTAL NAVAL FUNCTIONS

1. European navies should optimize against Soviet naval capabilities within regional command areas and eliminate forces inconsistent with this policy.

(U) The U.S., the U.K., and Canada would provide open ocean naval capabilities. This option would be the NATO equivalent of the U.S. Navy hi-lo mix (see p.194). With a NATO hi-lo mix, the European allies would

*(U) *NATO Rationalization Potential*, op. cit. Section III contains dollar estimates on potential resource reallocation which could be achieved through rationalization. Annex D-1 contains specific naval force mix changes and associated costs for the navies of the FRG, Greece, and Turkey.

"counteroptimize" against the Soviet Navy as the Soviet Navy supposedly has optimized against the U.S. Navy. Naval force levels would be generated within a total-force principle that takes account of the capabilities of NATO air forces in the various regional command areas. This regional consolidation approach would avoid the extreme of single nation specialization and permit the Europeans to concentrate on a narrower and less costly range of capabilities. However, it would still allow at least optical adherence to the view that protection of shipping in territorial waters is a national responsibility. The Europeans would provide the "lo" end of the mix by concentrating on fast missile boats, strait closure, mining, and minesweeping. The U.S., U.K., and possibly Canada would provide the "hi" end of the mix, i.e., the broad range of open ocean capabilities involving carriers, large surface combatants, and ocean escorts.* Savings by the Europeans could be diverted to improvement of ground and air forces.

2. <u>The "strait guarder" nations should improve their strait closing capabilities.</u>

(U) Much of the naval action between NATO and the Soviet Union could take place fairly close to land because of the geographical location of Soviet Navy bases. Crucial choke points would be the straits through which the Soviet Baltic and Black Sea fleets must pass. This situation points to the utility of small combatants armed with SSM or torpedoes, land-based air with ASM, and minelaying capabilities by surface or air (short-based SSM should also be considered). Since the U.S. Navy plans a relatively small number of high-value ships for NATO/Pact confrontations, the U.S. will be more dependent than in the past on allied guarding of the straits through which the Soviet Navy must deploy or return for refit. Thus German, Danish, Greek, and Turkish naval forces could make more effective and probably less expensive contributions to an allied effort by being assured "strait closers" (see pp. 179-190).

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* *NATO Nationalization Potential*, op. cit., p. E-4-1, suggests that the Dutch should also improve their open ocean capabilities. We believe that the Netherlands Center Region forces deserve priority over naval forces. (See p. 185).

Other straits or strategic passages, e.g., Gibraltar and the GIUK gap, will probably have to remain the concern of the U.S., with some U.K. assistance, because of the nature of the effort involved in their closure.

3. Eliminate attack submarines, other than U.S., not optimum for strait closure, barrier operations, or regional area coast defense.

(U) Provide, through integrated commands (or coordinated exercises), the necessary submarine services for peacetime ASW training exercises of the forces of the countries eliminating submarines.

(S) The NATO allies, other than the United States, currently have about 100 attack submarines in the active [illegible]. Of these only eight (U.K.) are nuclear-propelled; 32 more can be classed as long-range postwar types. None of them is equipped with the most modern sonars or weapons. The British SSN, for example, are still armed with World War II-type torpedoes. Except for those larger submarines that might have utility in barriers and certain small submarines that could be useful in strait closing and coastal defense, retention of the remainder appears inconsistent with NATO priorities. The costs of truly effective modern submarines are skyrocketing and the elimination of marginal craft could release resources for allocation elsewhere. Especially hard to justify on the basis of type or number are the submarines of Canada (three), Denmark (six), Greece (six), Italy (eight), Netherlands (six), and Portugal (four). Presumably some of the submarines of Germany (18), Norway (15), and Turkey (12) could be useful in strait closing and coastal defense, consistent with a regional specialization concept. At least some British submarines (about 29, including 8 SSN) could be useful in certain barriers, especially if equipped with modern weapons and sonars.

E. REMOVING THE ASW ALBATROSS FROM AROUND NATO'S NECK

(S) Except for U.S. carriers and non-U.S. mine warfare units, the bulk of NATO's sea power is ASW-oriented or designed to be ASW-capable. Representative 1974 figures indicate that out of 527 NATO-committed and national major combatant units, no less than 450 are ASW-designed or capable:

Allied surface ships and attack submarines	347
U.S. surface ships and attack submarines, available by M+30	180
Total	*527*
1974 ASW-Oriented or Designed Ships	
Surface ships, non-U.S.	171
Surface ships, U.S., by M+30	137
Attack submarines, non-U.S.	108
Attack submarines, U.S., by M+30	34
Total	*450*

(U) The foregoing totals do not include ASW-capable aircraft nor is there any indication of the quality of the forces. Table 3 presents a best estimate in this direction (U.S. forces listed in Table 3 are global totals, not necessarily available to NATO by M+30). Table 4 presents a breakdown of ASW forces, committed and national, probably available to NATO by M+30 (U.S. forces are those designated by the U.S. to be available by M+30).

(U) The continuing retention of large numbers of naval units devoted to ASW is largely a result of (1) experience in World Wars I and II, (2) the perception of the Soviet submarine force as a major threat to reinforcement and resupply from the United States, and (3) the flow of supplies and raw materials for populations and industry. In addition to other obvious tasks, such as protecting U.S. carriers and military reinforcements, the NATO commanders today appear to envisage:

1. A full-scale attritional war on the sea line of communication.
2. Operations against enemy ballistic-missile submarines, on the premise that all enemy submarines are fair game at any stage of a war and that reduction of enemy SLBMs would be a damage-limiting precaution.
3. Possible limited engagements involving enemy submarine action. (War limited to ocean areas is often contemplated.) In this case, full-scale surface transport or full-scale ASW operations would probably not be involved.

(U) Table 3

1974 NATO ASW FORCE ESTIMATES (U)

(NATO-Committed and National Units)

	NATO[a] Less U.S.	U.S.[b]	Total
Surface ASW[c]			
AAW/ASW Escorts			
Good ASW	17	70	87
Fair ASW	2	2	4
ASW Escorts			
Good Postwar	64	66	130
Fair Postwar	57	7	64
Good World War II	7	50	57
Fair World War II	6	5	11
Poor World War II	18	0	18
Total Surface ASW	*171*	*200*	*371*
Submarines[d]			
SSN	8	62	70
Long-Range SS			
Postwar	32	12	44
World War II	15	—	15
Medium-Range SS	19	—	19
Short-Range SS	34	—	34
Total Submarines	*108*	*74*	*182*
ASW Aircraft (UE)[e]			
VP Long-Range			
Difar-Data	—	90	90
Difar	4	135	139
Lofar	115	123	134
Obsolete	8	—	8
Total VP-LR	*127*	*348*	*371*
VP/VS Short-Range[f]			
Difar	—	—	—
Lofar	—	—	—
Obsolete	62	—	62
Total VP/VS-SR	*62*	—	*62*
Helicopters, Shore-based			
SH-3 Size	47	32	79
Smaller	56	—	56
Total Helicopters	*103*	*32*	*135*

Footnotes appear on p. 159.

Table 3 Footnotes

SOURCES: Naval Order of Battle, DIA, NAFIS, DPQ Responses, OASD/PAE Data.

[a]NATO less U.S. totals estimated by M+30, not necessarily available for all NATO commands.

[b]U.S. global totals, not necessarily available to NATO by M+30.

[c]Surface Escort Definitions

Good - ASW helicopter or +10-KYD range weapon, e.g., ASROC, MALAFON, IKARA

Fair - Tube-launched homing weapon or midrange trainable weapon, e.g., U.S.-Alfa, U.K. Squid, Limbo

Poor - Short-range weapons, e.g., Hedgehog, depth charge throwers, depth charge rails.

[d]Submarine Definitions

Long Range - +10,000-nm range

Medium Range - 5,000- to 10,000-nm range

Short Range - Under 5,000-nm range.

[e]ASW Aircraft Definitions

VP - Patrol aircraft, large

VS - Patrol aircraft, small (only non-U.S. shore-based listed)

HS - Helicopters

Difar-Data - Range, bearing, classification, computer assist

Difar - Same as Difar-Data, less computer assist

Lofar - Bearing only, noise classification.

[f]Non-U.S. VS are shore-based, U.S. VS (not shown) are sea-based.

Table 4

1974 NATO ASW FORCES BY COMMAND, BY M+30

(NATO-Committed and National)

	SACLANT			SACEUR North Non-U.S.	SACEUR MEDITERRANEAN			CINCCHAN Non-U.S.
	Non-U.S.	U.S.	Total		Non-U.S.	U.S.	Total	
Postwar Escorts[a]								
Good	68	75	143	3	10	24	34	—
Fair	21	—	21	11	14	—	14	13
World War II Escorts								
Good	—	25	25	—	7	8	15	—
Fair	—	—	—	—	6	—	6	—
Poor	—	—	—	4	14	—	14	—
Submarines								
SSN	8	30	38	—	—	4	4	—
SS-LR Postwar	30	—	30	—	2	—	2	—
SS-LR World War II	1	—	1	—	14	—	14	—
SS-MR	19	—	19	—	—	—	—	—
SS-SR	—	—	—	24	10	—	10	—
Aircraft								
VP-LR Difar	—	177	177	—	—	18	18	—
VP-LR Lofar	74	—	74	12	19	—	19	10
VP-LR Obsolete	8	—	8	—	—	—	—	—
VP/NS-SR Obsolete	23	—	23	—	39	—	39	—
Helicopters, Shore-based								
Large	23	—	23	—	24	—	24	—
Small	—	—	—	—	15	—	15	41

SOURCES: Naval Order of Battle, DIA, NAFIS, DPQ Responses, OASD/PAE Data.

[a]See Table 3, footnotes c through f.

(S) But we believe that these missions, and the force requirements they generate, are like an albatross around NATO's neck. Can even today's cumulatively massive ASW forces perform all these missions effectively? If not, will the technical and economic squeeze permit NATO sea power to rectify existing deficiencies sufficiently to:

1. Permit much surface transport of U.S. augmentation forces and necessary supplies, especially in the crucial early stages of a NATO/WP conflict?
2. Permit massive raw material shipments from overseas to feed European and North American requirements?

We understand that SACLANT has already made clear that he would not be able with present forces to provide the early convoy protection called for in present U.S. plans for NATO reinforcement until he had won the battle of the Atlantic.

(S) But comparing SACLANT's requirements alone against current deficiencies (see Tables 5 and 6) shows the sheer magnitude of the costs which would be involved in reducing SACLANT's ASW deficiencies to the level of "acceptable risk" in terms of current concepts. Even if all committed and national forces through 1981 were allocated to SACLANT alone, his "requirements" could not be met. Furthermore, all these forces obviously would not be so allocated, as it would strip SACEUR and CINCCHAN of all ASW forces. Tables 5 and 6 show further that there are not only quantitative shortages, but serious qualitative ones. The other major NATO commanders face similar, albeit less serious, problems.

(S) Even in the most optimistic estimates and studies, the chances of effectively controlling the modern submarine in the critical early days of a full-scale NATO/Pact war are low. Although these studies usually indicate that the Soviet submarine force is effectively eliminated in time (some analyses estimate Soviet submarine losses of about 78 percent in the first 90 days), they tend to play down certain realities, such as the waste of sophisticated weapons on false contacts, shortage of ASW weapons, attrition of ASW forces, and low ASW effectiveness in much of the non-U.S.

(S) Table 5

SACLANT ESCORT REQUIREMENTS AND AVAILABILITIES (U)

(NATO Global Totals Include Only Those U.S. Escorts to Be Available by M+30)

Requirements	1973-1978	1975-1980	Availabilities
Escort Requirements	530	476	
Current or Planned			
Escorts available, 1974 (committed and national)	189	—	Available to SACLANT by M+30
Escorts planned, 1981	—	210	Estimated available to SACLANT by M+30[a]
NATO Global Total, 1974	303	—	
NATO Global Total, 1981	—	306	(a)
NATO Global Total, 1974 (good and fair only)[b]	285	—	
NATO Global Total, 1981 (good and fair only)[b]	—	306	(a)

[a]Sources: OASD/PAE and NAFIS.

[b]*Good* and *Fair* are defined in Table 3, footnote c.

Table 6

SACLANT SS/SSN AND VP REQUIREMENTS AND NATO GLOBAL TOTALS (U)

(NATO Global Totals Include Only Those U.S. Units to Be Available by M+30)

	1973-1978	1975-1980
Submarines, Diesel and Nuclear		
SACLANT Requirements	175	214
NATO Global Totals		
All SS/SSN, 1974	142	—
Modern[a] SS/SSN, 1974	127	—
All SS/SSN, 1981[b]	—	144
Modern[a] SS/SSN, 1981[b]	—	136
Patrol Aircraft, Large		
SACLANT Requirements	432	444
NATO Global Totals		
All VP/VS, 1974	380	—
Modern[c] VP/VS, 1974	310	—
All VP/VS, 1981[b]	—	329
Modern[c] VP/VS, 1981[b]	—	311

[a]Postwar.

[b]1981 estimates are from OASD/PAE and NAFIS.

[c]Equipped with Difar and Lofar.

NATO ASW force. In fact, many of the studies depend on advance estimates of effectiveness of ASW weapons that are not yet in production.

(U) Traditional ASW tactics of area search and point defense will probably not be successful against the modern submarine, especially the SSN.* Such tactics certainly will not be effective against the SSBN running quiet and avoiding allied ASW forces. Strategic ASW based on barriers and mines will probably be more effective. But if passage of such barriers does not occur until 50 or 60 days after the war begins, assuming that a prudent enemy has predeployed his submarines, the effects of barrier attrition may never be realized in time to affect the outcome of a war, especially a blitzkrieg.

(U) There also appears to be another kind of artificiality in estimates of Soviet submarine losses. Some of the studies** appear to evaluate Soviet submarine operations as akin to the Norwegian lemming suicide phenomenon, i.e., the submarines will run blindly into whatever ASW grinder the allies happen to devise. Some schemes to reduce the need for escort forces and also reduce shipping losses — for example, those that aim to minimize sealift by prepositioning and airlift, until ASW attrition has taken its toll of Soviet submarines — depend for success on the lemming phenomenon. Unfortunately, NATO advance preparations sufficient to make such delayed sealift the difference between NATO victory and defeat would be well-known to the Soviets. The Soviet Navy would undoubtedly revise submarine deployment schedules and operational plans. In any NATO/Pact war, it is more likely that operations

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*(C) Modern surface ship sonars, the SQS-26 (U.S. only) as well as the best sonar in non-U.S. escorts (SQS-23 equivalent), are usually ineffective below the surface ducts, i.e., in the depths where SSN operate. Attempts to penetrate with variable depth sonar (VDS), towed array sonar systems (TASS), and light airborne multipurpose systems (LAMPS-escort-based helicopters) improve the situation, but only marginally.

**(U) For example, in "CAPLOC," *A Study of the Capability of U.S. Lines of Communication and Support Forces in Reinforcing NATO* (U), Studies, Analysis and Gaming Agency of the JCS, July 1973 (Secret), three-quarters of the Soviet submarine force are estimated sunk in 90 days: of the total sinkings, 9 percent are on D-Day, 47 percent in the first 30 days, 27 percent in the second 30 days, and 17 percent in the third 30 days. Other studies, such as SLAMIX I and NARAC-G, portray similar Soviet submarine attrition.

will follow the pattern of the Vietnamese war — the enemy controlling his own losses by making or breaking contact at his choice.

(C) To further complicate the problem and to cast some doubt on NATO ASW force requirements, even such apparently sacred ASW measures as the convoy system are being questioned as valid tactics in the evolving environment of sophisticated surveillance systems (including satellites), long-range passive submarine sonar capabilities, SSN, and the trends towards larger cargo ships. The enemy will probably not hesitate to use such relatively expensive and, perhaps, scarce weapons as the SSM against modern large sealift ships, in view of the fact that one supertanker carries as much POL as a full World War II POL convoy or that only three large container ships can carry a mechanized division set of equipment. Grouping in convoys would help to solve enemy targeting problems.

(C) As our surface cargo fleets diminish in numbers of ships and as lift requirements increase, ship sizes increase to meet the demand. Shipowners are forced into the efficiencies of large ships, as opposed to the flexibilities of traditional sizes. According to an internal Rand study, even now, for reasons of peacetime efficiency, over 70 percent of U.S. Army cargo and tonnage shipped by sea to Europe is containerized and moved in large container ships. We cannot afford massive sinkings during wartime as we learn to cope with modern submarines, especially if the war is protracted. According to naval historians, German submarines destroyed some 3000 ships with a total displacement of 14 million tons in the Atlantic in World War II. Today the U.S. Merchant Marine numbers only about 569 active ships, of which only about 335 are useful for defense or general cargo.* Although plans exist to utilize allied ships and so-called effective U.S.-controlled ships (flags of convenience), there is doubt that — even if made available — significant numbers could be in use prior to M+60 or M+90. (Only 45 out of 423 flags-of-convenience ships are general cargo vessels. All but 11 are to be retired by 1976, and these are refrigerator ships.)

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*(U) *Sealift Procurement and National Security Study (SPANSI)*, OASD(SA), August 1972 (Secret).

(U) Admittedly, NATO must retain an ASW capability hedge against the possibility of a long war. One of the difficulties in deciding on naval force structures (ships have such long life and require long lead times for construction and fitting) is that it requires working in a time scale of decades on the basis of political and technological forecast, the reliability of which is much shorter, perhaps only several years. Thus, sea power, particularly ASW, is akin to insurance. The questions, however, on how much insurance (i.e., what should ASW force levels be) have changed. The old question was: How much protection to prevent unacceptable losses over time? The new question, in face of the technical and economic squeeze confronting NATO, is: *How much must be transported by surface ship, and in what time frame, to be relevant to NATO's top priority mission of deterring or, if necessary, defeating a Warsaw Pact blitzkrieg?*

(U) The problem of estimating an adequate ASW hedge is not just confined to ships and aircraft. The mounting costs of manpower adds a new dimension. Normal naval training, for example, is not enough to qualify personnel for the complex ASW task. ASW specialists and forces require costly special training in tactics, sensors, and weapons — all of which requires time and constant practice and cannot be mastered in short order to meet a sudden emergency.

(U) One criticism in the selection of ASW hedge forces would be the estimated ASW effectiveness levels versus costs in money and manpower of the various ASW components. This approach must be used with caution, since ASW capabilities are synergistic and estimates of component effectiveness are influenced by this phenomenon, consciously or unconsciously. Nevertheless, the first cut in Table 7 below is suggestive:

(S) Table 7

U.S. ASW COMPONENTS AND THEIR PERCENTAGES OF ALL U.S. ASW OPERATING COSTS, MANPOWER, AND SUBMARINE KILLS (U)

U.S. ASW Component	Operating Costs	Manpower	SS Kills
Carrier a/c	11	15.4	11
Surface escorts	49	61.4	17
Submarines	30	13	49
Patrol a/c, land-based	10	10.2	23

SOURCES: Expenditure and manpower percentages are derived from an unpublished 1972 Rand study. SS kill percentages are from an OSD draft document, *Naval Issues, FYDP*, August 1972 (Secret).

(S) It should be noted that the kill percentages are for a campaign, presumably a 90-day period. This would, of course, mean that the very high kill score attributed to submarines would not apply in the early, critical days of a war, since most of the kills by U.S. carrier submarines would probably be against enemy submarines returning to base between D+30 and D+60. Carrier aircraft kills will probably be less than indicated in the 1972 OSD paper, since CVS no longer exist and carriers (CV) will probably carry smaller number of ASW aircraft than the full hunter-killer sets of the CVS. Additionally, the surface escort kills may be overstated as enemy submarines improve their SSM capabilities and rely less on torpedo attacks, which would require them to approach within surface ship sonar range. No estimates were available on mining costs and effectiveness. The newly developed CAPTOR mine might, for example, add to barrier effectiveness against transiting enemy submarines. Kills, however, would be in the same time frame as those by barrier submarines, i.e., between D+30 and D+60. Despite these observations on changing ASW effectiveness, however, the cost and manpower percentages should remain fairly valid. With improvements in sonobuoys (directional instead of omnidirectional) and data-processing gear, the percentage of kills by land-based patrol aircraft will probably increase relative to other ASW components, especially early in a war.

(S) Taking into account all the foregoing factors and the current overall NATO/Pact ASW versus submarine balance, *achieving acceptable*

shipping loss levels within the most critical time limits of a Center Region war would probably require a disproportionate resource commitment that promises either too little or too late a return relative to NATO's main mission of deterrence and initial defense. Such added resources are not likely to be available in any event. Other means must be found to remove the ASW albatross from around NATO's neck. We suggest below six measures:

1. (U) Initiate "time-phased" allocation of appropriate U.S. Air Force assets to assist in maritime warfare.

(C) The necessary NATO ASW hedge may lie more in the improvement of land-based air ASW capabilities and maintenance of submarine capabilities than in maintenance or increase of current levels of surface ASW. From Table 7 approximations, this approach would appear to cost the least in money and manpower, and would certainly stress those elements of the ASW team that are least vulnerable to the modern enemy submarine and probably the most effective. Hence, in keeping with the total-force principle and as a back-up hedge against protracted war or U.S. Navy maldeployments or area deficiencies, suitable U.S. Air Force units should be equipped (modestly and preferably on a modular basis) and trained to assist in maritime warfare, both in NATO/Pact contingencies and elsewhere. Air Force units so readied could be committed on a phased basis, i.e., greater numbers of specially trained units would be made available if probability of primary mission usage were low and vice versa. Certain Air Force units are already capable of minelaying. Navy and Air Force officials also agree that Air Force units would probably be capable of deploying sonobuoys, relaying sonobuoy data to VPs, in-flight refueling of VPs, and relief of VPs from surface search. Other potential Air Force maritime activities could include: participation in operations where navy assets are weak or time constrained; assistance in the NATO area when full NATO participation does not occur, e.g., Arab-Israeli, Yugoslav, and Greek-Turkish contingencies; and assistance in other than Atlantic or NATO-area contingencies, e.g., Indian Ocean, Southeast Asia, etc. Air Force Reserve and Air National Guard units

would be especially appropriate for protracted war hedges in defense of military and civil support convoys after D+30.

2. (U) Reduce the requirements for sea-lane-protection forces by sea-based prepositioning of U.S. equipment and stocks in Europe, and increased airlift for personnel and resupply.

(U) Since protection of the sea lanes provides the rationale for the bulk of NATO naval forces, reducing sealift requirements would in turn reduce force requirements. Also beneficial to the Center Region posture would be schemes to reduce reinforcement times, minimize the vulnerability of equipment and stocks (either being transported or prepositioned) and enhance the probability that credible readiness levels could be achieved prior to D-Day, thereby gaining deterrent relevance. All these might be useful hedges.

(U) Adoption of sea-based prepositioning, akin to the old C5-A/FDL concept, could be flexible and advantageous, both to the U.S. and NATO. This type of prepositioning would depend on the use of modern container or RoRo ships, three of which can carry the equipment and limited resupply for a mechanized division. If the loaded ships were already in NATO ports, they would avoid ocean-crossing hazards, be less vulnerable to early or preemptive air attack (by virtue of being fully behind NADGE and well removed from easy preemptive attack) than equipment stored in Germany, and would be available for use elsewhere on the continent or in the Middle East on short notice (as opposed to politically-tied equipment stored in Germany). The troops to use the equipment would be flown to the vicinity of debarkation ports where marrying-up could proceed under relatively secure conditions.

(U) Even if the ships were to be kept in U.S. ports in a ready state, the time to debarkation in Europe would not exceed eight days. A 1971 Rand study* indicates that ten-year costs for 18 ships,** which includes a 20 percent backup, would be about 0.6 billion dollars. By

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*(U) T. F. Kirkwood et al., *High-Speed Surface Effect Vehicles for Military Deployment and Supply* (U), The Rand Corporation, R-616-ARPA, October 1971 (Confidential).

**(U) Fifteen ships would suffice for the initial five-division set now envisaged in U.S. sealift plans. The other three ships would be a backup permitting equipment rotation, training or contingency use elsewhere.

comparison, a force of 114 C-5A aircraft, with the same deployment capability as 15 ships, but over 25 days, would have a ten-year cost of $5.7 billion (including a 20 percent backup). Aircraft acquisition costs exclude the cost of C-5As already procured, about half of the number needed.

(U) Reexamination of the cost-effectiveness of sea-based prepositioning and airlift also appears warranted in view of changed Civil Reserve Air Fleet capabilities since 1971.* Other possibilities, such as optimization for NATO of stationed U.S. Army supplies and equipment** and arrangements for joint use for training of CONUS Army equipment by ready, reserve, and inactive forces (to avoid dual equipment sets), also merit examination (see pp. 52-53 of Chapter II).

(S) Other elements also tend to make sea-based prepositioning more attractive than in the past. The first is the possibility of NATO/Pact MBFR agreements, which could also serve to reduce the U.S. prepositioned equipment levels in the FRG. As now visualized, the MBFR area would not encompass British, Italian, or Portuguese ports, and would not come under MBFR restrictions. Another element is the high vulnerability of prepositioned equipment and stocks in the FRG to easy and early attack by the USSR. According to a 1973 study,*** and depending upon the relative timing of D-Day to M-Day, depot stock losses would range from 40 to 85 percent by D+30. Equipment losses would vary from 44 to 77 percent, if troops assigned to equipment did not arrive in time to disperse it before enemy attacks began. A JCS study group,† noting this vulnerability, has stressed the importance of seeking dispersal sites and improved air defense. A more mundane benefit of the sea-based prepositioning is the increase in dispersal sites now inhibited by real estate restrictions in Europe.

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*(U) Another Rand study asserts that modifying CRAF 747-type aircraft sufficient to deploy programmed forces according to present schedules could be accomplished for $1 to 1.5 billion, a figure approaching ship costs.

**(U) Economies in equipment, supplies and support could be achieved by "specializing" U.S. Army stationed forces for their potential combat areas, rather than adhering to general-purpose-force flexibility concepts. See *Restructuring NATO Forces to Compensate for MBFR*, op. cit.

***(U) Dedeyan, *Vulnerability Analyses*, op. cit.

†(U) "CAPLOC," op. cit.

(U) Adoption of any prepositioning schemes beyond current levels would increase the possibilities for postponing surface support shipping. This, in turn, would reduce the effectiveness of predeployed Soviet submarines and increase submarine sinking loss ratios, as many submarines would have to return, without score, through NATO barriers. As noted earlier, however, the Soviets would undoubtedly alter deployment plans as they became aware of NATO's gambit. Thus, submarine kills would probably not be as high as otherwise estimated in the early days of a war. If the Soviets chose to keep submarines in port early in a war because of low target opportunities, this also would improve barrier attrition when they finally did deploy.

3. (U) Fast sealift between M- and D-days would also reduce the need for sea protection forces.

(S) If NATO can count with confidence on a likely 23-day interval between M- and D-days, as is accepted in U.S. planning guidance, then a whole series of possibilities for fast sealift open up. The U.S. Navy has analyzed these in its provocative SEA EXPRESS study,* which suggests that it would be quite feasible at little cost to move the unit equipment of all nonprepositioned active U.S. Army divisions to Europe together with their combat support and 40 percent of their service support within 23 days after M-Day (see pp. 53-54).

4. (U) Arrange for military forces to have assured access to domestic POL reserves in time of emergency.

(U) Recent DOD studies covering support shipping requirements for a NATO/Pact war indicate that a large portion of the shipping would be devoted to POL transport. Other studies** and OECD surveys made before the October 1973 Arab-Israeli hostilities indicate that domestic POL reserves in the NATO European countries varied from 45 to 80 days of normal peacetime requirements. Arrangements could be made for NATO forces to have access to domestic POL stocks for emergency supply. This should have

*(U) *Project SEA EXPRESS*, op. cit.

**(U) P. B. Buck, *Supply and Distribution of POL to Tactical Forces* (U), Institute for Defense Analyses, WSEG Report 204, June 1973 (Secret).

the effect of reducing early shipping requirements, associated escort requirements, and losses of tankers.

5. (U) Modify container ships and tankers to carry ASW helicopters.

(U) As noted on p. 196, the sea control ship (SCS) is a core item in the lo end of the new U.S. Navy hi-lo mix, designed to assist in the protection of underway-replenishment groups, amphibious ships, and other convoys in a low-air-threat environment. The Secretary of Defense has noted deficiencies in the capabilities of embarked helicopters for continuous ASW and surveillance.* Similarly, the capabilities of the current generation of V/STOL for local defense against air and missile attack have been criticized. If the problem is mainly one of numbers of helicopters, *the Navy should modify container ships and tankers to carry ASW helicopters*. According to a British source, with some decking installation and diversion of about 575 of the 2300 containers in a 43,000-ton container ship, each ship could carry six Sea King helicopters along with modular maintenance facilities and weapon storage.** A possibility of trade-off could also exist for reduction of the number of initially planned SCS (eight at $120 to 150 million each), in order to improve less vulnerable forces designed to hedge against the possibility of a protracted NATO/Pact war.

6. (U) Increase the frequency with which U.S. Coast Guard ships with an ocean-going ASW capability exercise as integrated units with U.S. Navy ships.

(U) In view of the proclaimed shortage of escort ships, the Navy should arrange to increase the frequency of integrated exercises including those Coast Guard ships with an ocean-going ASW capability. Such a practice could help insure that these ships would suffer no capability time lag in a peace-to-war transition. With some equipment additions, about 27 Coast Guard cutters could be involved; 12 cutters are scheduled to have navy patrol frigate capabilities in FY 1975.***

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*(U) *Annual Defense Department Report, FY 1975*, op. cit.

**(U) *Navy International*, December 1973.

***(U) *Annual Defense Department Report, FY 1975*, op. cit.

F. COMMON LOGISTICS, STANDARDIZATION, AND COMPATIBILITY

(U) As might be expected, equipment, communications, procedures, and the like vary so widely among NATO's naval forces that common employment is exceedingly difficult in many cases. Although it is a time-honored military axiom that logistics is a function of command, in NATO it remains for the most part a national responsibility. Over the years, the NATO commanders have evolved logistics staff elements and information-collection systems that assist them in performing their peacetime tasks of planning for war and exhorting alliance members to meet military "requirements." Emphasis has been mainly on national war-reserve stocks, although urgings to achieve interoperability of equipment are increasingly popular. But NATO commanders have no funds or resources at their disposal for logistics purposes, nor sufficient information or authority in peacetime to insure effective coordination of national logistics systems when the commanders assume operational command in wartime.

(S) Economies that might be achieved through standardization or even interoperability are similarly difficult to achieve. According to a former chairman of the NATO Military Committee, the NATO navies have more than 100 different types of ships above destroyer level, 36 different kinds of radar, 40 different kinds of large-caliber naval artillery, and so on, so that if a multinational fleet were to be put into operation, stocks would have to include 40 different kinds of ammunition.* The Deputy SACLANT has pointed out that because NATO regrettably standardized on an older flange coupling, NATO ships require up to one hour dead time for refuelling operations, which greatly increases vulnerability during refueling.** Nor does NATO even have a standard system for identification of aircraft as friend or foe (IFF); as a result, in a recent NATO exercise, 30 of 56 friendly maritime aircraft "shot down" were actually accounted for by our own fighters.

(S) Even in mine warfare, where technical cooperation should be relatively easy to achieve, the recently established Standing Naval

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*(U) General Johannes Steinhoff, "NATO Enters Crucial Phase," *Armed Forces International Journal*, June 1974.

**(S) *USNATO 8586*, November 5, 1974 (Confidential). He noted that the nonstandard USN system requires only 4 to 5 minutes to hook up and 2 minutes to disconnect.

Force Channel found that the mine craft of four different nations (Norway, Germany, Belgium, and the U.K.) have different communication equipment, different minesweeping gear, different spares, and different maintenance periods. The operational problems are obvious in that the lack of standardization, for example, forces individual ships to return to home port for spares, instead of permitting the U.S. practice of cross-servicing at sea.*

(U) Situations such as those described have prompted NATO's Assistant Secretary General for Defense Support to specify in order of priority (and probable reverse order of feasibility) the desiderata for cooperative development, procurement, and testing of naval armaments: (1) standardization, (2) interoperability, interchangeability, and (3) compatibility.

(U) The scope of logistics is so large, incorporating, as taught at the U.S. Naval War College, everything that isn't strategy or tactics, that analyzing it comprehensively is beyond the range of this chapter. The political and economic obstacles to R/S may even be more potent in naval logistics than elsewhere. Nevertheless, NATO already has achieved some measure of standardization in such matters as communication procedures, replenishment at sea, formats for operation orders, and ASW tactics. There are certain other areas, specifically in communications, armaments, and shore facilities where rationalization may be less incompatible with national parochialism than the ideal of logistics integration across the board.

1. <u>Exploit opportunities for regional pooling of naval supply, maintenance, and other logistics operations, and encourage coalitions of alliance members in combined development, production, and evaluation ventures.</u>

(U) Perhaps the greatest NATO naval-forces economies could be achieved by terminating the NATO policy that makes logistics a national responsibility. In particular, overhead and many other costs that are high in the European naval establishments because of the small scale of

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*(U) *ACE Naval Commanders Conference, Sea Breeze '74*, SHAPE, May 1974 (NATO Secret).

the separate naval programs could be reduced by regional logistic pooling.

(U) Potentially, for most types of support and maintenance operations, there are significant economies of scale. Multinational naval forces composed of similar elements could provide greatest operational effectiveness at least cost if bases, maintenance, and supply facilities could be combined. If the forces were to be consolidated, headquarters savings would also be affected. A practical first step could be the centralizing of supply management for similar navies so as to increase purchasing power, promote standardization, reduce inventories, and lower storage costs.

(U) The achievement of combined support and maintenance systems has been hampered by the lack of effective standardization of equipment. Although, to date, national sovereignty and interests have blocked real progress toward standardization, the growing technical and economic squeeze might outweigh these difficulties. The NATO Conference of National Armament Directors (CNAD) possibly provides a ready forum for agreement on standardized designs of major equipments before individual nations embark on costly developments. In keeping with some earlier suggestions in this Report, appropriate fields for exploration of standardization possibilities would be: C^3 equipment, surface-to-surface missile systems; shipborne weapons versus missile attack; and, for navies retaining submarines, tactical submarine-to-surface missiles.* Standardization of ASW weapons, gun ammunition, and fuels may also be feasible. Agreement on standardized designs could lead to further economies in research and development, production, evaluation, and training.**

4. Survey NATO and national shore-based facilities and missions and consolidate where practicable.

(U) Further NATO naval-force economies could come from consolidation of shore-based naval facilities and missions. ASW and reconnaissance

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*(U) Standardization of SSMs and SAMs would be a useful first step: Reports indicate that European navies alone have 16 different missiles of these types.

**(U) The NATO Sea Sparrow SAM, involving production by the U.S., Norway, Denmark, Italy, Netherlands, and Belgium, is an example.

aircraft and their bases, communications, facilities, and underwater fixed arrays should receive early attention. The aircraft and facilities involved in such missions as ocean reconnaissance and ASW are logical candidates for consolidation. Some experience with coordinated operations has already been gained by NATO forces in the Mediterranean through the NATO Maritime Air Command; such coordination should be extended on a continual basis. Consolidation possibilities exist also in the communications field. In this case the objective would be to eliminate duplication of similar facilities.

3. Press standardization or at least compatibility in the highest priority areas.

(U) The consensus at the October 1974 CNAD meeting and among the top NATO naval commanders was that more common C^3 were of utmost priority. The MNCs have repeatedly stressed that complete interoperability is a requirement, if workable command and control of multinational forces is to be realized. Yet NATO has accomplished all too little along these lines, in contrast to the high degree of naval standardization in the WP forces.

The lack of interoperability in the communications field alone is appalling. For example, the U.S. and U.K. have ongoing programs for satellite systems which are not interoperable with each other or with many NATO ground terminals. There is no NATO standard shipboard secure voice equipment nor even a standard modulation scheme. Cryptographic incompatibility makes difficult secure teletype communications between U.K. ships and shore stations of other NATO allies. Existing ADP systems do not permit a free flow of data without time-consuming adaptation of the product of one system to that of another.*

(U) The CNAD agreed that lack of interoperable and secure communications and data links was a serious shortcoming and that solutions should be sought urgently. NATO needs interoperability between its two main systems of data links, and ultimately a common language for all data links of all services. The CNAD also agreed to press on C^3 standardization

*(U) CINCLANT N03020 to JCS, June 17, 1974 (Secret). Also *USNATO 5195*, September 24, 1974 (Secret).

in general and on standardization of the next generation of antiship missiles.*

G. COUNTRY-BY-COUNTRY REALLOCATION OF RESOURCES

(U) In this section we suggest various individual country resource shifts to the net benefit of the Alliance.** Through adjustments of this type, sufficient cumulative reallocation of resources might be achieved over time significantly to enhance deterrence and defense in the high priority areas.*** In keeping with our premises of a NATO hi-lo mix, regional consolidation and area/force specialization, two main questions have been asked — what should the role of each country's navy be in light of the overall total-force situation and relevant constraints, and what naval posture is best suited for that role? The various suggestions represent compromises needed to achieve a balanced NATO naval posture (which, of course, may be at variance with individual country desires).

(U) As OASD/PAE has pointed out, most European NATO navies now have an excess of old, expensive, but generally poorly armed surface ships (of destroyer size and larger) with limited effectiveness against Pact forces. These should be traded off as a first priority for additional aircraft and SSM-armed fast patrol boats. Because of limited resources, single-purpose weapon systems and smaller naval craft — rather than larger, more costly and probably more *vulnerable* multipurpose ships — should be stressed.†

(U) Since we also believe that a rational total-force policy would provide for reallocating some European resources now devoted to naval forces to meeting even more serious ground and air deficiencies, we suggest below where cuts in individual naval forces might be made.

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*(U) *USNATO 8686*, November 5, 1974 (Confidential).

**(U) This survey is based on available intelligence, especially the NAFIS series, responses to DPQs, and consultation with knowledgeable DOD officials.

***(U) See also OASD/PAE, op. cit., pp. D-1-1ff. and pp. E-4-1ff. (Secret).

†(U) OASD/PAE, op. cit., Annex E-4.

1. Belgium

(S) Belgium has 32 mine warfare ships that are capable of effective but limited minesweeping; these would operate in the CINCCHAN area. Five helicopters may be available for mine location, air-sea rescue, and patrol assignments. There is no AAW, ASW, or minelaying capability. Personnel: 4400 men (300 officers, 4100 enlisted, of which about 35 percent are 15-month conscripts). Only 70 percent of Belgian naval forces are in operational status. Belgium has ordered four 1800- to 2000-ton destroyer escorts, with delivery estimated between 1977 and 1979. A special naval basin for these is planned for completion in 1976 at a cost of $2 million.

(S) Given Belgium's maritime potential, location, and the higher priority need to strengthen its corps sector in the NATO forward shield, building four DEs appears to be an unfortunate diversion of resources. Equipment planned to be installed will provide only poor ASW capability. Resources could be shifted to improve Belgium's ground-force contribution to the Center Region, but her existing minesweeping capability preserved.

2. Canada

(S) Canadian Atlantic-based units are committed either to SACLANT or to the Canada-United States Regional Planning Group (CUSRPG). Personnel include 14,000 officers and men.

	1974	1981
DDH, Good	4	4
DE/DEH		
Good	13	13
Fair	3	3
SS-LR, Postwar	3	3
VP-LR		
Difar	—	24
Lofar	32	—
VS-SR	23	—

(S) Twelve escorts are usually in the Atlantic and ten in the Pacific. Canadian ASW forces are considered well trained, with good effectiveness, especially against conventional submarines. About 14 of the escorts are equipped with either helicopters or ASROC and variable-depth sonar and should have marginal capabilities against nuclear submarines. Despite new construction and modernization of individual units, Canadian ASW forces total numbers will probably decrease.

(U) The escorts usually stationed in the Pacific would not be able to assist in the early critical days of a NATO Atlantic contingency. All but one division (four escorts) could be transferred to the Atlantic. The commitment to CUSRFG (about seven escorts and five VP) should be terminated and all Atlantic destroyers committed to SACLANT. Another option would be to reduce escort levels over time, raise maritime patrol aircraft levels,* and shift any saved resources to air-transportable troop capabilities. The three Canadian submarines, used largely for ASW training, could be eliminated. These are used mainly for ASW exercises; if they were decommissioned, Canadian ASW units could exercise with U.S. forces.

3. Denmark

(S) All Danish forces are committed to SACEUR. Personnel strength is 6460 (1495 officers, 4965 enlisted).

	1974	1981	
DE, Poor	2	2	(No standoff weapons)
Patrol craft, Coastal	13	15	(Minimal ASW capability)
SS, Coastal	6	6	(2 new in 1980)
Minelayers			
Coastal	4	4	
Inshore	3	3	
Fast Patrol Boats	11	18	
Minesweepers			
Coastal	8	8	
Inshore	4	4	

*(U) OASD/PAE, op. cit., p. E-4-2, recommends the purchase of an additional 20 P-3C ASW patrol aircraft out of funds made available by reductions in the Canadian Army. This shift of resources would appear to be inconsistent with NATO priorities, especially in a short war concept.

(S) The Danish Navy is a feeble conglomeration of old and new ships, considered only about 50 percent effective in closing the Danish Straits, and then only if sufficient time is available for mobilization and air defense is provided by other allies. There is high dependence on conscripts, whose training is poor (although training of regulars is good). Now conscript service is being reduced from 12 to 9 months. Danish coasts are essentially undefended, except for several 150mm batteries and some mines, if laid. Eight new fast patrol boats now under construction, to be delivered by 1978, will be equipped with wire-guided torpedoes and probably SSM. These should have a high combat potential.

(S) Denmark's escort types and submarines are of doubtful effectiveness in the Baltic approaches. Resources should be shifted to improve strait closure capabilities.

4. Germany

(S) All forces are committed to SACEUR, although German escorts participate from time to time in Standing Naval Force Atlantic operations. Except for these operations, current ASW, AAW, and mine-warfare activity is limited to waters adjacent to West Germany and the southern region of the North Sea. Personnel include 36,150 (4950 officers, 31,200 enlisted, including 6400 in naval air). Twenty-five percent of the enlisted men are conscripts with maximum 15-month service.

(S) German escorts are assessed to be of low ASW and AAW effectiveness, except possibly for three DDs equipped with ASROC and Tartar missiles. Other escorts are equipped with World War II weapons. The ASW air arm has fair to moderate capability, but no mining capability. By the Western European Union Treaty of 1954, Germany is limited to warships of less than 3000 tons, except for eight destroyers. The larger ships are operational only six months of the year. Eighteen new coastal submarines are being constructed. Reserve flotillas and amphibious transport units are being eliminated. Thirty old fast patrol boats are being replaced with 30 new ones (20 to be equipped with SSM). Navy F-104Gs are being fitted with ASM. Four destroyers are being fitted with SSM.

	1974	1981	
DDG, Good	3	3	
DD, Fair	4	4	(To be fitted with SSM)
DD, WWII, Poor	3	—	
DE, Old	6	6	
SSC	18	18	
PCG	—	10	(No ASW capability)
PTFG	—	20	(No ASW capability)
PHM	—	10	(No ASW capability)
PTFG, Old	39	—	(Phasing out, 1978-1985)
Minesweepers			
Coastal	42	36	(Additional 4 MHC
Inshore	47	30	possible)
VP-LR Lofar			
MK2 Atlantique (or S-3A)	—	10	
MK1 Atlantique	12	12	(to 5 in 1983)
F-104G	18	?	(MRCA after 1976)
No minelayers			

Some of these changes are part of the FRG 1975-1980 force-restructuring program. But modernization of four Hamburg class destroyers with SSM seems questionable in view of Soviet Baltic capabilities. Unless these DDs are to be used elsewhere, the FRG would probably do better to follow SACEUR's 1975-1980 force proposals and equip all of its new patrol boats with SSM. SACEUR deems guided-missile patrol boats "to comprise one of the most effective means of providing coastal defense against surface ship operations, including amphibious assault. The current inadequate numbers of these units for use in the Baltic Straits constitutes a critical Northern Region deficiency."*

(U) The larger German surface ships, especially the 11 destroyers, would appear to be highly vulnerable if assigned solely to Baltic and Northern Region tasks. Under a regional specialization concept, Germany would in the future concentrate on smaller, less vulnerable craft, missile boats, and land-based air, for example, to attack enemy naval forces and installations in the Baltic and North Seas approaches. Any

*(U) *NCE Force Proposals, 1975-1980*, op. cit.

savings could be shifted to Center Region force improvements. An immediate alternative would be to shift the escort types to ocean escort missions under SACLANT. The effectiveness of this scheme would depend, however, on escort capabilities, logistic-support arrangements, and compatibility with other Atlantic escorts.

5. Greece

All Greek forces were in the SACEUR-South area until August 1974, when Greece withdrew its military forces from NATO. Personnel numbers 16,900 (2050 officers, 14,850 enlisted).

	1974	1981	
Escorts, Good (DEG)	--	3(?)	(IOC in 1977?)
DD, WWII, Good	3	3	
DD, WWII, Fair	1	3	
DD, WWII, Poor	7	—	
DE, Old	4	—	
PCE, Coastal	3	2	(Poor ASW)
SS-LR, WWII	2	2(?)	(May phase out by 1980)
SSC, German	4	4	
PTFG	4	8	(No ASW capability)
PTF	12	17	(No ASW capability)
Minelayers	2	2	
MSC	20	14	
VP-SR, Obsolete	19	6	(Phased out by 1982)

Greece also has 12 amphibious ships and about 108 miscellaneous amphibious, auxiliary and service craft.

Greek Navy ASW and AAW are generally poor.* Surface escort types have poor ASW equipment and add little to Alliance capabilities for sea-lane protection. The utility to NATO of the Greek submarines is also difficult to visualize. Capability against Soviet Navy ships is limited and marginal at best. The Greeks plan to increase surface escort

*(U) According to *Navy International*, July 1974, p. 7, Greek destroyers spend two-thirds of the year in port and, for the most part, run only on "day exercises."

strength to eight or nine and submarine strength to eight. If submarine strength is increased, the old World War II U.S. submarines will be eliminated. Bids have been requested for four fast patrol boats and three to five DE for 1977-1978.

(S) Concentration by Greece on fast missile and torpedo boats and mine-warfare craft would appear more sensible. The Greek naval program seems highly expensive from a NATO viewpoint, given more pressing ground- and air-defense deficiencies. If Greek (and Turkish) escort forces were made fully capable of Mediterranean ocean escort functions, they could productively carry out sea-lane defense tasks.* But the large amount of resources required to modernize Greek ships for these functions and to provide adequate logistic support would be an unfortunate diversion of funds from the priority task of strengthening local Southeastern Region ground and air defenses and building adequate war reserve stocks. Accomplishment of these priority tasks would virtually eliminate the need in the early weeks of a war for sea-lane defense -- based on reinforcing the Region -- and might deter local conventional attack entirely in the event of a larger NATO/Pact conflict.

6. Italy

(S) Italy's sizeable forces all operate in ACE's Southern Region. Personnel is 43,600 (4014 officers, 39,586 enlisted men, including 655 naval infantry and 850 naval air). Sixty percent of Italian Navy enlisted men are conscripts.

(S) Only the ships listed below as good and the four SSC are considered modern. All the other ships are obsolescent and would probably not be effective in war. Current ASW capability is considered low. There is a shortage of well-trained manpower. Inadequate logistics are considered a major weakness. Only two-thirds of the Italian fleet is operational at any time. Two new SSK are under construction and should be in service in 1975-1976. Orders have been placed for two new DD types. Italy plans increased use of ASW helicopters and may fit them

*(U) OASD/PAE, op. cit., p. D-1-2.

	1974	1981	
Cruisers	3	3	
DLG/DDG, Good	5	5	
DLG/DDG, Fair	2	2	
DL, WWII, Fair	1	—	
DD, Postwar, Fair	2	2	
DD, WWII, Fair	2	—	
DE, Good	6	8	(1981 list includes 2 DEG)
DE, Fair	4	4	
Patrol craft (antiship) ...	9	10	
SS-LR, Postwar	2	2	
SS-LR, WWII	2	—	
SS-MR	—	2	
SSC	4	4	
VP-LR-Lofar	14	23	
VP-SR, Obsolete	18	—	(Phased out by 1979)
Large helicopters	24	24	
Small helicopters	15	15	

Italy also has 61 mine-warfare craft, 6 amphibious ships, 71 amphibious craft, 44 auxiliaries, 65 service craft, but no minelayers.

with ASM. A number of new gunboats are planned to be equipped with the OTOMAT SSM. The two squadrons of Atlantique VPs (seven per squadron, a total of 18) should be ready for operations in mid-1974.

(S) The Italian cruisers* equipped with SAM are understood to have a wartime role, initially, as Sixth Fleet escorts. The role of the other cruiser is less firm.** Although the cruisers participate in NATO combined exercises from time to time, informal reports indicate that continual problems occur in maintenance, C^3 compatibility, and logistic support. In light of these reports, overall NATO priorities and the probable marginal role of Mediterranean naval forces in a NATO/Pact conflict, the cruisers appear to be an inappropriate use of resources. The

*(U) Two 6500-ton cruisers with SAM, one 8850-ton cruiser with helicopter and ASROC.

**(U) *Navy International*, April 1974.

rationale for the larger, long-range Italian submarines, the amphibious ships, and craft appears similarly dubious. Hence, Italy would appear to be a prime candidate for resource shifts, especially to small craft optimized against the Soviet Navy, such as PHMs or FPBGs. Whatever savings could be realized from reduction of Italy's marginal naval units might better be applied to less expensive, specialized naval forces to counter Soviet naval forces, to air defense, to increase low war reserve stocks, to infrastructure projects, such as shelters to reduce the vulnerability of land-based aircraft, and to increased operations and exercises to improve the combat efficiency of all forces.

7. The Netherlands

About one-third of Netherlands ships are committed to CINCCHAN and the remainder to SACLANT. Personnel strength is 18,900 (2300 officers and 16,600 enlisted) plus 3000 Marines (200 officers, 2800 enlisted) of whom 800 are stationed in the Antilles.

	1974	1981	
CLG	1	—	(Phased out in 1975)
DDG, Good	—	2	
DEH, Good	6	8	(Possibly includes 2 DEP in 1976)
DD, Fair	10	2(?)	
PCE/SC	11	11	(11 Coastal ASW)
SS-LR	6	6	
MMC	4	5	
MSC/MHC	31	24	
MSI	1	2	
Landing Craft — VP-LR	12	12	
Atlantique			
Difar (or new type VP)	—	9	(16 total by 1983)
Lofar	8	8	
Neptune			
Lofar	10	—	(Phased out by 1980)

Dutch ASW forces are considered of good combat effectiveness against conventional submarines. Except for one fleet oiler (and another fitting out), the Dutch Navy has no separate mobile logistic support and is therefore dependent on assistance from other allies for distant operations. One submarine (on a rotating basis) operates with the British Navy — 14 weeks at a time. The Netherlands Marines train with and operate with the British Marines.

Future ASW capabilities will be planned around fewer, but more capable, land-based ASW aircraft and increased surface ASW capabilities. The Netherlands is replacing its cruiser with two large DDG of over 6000 tons and is also considering additional submarine purchases. The DDGs, which will come into service in 1978-1980, will be equipped with Harpoon SSM, Tartar SAM, and ASROC ASW missiles. Purchase of an additional four such DDGs is also under consideration.

But the Netherlands simply lacks the resources to deploy effectively naval forces of this magnitude while still meeting its even higher priority requirement to rectify the weakness of the I Netherlands Corps allotted to the NATO shield (see Chapter II). Thus, despite the strong Dutch naval tradition, we believe that such resource allocations would serve to starve the Army while funding the Navy, a tendency certainly out of kilter with the perceived threat. The DDGs appear excessively large for national and Alliance purposes, but the Dutch probably justify these ships with their vestige of overseas possessions. Unless new or current submarines are effective for ASW barriers, they too appear excessive. We regard the Dutch submarine force as a prime candidate for trade-offs, since its main function seems to be to train Dutch ASW forces. Justification for the Dutch Marines is also hard to find in a NATO context. Shift of freed resources to improve Center Region antitank and attack air capabilities appears badly needed (see chapters II and III).

8. Norway

Norwegian DEs are committed to SACEUR, presumably for coastal defense, since they have only fair ASW capability. The Air Force mans the P-3B maritime patrol aircraft, all of which are committed to SACLANT.

Personnel strength is 8600 (1660 officers, 6940 enlisted), which includes 300 officers and 1600 men in the coast artillery.

	1974	1981	
DE, Fair	5	5	(SSMs by 1976?)
PC	2	2	
SSC	15	15	
PTGL	26	26	
PT	20	0	
MMC	5	3	
MSC	10	10	
VP-LR Lofar	4	5	

(S) The Norwegian Navy has only minimal capabilities to defend the coast against amphibious attack and to protect coastal shipping. Only 62 percent operational, the other 38 percent would take 15 to 45 days to become combat ready. Norway has been considering the purchase of new submarines and about 14 new guided-missile patrol boats with SSM and wire-guided torpedoes. Funds have not yet been allocated. The five Norwegian destroyer escorts would appear to be a target for resource shift, unless they are equipped with SSM as may happen. Improvement in SSM-armed small craft and land-based air ASW capabilities would seem a higher priority need.

9. Portugal

(S) The entire Portuguese Navy is of low capability and marginal combat effectiveness. Only half of the eight DEs are committed to SACLANT. Personnel include 19,500 (2000 officers, 17,300 enlisted, and 200 cadets) plus 3900 Marines; 7800 men are stationed overseas; 40 percent are conscripts.

(S) Except possibly for several DEs, the Portuguese Navy is considered incapable of effective wartime operations. Four PCEs have been ordered from Spain for delivery in the mid-1970s. Now that Portugal is giving up its colonies, an opportunity exists for rationalizing its navy to optimize its NATO role. Since no Portuguese units are assessed to

	1974	1981	
DE, Fair-Poor	8	8	(Two DEs are inactive)
SS-MR	4	4	(Marginally operational)
PCE	6	10	(All in Africa)
PC	8	3	
PGM	18	20	
VP-LR Obsolete	8	—	(Phased out by 1977)
MSO	2	0	(Manned by Air Force)
MSC	11	6	

Portugal also has 11 amphibious and service craft. This includes 7 LCU which can lay mines.

have high or even moderate capability, Portugal might be induced to scrap its ineffective DEs and submarines in favor of higher quality surface escorts, mine craft, and effective ASW patrol aircraft specialized to assist in the control of the Straits of Gibraltar and approaches.

10. Turkey

(S) Turkey's Navy, although probably the best of the three Turkish services (with the highest ratio of long-service personnel) is mostly of less relevance to NATO needs than the other services. Although all of the Turkish Navy is in the SACEUR Southern Region, no units are formally committed to NATO. Personnel strength, including 3000 Marines, is 2500 officers, 5000 petty officers, and 32,000 conscripts. Only 29 percent of the total are afloat. Some ships are 20 to 30 percent overmanned.

(S) The Turkish Navy has only marginal straits control capability, a serious deficiency since this is the highest priority naval mission from a NATO viewpoint. With a deteriorating mine stockpile and minelayers reportedly inactive in peacetime, it is estimated that five to six weeks would be required for Turkey to close the straits — if air defenses were adequate, which they reportedly are not. Turkey's naval plans seem to have Greek, rather than the WP, forces in mind. In addition to the new ships noted in the list below, eight utility landing craft will be acquired by 1975. Four DDs and two DEs are to be equipped with SSM.

	1974	1981	
DE, Postwar, Fair	2	4	(8 by 1985?)
DD, WWII, Good	4	4	
DD, WWII, Fair	2	2	
DD, WWII, Poor	9	3	
SS-LR, WWII	10	8	
SSC	2	4	(1000-ton German types)
PCE	4	4	(Coastal ASW)
PC	6	6	(Coastal ASW)
PCM	2	2	
PTF	11	13	(1981 list may include 4 PTFG)
NMC, New	1	1	
WWII	7	7	
MSC	16	16	
MSI	4	4	
VS-SR, Obsolete	12	12	(Manned by the Air Force)

Turkey also has 62 amphibious craft, 40 auxiliaries, and 47 service craft.

(S) But Turkey's ground and air deficiencies are so serious that a strong case can be made for trading off naval resources to meet them. Granted that the Cyprus problem and other long-standing Greek/Turkish difficulties make this doubly difficult, at least aid suppliers like the United States and FRG should not contribute to the Turkish imbalance by providing naval aid of marginal overall utility to NATO. Turkey's destroyer types and ten large ex-U.S. World War II submarines would have low survivability and effectiveness in the Black Sea. From a purely NATO viewpoint, most such ships (except those with SSM) could be eliminated to provide resources for improved strait-closure capabilities, especially in mine-warfare craft and fast patrol boats armed with effective SSM. Turkey might also consider purchasing more small submarines, similar to those the FRG is building.

(S) We see Turkey's highest priority naval needs as strengthening its strait-closure capabilities. Like most other European NATO countries,

Turkey should give first priority to antishipping, missile-armed aircraft and patrol boats. OASD/PAE recommendations for Turkey (if funds become available) call for command support facilities, 40 A-7E aircraft, and a fleet oiler, in that order of priority. But, in view of NATO priorities, should Turkey really allocate scarce funds for communications support for deployed forces (about $2 million worth) and a fleet oiler to facilitate "independent escort operations for major surface combatants."* The contribution of such improvements to enhancing local strait-closure performance — not involving deployment or "independent escort operations" — is questionable.

11. United Kingdom

(S) The U.K. commits the bulk of its naval forces to SACLANT, but also furnishes some ASW forces to SACEUR's Southern Region and to CINCCHAN, as well as some mine-warfare forces to CINCCHAN. Some 65 percent of the British Navy is earmarked for NATO by M+15. One or two DEs are stationed in the Caribbean, and a similar number kept in the ANZUK force. East of Suez, the U.K. maintains one DLG, five DEs with auxiliary support, and one SSN, when available. Personnel is 83,000 (10,200 officers, 62,800 enlisted), including 10,300 in the fleet air arm and 8200 Marines.

(S) British ASW forces are fairly adequate against conventional submarines but obviously too few in number for protection of the sea lanes to the U.K. without much U.S. assistance. The fleet air arm is becoming all-helicopter, for local escort only. Short-range AAW Seacat missiles are fitted in all escorts, except a few old DEs. Seaslug medium-range AAW missiles are fitted in eight DLG/DDG. Submarines, even the SSNs, carry World War II weapons. Plans exist to install SSM in surface escorts. Submarines are equipped for minelaying; no surface minelayers are active. For NATO flank-reinforcement missions, the amphibious ships and craft can carry a reinforced brigade, but the U.K. Marines are considered to have no sustained combat capability. If, as

*(U) OASD/PAE, op. cit., p. E-4-6 and 7.

	1974	1981	
CV	1	—	(Phased out by 1978)
CLH	2	—	(To be replaced by thru-deck cruisers when funded)
DLG/DDG, Good	11	19	
DE, Good	43	48	(1981 list may include 11 DEG)
DE, Fair	16	1	
SSN	8	13	(A total of 15 is planned)
SS-LR	21	19	
PGM	1	1	
PTF	3	3	
MHC	15	19	
MSC	20	10	
MSI	5	5	
VP-LR			(Manned by Air Force)
Difar	—	41	
Lofar	35	—	(Phased out by 1978)
Helicopters, shore-based			
SH-3	23	23	
SH-34	11	—	(Phased out by 1979)
Wasps	23	18	
Lynx	—	22	(By 1977)

The U.K. also has 11 amphibious ships, 48 amphibious craft, and about 270 auxiliary and service craft.

some observers believe, the Royal Navy will before long lose all the larger ships capable of controlling an amphibious assault, then it will either be completely dependent on U.S. C^3 support or unilaterally incapable of such an assault.

The keel has been laid for one thru-deck cruiser (CAH) to be equipped with SSM and SAM and carry helicopters and V/STOL aircraft. Three CAHs were planned for 1980-1982 delivery, but funds have been held up. About 12 DDG/DEG are under construction or planned. Since the U.K. military withdrawal from East of Suez and the reorientation of U.K. defense policy more completely toward Europe, it is difficult to see

exactly what the Royal Navy role is supposed to be. Its size (still third largest) and nature still bear witness to past great-power status and a worldwide role that has essentially disappeared. Britain's economic problems and drastic curtailment of all types of government spending will make it impossible for the U.K. to maintain its current maritime position.

(U) Nonetheless, the recent U.K. defense review seems to have placed emphasis on retaining balanced national forces rather than on Alliance missions. It now appears that the U.K. will withdraw further to the West and abandon its naval commitment in the Mediterranean, where it normally keeps nine or more naval combatants. The defence review also indicates a probable shift in capabilities from protecting long-haul shipping (such as tankers from the Mideast) to protecting North Sea oil rigs and pipelines. It also calls for reduction of one of two helicopter ships (LPH) and one of two landing craft (LPD). This will impact on U.K. ability to launch an amphibious force even in adjacent waters — for example, to deploy troops to Norway. It seems to us that after the programmed cuts the reduced capability of the amphibious force makes it of doubtful value to the U.K. or to NATO. Rather, it seems like an example of an across-the-board cut where everyone is reduced somewhat, rather than one of facing hard priorities. The reduction of diesel submarines (SSK) to 14 by end-1978 is more rational, but the proposed reduction of mine-hunters and minesweepers will impact heavily on NATO's already limited mine-warfare capabilities. The reduction of maritime patrol aircraft from 41 to 28 is not compensated for by the retention of 34 shore-based ASW helicopters, which the U.K. had previously planned to phase down.

(U) It would seem more rational for the U.K. to maintain and modernize British ASW capabilities as the eastern anchor of the sea-lane protection hedge forces.* To this end, we recommend actions such as putting

*(U) The British might also consider consolidation of shore facilities as an economy move. According to *Navy International*, July 1974, p. 3, the dockyard labor force in 1962-1963 was 57,800 to support a fleet of 513 warships, while in 1974, 46,800 men in four dockyards supported only 333 warships. This fleet decline of 35 percent is not matched by the labor force decline of only 19 percent, and adjustments should be possible.

helicopters and V/STOL on oil rigs instead of allocating scarce escort resources, and reconsidering the value to NATO of its reduced amphibious forces versus the value of modernizing and maintaining its maritime patrol aircraft.

12. UNITED STATES

(U) Since the U.S. Navy is sized and configured for a global rather than a primarily NATO role, it is difficult to develop rationalization options based primarily on NATO contingencies. The U.S. Navy now specifies three main naval general-purpose force missions:

(a) Sea control, including the protection of the sea lines of communication for both projection and support traffic.
(b) Projection of force by sea-based air and amphibious forces.*
(c) Presence, or the naval contribution to U.S. political, economic, and military objectives by visible, geographically relevant, and controlled display of potential strength or involvement — the modern version of "gunboat diplomacy." The premise is that forces for the presence mission would come from the inventory designed for the other two missions.

(U) It has become apparent to the Navy that without the introduction of new concepts and defensive technology, the increasing vulnerability of the carrier (especially to antiship missiles) would rapidly degrade its usefulness in the projection mission, particularly in the context of a NATO/WP war. But in other contexts and in areas where U.S. base availability is sparse or lacking, carrier forces may be our main reliance for projection or presence missions. However, the tremendous increases in costs resultant from the offensive, defensive, and propulsion technology necessary to be truly "general purpose" is automatically forcing a reduction in numbers of carriers coincident with overall shrinkage in overseas U.S. base availability. As increasingly expensive baskets for increasingly expensive eggs, the carriers may be becoming too valuable to risk in any but

*(U) Until spring 1974, projection was the priority U.S. Navy mission.

anti-Soviet contingencies. And in these, the ASM and SSM threat may make flight-deck survival dubious.

(U) These factors, in combination with a changing pattern of U.S. global commitments, add new complexities to the carrier question in terms of cost-effectiveness and relative priority. The 12 carriers that the Navy plans for on a continuing basis (15 in FY 1975) are difficult to justify on the basis of strictly NATO considerations, in view of their vulnerability and limited contribution to the key Center Region. However, the Navy is exploring the possibilities for improving conventional deterrence-defense assets by the use of sea-based air to support the Center Region land battle.* This would be in accord with our view of proper NATO priorities, especially in the first 30 days of a NATO/Pact conventional war. But the SEA CLAMP scheme, by restricting carrier operations to relatively small sea areas, would probably increase their vulnerability, if the Soviets predeployed attack submarines into the areas prior to establishment of ASW barriers or were able to mine the areas.

(U) But the most important area warranting review in terms of rationalizing the U.S. Navy contribution to NATO lies in the ASW area. The force posture of the U.S. Navy, especially the attention paid to ASW capabilities, also reflects an assumption of a protracted war in NATO Europe and the consequent need for large forces to protect the sea lines of communication. We have questioned whether this assumption is consistent with an optimum NATO strategy, particularly given the fact that our allies are not presently capable of sustaining a protracted conflict (see pp. 143-146).

(U) The complex and interlocking protective tasks involved in direct defense (escorts), interdiction (air and submarine barriers), sea area control, and surveillance have also caught the U.S. Navy in the technical and economic squeeze described earlier (see pp. 138-143).** The

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*(U) *OPNAV "SEA CLAMP"* presentation.

**(U) Escorts are becoming so large and expensive that they themselves have become worthwhile targets, even in the presence of larger ships. For example, the *Spruance*-class destroyer (of which 30 are planned) is 563 feet long and displaces 7800 tons. This is about twice the size of the majority of current escorts and larger than many pre-World War II light cruisers. If this tendency continues, can we look for smaller single-purpose escorts to escort the larger escorts?

Navy hopes to acquire a sufficient number of ship units to cope with widely spread contingency possibilities, while retaining relevant capabilities in the face of the squeeze, via its hi-lo mix concept. Only a relatively small number of expensive, high-capability, multifunction surface units are allocated for confrontations with the most capable enemy, i.e., the Soviet Union, in situations where the enemy can use his full range of capabilities. This "hi" part of the Navy mix would, of course, include the large carriers and the most capable escorts. The bulk of the Navy (the "lo" part of the mix) would be composed mostly of single-function surface units or units that could be tailored by modular equipment design for capabilities to fit the need. These units would be designed to cope with enemy capabilities of less scope than those confronting the "hi" part of the mix, i.e., "lo" threats, and could include sea control ships (SCS) and less expensive ocean escorts. The "tailoring" capability would permit the use of the "lo" part of the mix for specialized presence, projection, or area control missions, either alone or in conjunction with the "hi" units.

(U) In many ways, the U.S. Navy has anticipated the technical and economic squeeze and the need to modify forces for maximum effectiveness and consistency with global realities, within political and fiscal constraints that have forced a 45 percent reduction in forces since 1969. The hi-lo mix concept and the sea control ship are examples of this innovativeness. Another example is the concept of the flexible-load aircraft carrier (CV) as opposed to the traditional attack carrier (CVA) and ASW carrier (CVS) arrangement of former years. But the hi-lo mix scheme is controversial. Features such as the currently available (AV-8) V/STOL aircraft for the planned sea control ships (three of each) are considered by some to be of dubious military value, while the planned load of helicopters (14) is deemed insufficient to maintain a continuous and effective ASW patrol.*

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*(U) Admiral E. R. Zumwalt, then CNO, disclosed in early 1974 that the Navy is adding some 30 feet to the proposed length of the sea control ship so that 25, rather than 17, aircraft can be carried. Such changes are seen to increase building costs to over $150 million, instead of the original $100 million estimate. They also will tend to arouse the suspicions of the other services that the SCS will eventually grow into a true carrier, complete with catapults, arresting gear, and defensive armament, features not now planned. (Congressional action in the spring of 1974 eliminated funding for the SCS in FY 1975.)

(S) The SCS, of course, is a Navy compromise to cope with large numbers of dispersed Soviet naval forces that could threaten global sea lines of communication. At the moment, only large carriers may be able to cope with Soviet surface cruise missile ships, but large carriers are now few in number. This situation makes it difficult to provide demonstrable opposition to widespread Soviet naval forces. Although the SCS may be the answer in a political presence sense, questions have arisen as to its capability to withstand attack from SSM (surface or submarine-launched) or ASM. Many studies indicate that even the CV will have problems in this regard. If the CV cannot cope, the value of the SCS with relatively low performance, no integral defense, and undersize air wing becomes questionable. Additionally, the SCS, without the S3A aircraft, is expected to have only marginal ASW effectiveness, due to limited effectiveness of current sonobuoys and dipping sonar.

(S) Another NATO rationalization option warranting review would be the adjustment of current force deployments to put more ships in the Atlantic at the expense of the Pacific. Not only are Atlantic requirements of higher priority in a NATO/WP conflict, but we question the current planning assumption that in this contingency hostilities would also occur simultaneously in the Pacific. In all likelihood, the CPR would remain neutral in the event of a NATO/Pact clash and Japan might well do the same. It is also quite possible that the USSR would not wish to become involved in a two-front war. Under these circumstances, it is difficult to see what the U.S. could expect to gain from initiating hostilities in the Pacific. Current plan to deploy seven of the Navy's planned 12 aircraft carriers in the Pacific, and other Pacific deployments as well might be reconsidered in this light.

V. RATIONALIZING NATO LOGISTICS

(U) If NATO is to field a credible defense at acceptable cost, it must rationalize its present cumbersome logistic posture. We are speaking here primarily of military logistic functions. NATO does have an elaborate array of civil logistic bodies but these are concerned mostly with mobilizing and allocating civil resources to the war effort, and deciding on civil versus military allocations. Indeed, this NATO logistics apparatus is so spread out and includes so many agencies that, as one senior NATO military logistician complained, it is difficult to know which does what or which to go to for decisions.

(U) However, on the military side, despite the large number of NATO agencies and bodies involved in various aspects of logistics, *NATO does not have a logistic posture* — what it does have is a number of separate national logistic postures, most of them quite inadequate and probably lacking sufficient capability to support even their own planned forces within assigned sectors.* Since there is also no military logistic organization capable of meeting the needs for out of sector deployment, even in the Center Region, it is hard to see how national forces could be logistically supported if deployed out of assigned sectors. In wartime, moreover, the separate national LOCs would become so intermixed as to create a logistic nightmare, with no authoritative NATO military body to impose priorities or to sort things out. In short, we believe that NATO lacks the minimum essential logistic backup to permit it to carry out even an initial conventional defense (see pp. 204-205).

(U) Thus, finding rational solutions to NATO's complex multinational logistic problems is indispensable on grounds of effectiveness alone. Any cost savings probably would be modest.** However, given

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*(U) This is the clear thrust of SHAPE analyses of individual country postures, as we read them.

**(U) A similar conclusion was reached in the most penetrating analysis of NATO logistic problems and options in two Adelphi Papers, No. 62 on *Military Logistic Systems in NATO: The Goal of Integration, Part I: Economic Aspects*, December 1969. and No. 68, *Part II: Military Aspects*, June 1970. Both are by Geoffrey Ashcroft, an Assistant Secretary in the British Ministry of Defence. He writes from considerable background knowledge of NATO, and this chapter is greatly indebted to his work.

the resources bind, which is a key premise of this study, rectifying logistic deficiencies will probably depend on identifying cost-saving trade-offs. Even more important, the add-on costs of rectifying existing logistic deficiencies on a purely national basis are probably so great as to drive NATO toward multilateral solutions as the only cost-effective course available in a period of severe cost constraints.

(U) Fortunately, logistics also offers one of the most promising areas for achieving greater effectiveness and even cost-saving efficiencies via R/S, if only because so little has been done to date. This is partly an intuitive judgment, based on our feeling that many (though not all) logistic matters are less subject to doctrinal or parochial national or service objections than combat-force structure and employment. Thus, NATO allies faced with tight budgets seem more likely to compromise on rationalizing logistically than to cut national combat forces or standardize weaponry. Moreover, some forms of logistic support would seem well suited to combined NATO, rather than individual allied, effort because they entail common-user supplies like POL, transport, or port and depot facilities, which can readily be used by several national forces.

(U) But first it is essential to define what we mean by *logistics*. Ashcroft points out that there is no single hard and fast definition. Rather, it is an elastic term that can be interpreted broadly to include "all functions other than fighting, tactics, or strategy," or narrowly confined to maintenance, movement, and supply of troops.* For the same reasons as Ashcroft, we too will restrict the scope of this chapter primarily to maintenance, transport, and supply functions, leaving for Chapter VI such issues as joint R&D, equipment standardization, and weapons procurement. In effect, our primary focus will be on what the Logistic Subgroup of the NATO EWG has termed *consumer logistics*, rather than on *producer logistics*. We will further focus on logistic functions behind corps rear boundaries, rather than in the immediate combat areas, and mostly in the Center Region (since geography alone makes the flanks a rather different problem).

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*(U) Part I, op. cit., pp. 2-4.

A. OBSTACLES TO LOGISTIC COOPERATION

(U) We find it surprising that logistic cooperation has received so little attention in NATO over the past 25 years, particularly in the crucial Center Region. We have found that NATO and national logisticians seem on the whole more open-minded and willing to go further toward logistics rationalization than authorities in most other fields. Indeed, they appear willing to go further than their national authorities, with their larger reservations about R/S in general, will as yet permit. But NATO and national logistic planners are not receiving the high-level support and direction needed to devise more rational and economical support arrangements. So it behooves us to begin by asking: Why not?

1. Logistics As a National Responsibility

(S) The long-standing "doctrine" that logistics is a national responsibility has been the biggest obstacle to -- and, indeed, an ironclad excuse for -- inaction. From the outset of NATO, it has inhibited common logistic approaches, many nations having used it as an excuse for inaction or to justify opposition to increased logistic cooperation. MC 36/2, the basic document outlining the division of responsibilities between national commanders and allied commanders, requires that each nation must *arrange for* the support of its forces. This requirement is a far cry from a specific injunction that each nation must itself provide all such support. While the principle that logistics is a national responsibility was expressly set forth in MC 86/2 and 86/4, the guidance in these documents pertained primarily to specific areas of logistics. The principle has subsequently been interpreted to include all aspects of logistics and has been used by nations when they seek an escape from proposals they do not wish to accept for other, more parochial or less defensible reasons.

(U) The underlying reasons for this doctrine are deeply imbedded in the national particularism that has dominated NATO (see Chapter I). National political and military authorities have been as reluctant to give up autonomous control of support forces or supplies as they have

been to give up control of combat forces. They also worry about getting a fair share of any production or support program for their industries.

(U) Another explanation advanced is that in the early days of NATO the U.S. insisted that nations support their own forces as a means of getting the allies to contribute more (since the U.S. was already supplying much of their equipment under MAP). At the time, however, many Europeans argued the advantages of logistic integration, as an essential aspect of integration in general, which reached its high water mark in 1954 with the abortive proposals for a European Defense Community.

(U) After this debacle, logistic integration was studied again in 1957-1960, following a NATO summit resolution in December 1957 calling for standardization and integration, particularly of logistic support. But this was rejected again because of the formidable political, economic, and financial obstacles.* Only the FRG, which was of course rebuilding its military establishment from scratch, was favorable. In fact, it proposed in 1960 that an integrated logistic system be created, including "integrated logistic centers within major allied commands, the provision of common storage, logistic support, stocks of spare parts, and maintenance for all advanced weapons systems, and an integrated depot structure in Central Europe."** But neither the NATO military authorities nor the other allied governments were willing to grasp this nettle.

2. Lack of NATO Initiative

(U) Indeed, Ashcroft is particularly critical of the NATO military authorities, who could have been expected to see most clearly the gains in military effectiveness from common logistic systems. Nor have NATO or national political authorities done much; in fact, they have often failed, for parochial reasons, to support military efforts to achieve greater efficiencies within available resources. Witness the death of the military's effort to generate standardization by promulgating NATO Basic Military Requirements.*** The current efforts by the Conference

*(U) See MC 86/1 (Revised), Final Decision, 9 December 1960.

**(U) Ashcroft, Part II, op. cit., p. 4.

***(U) Some 49 NBMRs were promulgated before the scheme was abolished in 1965 because "not one NBMR had resulted in the common production of an item specifically designed to meet it." Ashcroft, Part II, op. cit., p. 5.

of National Armaments Directors (CNAD), a civilian organization supported by military experts, have suffered from lack of national support as well. Even the foreign and defense ministers recognized this fact when speaking of the CNAD's progress:

> They recognized that more political support would be necessary to overcome the obstacles to greater cooperation. They agreed to the need for a more positive approach in order to achieve the financial and operational benefits of more widespread adoption of jointly developed and produced equipment.*

3. The Alliance's Nuclear-Oriented Strategy

(U) Moreover, since the Europeans in particular have relied mostly on the U.S. nuclear umbrella to deter war, they have seen no overriding need for unified logistics. Even if aggression did occur, they have not really expected to have to fight for more than a few days before nuclear escalation. And somehow this awesome eventuality was to bring about early war termination, so that the incalculable logistic consequences need not be prepared against. This was accepted strategy during the first 20 years of the Alliance, and NATO's infrastructure, POL, munition stocks and storage, WRM, communications, and other necessities of war were geared to this predominantly nuclear strategy. For example, one aircraft with one nuclear weapon was expected to destroy one enemy airfield or one choke point such as a key railway marshalling yard.

(U) Today, NATO has accepted that the present balance of U.S. and Soviet nuclear capabilities places increased emphasis on NATO's conventional capabilities. But NATO has not accepted or even fully calculated the increased demands a conventional defense places on NATO's infrastructure and logistic support capabilities. For example, to destroy an enemy airfield or choke point by conventional means requires attack by numbers of aircraft with diverse bomb loads against specific aiming points -- aircraft, runways, radars, SAMs, and antiaircraft weapons, POL storage, and command centers to name a few. In all likelihood, it would require

*(U) *Final Communiqué of the Ministerial Session*, Brussels, December 3-4, 1970, paragraph 19. See also Schlesinger's Statement to June 1974 DPC.

repeated attacks to keep the installation out of commission. All this demands more POL, more bombs, more maintenance and repair, more spare parts, and hence more logistic support. However, NATO has been notably ambivalent about accepting the increased logistic requirements inherent in its revised MC 14/3 strategy, partly because of continued residual confidence in nuclear deterrence, partly because it doesn't want to face up to the costs or changes involved.

(S) Instead, the alliance buys "days" of supplies instead of stock levels tailored to target objectives and potential supply losses. In effect, there has been a cultural lag that will continue until SHAPE and national authorities accept the idea that calculations of NATO's WRM requirements should be based on the projected level of effort and the targets to be killed.

4. The Go-It-Alone Syndrome

(S) In many respects, national logistic planning still reflects what one senior U.S. general has termed the "go-it-alone" syndrome. In part, this has been perpetuated by the reluctance of such major allies as the U.S., U.K., and France to see their forces tied down in ways that limit their flexibility for use in other contingencies. Some smaller powers follow suit and use their interests in former colonies as their excuse for independent support systems.

(S) The U.S. logistics posture, in particular, is still based on going it alone. For example, instructions to USNATO on the NATO study of military specialization in logistics specify that:

> The United States considers that the responsibility placed upon its forces to retain the capability for U.S. unilateral military action anywhere in their geographical area of responsibility makes it imperative that the United States retain control of resources vital to the support of U.S. combat forces. This consideration should be paramount in any negotiations which may evolve on this subject as a result of the ongoing AD-70s study, specialization efforts, or U.S. offset negotiations. In reaching this conclusion, U.S. consideration has been given to the fact that in NATO war it may be necessary or desirable to rely on appropriate NATO commanders for protection of certain LOCs.

And:

> The NATO precept that each nation is responsible for arranging for logistic support and administration of its own forces, whether assigned to NATO Command or not, is politically and militarily pragmatic.*

EUCOM's current responsibilities for contingency operations do call for a degree of unilateral capability, but we should not let this contingency requirement prevent our participating in NATO or in bilateral logistic programs that will either generate significant economies or improve NATO's overall capabilities. The current DOD Planning and Programming Guidance Memorandum (PPGM) already states that plans should not contemplate large-scale withdrawals of U.S. forces from Europe for other contingencies. This is a step in the right direction.

(U) We would go one step further. If we do not plan for such large-scale transfers of our Europe-based forces, we should be able to better tailor our theater forces for NATO defense. What is needed is a clear-cut national position on the role U.S. forces are to play in NATO's defense. We suggest this position be that *there is no concept of a unilateral U.S. defense of Western Europe, and the U.S. will rely on its allies for logistic support wherever feasible.* Until this policy is accepted, OSD's Total Force Policy is not going to work for the United States, and until it works for us, it is not going to work for NATO. Nor will U.S. military authorities here, or NATO staffs, think in terms of a NATO defense with our allies, rather than a U.S. defense of designated sectors.

(U) All the above criticisms are nothing new, and many more of similar authority could be cited. Indeed, the inefficiencies of NATO's logistic posture are widely recognized. But not until now have both the need and the economic pressures for change appeared to be great enough to stimulate widespread interest in remedial action.

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*(U) State to USNATO Airgram No. 175077, dated 11 September 1973 (Secret).

B. THE CASE FOR NATO LOGISTIC COOPERATION

(U) NATO is now coming to realize that it can no longer afford the outmoded luxury of leaving logistics a national responsibility. To do so is increasingly inconsistent with the future viability of the Alliance. The most compelling arguments to this effect are summarized below:

1. *At present, NATO might actually lack the conventional logistic posture to fight effectively, even for the first 30 days.* First, while deficiencies in key stocks are greatest in the Southern Region, many also exist in the Center (for example, SHAPE's 1973 Logistic Estimate shows that only 7 of 17 categories of critical Dutch ammunition items are up to 30-day levels). Plans are being made to rectify such deficiencies by 1977-1978 and to update NATO measurements of required days of supply. But experience shows that slippage is endemic in logistics. Second, even if stocks were available, SHAPE estimates that it would take 5 to 20 days to move them forward to planned defense positions, a critical deficiency if NATO were exposed to a short-warning attack.* Again, plans are being made to overcome this deficiency via funding forward storage sites under the NATO Infrastructure Program; but it is difficult to find land in the FRG. Third, the proliferation of different national weapons systems, different calibers of ammo, different supply and commo systems — many lacking in interchangeability or even compatibility — creates a logistic nightmare in the crucial Center Region.

(U) Fourth, the present system whereby logistics remains a national responsibility adds to this logistic nightmare, since the many different lines of communication to the national corps sectors would quickly become inextricably intermingled in event of a NATO/WP conflict and create another weak link for enemy exploitation. As for the U.S. ground forces in Germany, they do not, in fact, even have a wartime LOC at this moment, since one was never recreated to replace the loss of the LOC across France in 1966. In effect, NATO lacks the logistic capability to respond sufficiently flexibly to the many offensive options open to the Pact.

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*(U) SHAPE comments on 1975-1980 Force Proposals (Secret).

(U) 2. On the other hand, *the increasing importance of conventional NATO capabilities dictates increased attention to logistics.* Conventional defense is much more logistically demanding than nuclear warfare. Moreover, especially during the first crucial few weeks of a NATO/WP conventional clash, before major wartime national logistic establishments could be set up and before the sea lanes could be cleared of a high level of threat to shipping, major reliance would have to be placed on mobilizing the immense pool of European civil assets. This is doubly so in event of the worst-case contingency -- surprise attack -- when the need would be greatest both for maximum initial combat force availability and for fastest deployment of combat rather than support forces and supplies.

(S) Moreover, as stressed in chapters I (p. 4) and II (pp. 37-38), AFCENT must be able to employ its forces far more flexibly than at present planned or feasible, if the "maldeployment" problems cited by SHAPE (and in AD-70) are to be overcome. As SACEUR has pointed out, WP possession of the initiative permits the Pact to decide where and how to attack. AFCENT forces must be able to be quickly shifted to meet the threat as it develops. This has obvious logistic implications, particularly for the U.S., which would provide the bulk of AFCENT augmentation forces. Hence, Secretary Schlesinger, in his written statement for the June 1974 DPC, laid great stress on more flexible forces, calling for a "comprehensive Central Region LOC plan which would allow us to send any reinforcements where they are most needed."*

(U) But NATO lacks the logistic base to permit such flexibility. How can U.S. follow-on forces be shifted quickly to NORTHAG, for example, if no logistic arrangements have previously been made? Unlike the Europeans, the United States does not have its own civil economic base and transport infrastructure in Europe, but must either bring it overseas or rely heavily on its allies. In an era of constrained budgets and threatened MBFR (or unilateral) cuts, the second alternative is the only viable one. Thus rethinking the AFCENT logistic problem is essential if the U.S. is to make its contribution to NATO optimally effective.

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*(U) USNATO Cable No. 3355, Section 3, p. 2, 18 June 1974 (Secret).

(U) 3. *National logistics responsibility is already an outmoded myth.* While in theory the NATO allies could each support its own forces (if each spent a great deal more than is likely — see below), in practice they are already highly dependent on each other. In fact, we would argue that interdependence is already so firmly established (especially in the crucial Center Region) that no NATO nation could go it alone in Europe, not even the United States. For example, neither our air nor ground forces can operate without POL supplies that are dependent on allied cooperation. Our radar sites are linked by *Bundespost* land lines and their utilities depend on local sources — even the emergency back-up generators are operated by FRG *Standortverwaltung* personnel who are responsible for the logistical support of these sites. Local national employees drive and repair our vehicles, inspect and repair our aircraft, man our depots, commissaries, and mess halls, serve as physicians and surgeons on the staffs of our general hospitals, furnish fire protection for our installations, and serve as perimeter guards at some of our most critical installations. We could not operate without such support. Interdependence is further exemplified by the fact that other NATO countries are registered users of 1.3 million U.S. items and are the sole managers of 445,000 items used by the U.S.* If we are already this dependent, then why not seek practical means to go the extra mile and see if we can improve NATO's overall logistic capability at less cost?

(U) 4. *Besides, the vast growth in West European facilities and infrastructure since the early 1950s facilitates their utilization to meet many logistic needs.* Their development since the early days of NATO, when Western Europe was still struggling for economic recovery, has been enormous. For example, NATO wartime military needs could be handled by only a modest fraction of Europe's present port, transport, warehouse, medical, and POL facilities. Indeed, most European allies already rely heavily on mobilizing or using civil assets.

(U) 5. In any event, *economic constraints dictate realizing the savings from logistic cooperation so that resource savings can be shifted to rectify other crucial NATO deficiencies.* As stressed

*ASD/I&L Memo dated 18 October 1974.

earlier (see Chapter I), declining availabilities in real resources will force NATO increasingly to fund defense modernization out of trade-offs rather than add-ons. This makes the economic inefficiencies from duplicatory and in some cases overlapping logistic support functions obvious candidates for review.

(U) Under similar budget pressures, many NATO countries have long since moved toward streamlining their national logistic structures via interservice realignments whereby one service operates as single manager for others, or via combined logistics agencies. The U.K.'s "rationalized tasks" are an example of the former, and the U.S. Defense Supply Agency (DSA) an example of the latter.

(U) The FRG has probably gone furthest of any major NATO ally toward logistic rationalization, not only between services, but in terms of depending on the civil sector for much of its transport, maintenance, and other forms of support. For example, the Bundeswehr relies heavily on civilian contract maintenance of its vehicles by their commercial suppliers. It also counts largely on wartime mobilization of earmarked civil assets to flesh out its logistic structure. Current NATO efforts to expand military and civilian cooperation through civil emergency planning are laudable, but the fact remains that this resource has barely been tapped.

(U) Moreover, the West Germans have faced up better than anyone else in NATO to the dilemma created by the way rising manpower plus O&M costs prevent sufficient force modernization within constrained budgets. Projecting past trends in the FRG defense budget, the FRG Force Structure Commission stressed in 1970 that:

> Relative to the overall defence budgets there is a disproportion between capital expenditure and operating expenditure. This disproportion is becoming more acute year after year, because total defence expenditure grows at a smaller rate than operating expenditure. For years, the size of the defence budget has been determined not so much by requirements but rather by fiscal and economic constraints. In other words, the level of defence expenditure is fixed. Only what is left over after the cost of operating the Bundeswehr has been covered is available for capital expenditure. Cutbacks imposed for countercyclical reasons and other economy measures aggravate the situation.

Ensuring the operation of the Bundeswehr while maintaining its strength and efficiency thus requires a constant re-channeling of funds away from capital expenditure, with the results that:

- equipment projects have to be deleted in whole or in part;
- important procurement projects have to be postponed until future fiscal years;
- second-best solutions have to be adopted in equipping the Bundeswehr.

The consequences are:

- first, the use of obsolescent materiel to a militarily unacceptable degree;
- second, uneconomically high expenses for materiel maintenance; operating costs continue to rise and they in turn bite even more deeply into the capital expenditure fund;
- third, a cumulation of equipment demands in future fiscal years; the backlog is growing bigger and bigger.

As past experience has shown, rationalization, international cooperation, and standardization cannot be expected effectively to countervail the disproportionately large increase in operating expenses and substantially to reduce the amount of funds needed for armaments and equipment.

Mounting operating expenditure will cost more heavily on the financial resources year after year. The gap between capital requirements and funds available for capital expenditure continues to widen. *Ultimately, a limit will be reached and new policy decisions will have to be taken both at the military and at the political level.*[*] (Italics added.)

(U) These consequences are equally familiar to the U.S. and other allies. For example, the Dutch and U.K. are wrestling with similar problems. Ultimately, each nation and the Alliance will reach a limit and face policy decisions at the military and the political levels. However, we do not have to wait until the only decision possible is to reduce forces or to forego technological improvements. Instead, as the Germans did in the case of the Bundeswehr, NATO as a whole can rationalize its force posture to *help* counter the disproportionately large

[*](U) *The Force Structure in the FRG*, op. cit., pp. 258-261.

increases in operating expenses. All it takes is the political and military will to do so. Nor need it entail any nation's giving up an undue degree of sovereignty or national control.

(U) 6. *NATO's own experience to date with cooperative procurement and logistic support suggests that much more would be feasible.* Despite logistics' being a national responsibility, various NATO members have undertaken several cooperative projects with logistic aspects. Cooperative procurement of Hawk entailed a common logistic support program. Other production consortia for Sidewinder, Bullpup, and the F-104 Starfighter also involved some common maintenance and spare parts provision. An international Supply and Logistics Center was created to provide spare parts for the four purchasers of the NATO maritime patrol aircraft Atlantic.

(U) A possible precursor for joint action is the *NATO Maintenance and Supply Agency* (NAMSA), originally proposed by the U.S. in 1957. It has gradually assumed a modest role in providing common supply of parts and maintenance spares for such NATO weapons systems as those cited above. NAMSA is essentially a small-scale procurement agency for a relatively limited range of high value specialized items where common procurement is advisable. Its greatest savings potential arises from the fact that it requires international competitive bidding.* It also manages certain logistic support for NADGE (see below).

(U) Another possible prototype is the *NATO Pipeline System* with about 6300 miles of pipeline and 70 million cubic feet of fuel storage, mostly in the Center Region. A Central European Pipeline System (CEPS) is managed jointly by a Central European Pipeline Policy Committee and a Central European Pipeline Office, which have under them a civilian Central Europe Operating Agency, which coordinates the seven national operators. It was originally funded as NATO infrastructure, but now obtains most of its operating revenue from charging military and civil users.

(S) The long-standing *NATO Infrastructure Program*, one of NATO's most striking successes, is more an example of a successful joint

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*(U) See Ashcroft, Part I, op. cit., pp. 15-18.

funding mechanism than a joint operational program. Individual nations construct the facilities, which are multinationally funded. But it shows how logistic as well as other funding for common NATO use could be developed via common action. For example, under the special weapons support agreements whereby the United States furnishes and maintains nuclear weapons (under U.S. custody) in return for the host nation's providing the storage sites and base support, the storage facilities are funded as infrastructure. Some ammo depots and naval logistic facilities have also been financed via the infrastructure formula. In general, however, it is surprising how little the infrastructure has been used for support facilities.* Moreover, this program too is being squeezed by inflation and recession. The last slice was far smaller than minimum essential needs.

(U) Canada relies almost completely on U.K. and U.S. logistic support for its forces in the FRG, a notably successful example of mutual support on a small scale.

(U) The EUROLOG subgroup of EUROGROUP, focusing first on the four-country NORTHAG area, has set up a NORTHAG Logistics Coordinating Cell with representatives from the four logistical commands involved to look at the possibilities for joint and common action. A 2-ATAF cell has also been set up, and EUROLOG is now beginning to look at naval logistics. EUROLOG reported that several small but useful measures had been achieved by June 1974, including the setting up of logistic coordination cells, the exchange of logistic personnel for training and exercises, improved cooperation between NORTHAG and the nations, and studies on storage and movement of supplies, but that *there had been no breakthroughs*. However, we would disagree, because MOD Mason, in making this report to the EUROGROUP ministers, went on to say "... *more could be done if the political will was there -- for example, perhaps one should consider whether it still made sense for logistic support to be a purely national responsibility*. MOD Vredeling agreed.** To our minds such

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*(U) Ashcroft suggests some possible reasons, Part II, op. cit., p. 8.

**(U) EUROGROUP Ministerial Meeting, 13 June 1974.

expressions from MODs do constitute a breakthrough that needs to be nurtured.

(U) The *NATO Air Defense Ground Environment* (NADGE) program is yet another example of a common production and logistics effort. It is hardly the best example, because the U.S. sought a simplistic approach to its balance-of-payments problem by insisting that for every U.S. dollar expended we had to receive a dollar's share of the production program. Other nations demanded equal consideration and this complicated bid allocation to an unsatisfactory degree. Nevertheless, NADGE has worked and provided a road map of pitfalls to be avoided in future cooperative programs.

(U) In developing the production-sharing formula for the *NATO Integrated Communications System* (NICS), the alliance avoided some, but not all, of the pitfalls found in NADGE and actually improved NATO's international competitive bidding (ICB) procedures.* However, the resolution of NICS problems required the personal intervention of MODs in restricted session, because of the national political and economic issues raised by cooperative production.

(U) These examples show that where NATO can summon up the will, the technical know-how is available to develop international logistic systems to meet felt needs. On the other hand, they only scratch the surface of what is possible in the logistic field. In fact, even NAMSA, NADGE, NICS, and the NATO Infrastructure Program cover only a minor fraction of the joint effort possible in their fields. Much more could be done. The problem is to generate the necessary incentives, which is essentially a political problem calling for enlightened leadership from the decisionmaking level in the allied governments.

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*(U) Formerly, host nation import duties and taxes were added to bids submitted by other nations. Although these costs were refunded if a foreign firm won the bidding competition, it gave host nation firms an advantage, as their bids would be lower by the amount of the projected duties and taxes. Nations have agreed to eliminate this practice in the interest of promoting more active competition and, in turn, enhancing the possibility of getting a better product at lower cost.

(U) 7. *Finally, the U.S. itself would be potentially the greatest beneficiary if the wasteful and outworn doctrine of logistics as a national responsibility were officially discarded.* Because the U.S. must project its forces overseas to help defend NATO, the more it can rely on allied logistic support the less it will have to posture to provide its own. However, we would caution U.S. planners not to jeopardize future progress by turning rationalization and specialization into another U.S. burden-sharing exercise. While it offers potentially important burden-sharing gains for the U.S. (and U.K.) over time, it would be counterproductive for the U.S. to stress this aspect. Some allies already suspect that U.S. advocacy of rationalization aims at reducing U.S. support expenditures at allied expense, because of previous U.S. efforts to have our allies, particularly the FRG, assume housekeeping functions for U.S. combat forces. The allied military will resist any such efforts strenuously if such costs were to impact on their force structure (our difficulty in securing arrangements for colocated operating bases *by service-to-service contacts "at no expense to the United States"* should be ready proof of the allied service resistance we can expect). But a great deal can be done by using or earmarking civil assets that would not cut into allied defense costs. Further, the U.S. must be prepared to enter into logistic arrangements on a true partnership basis. No nation wants to do the U.S. laundry or mess-kit repair, while the U.S. does precision electronics maintenance.

C. INCREMENTAL APPROACHES TO LOGISTIC RATIONALIZATION

(U) Realism dictates that NATO will probably take an incremental approach to logistics rationalization, building on existing areas of coordination and cooperation, and undertaking specific new initiatives when the advantages seem so overwhelming (or the obstacles so few) that allied agreement seems possible. This is essentially the approach being used by EUROLOG and the EWG Logistic Subgroup (see p. 210). The former is concentrating on better logistic coordination in the NORTHAG area, while the latter is endeavoring to identify one or two areas in which early practical results could be produced.

(U) While the incremental approach may be open to criticism as suboptimization, such "salami tactics" are probably the most feasible approach in a loose 15-nation coalition. It allows the great advantage of bilateral and multilateral arrangements on less than a NATO-wide basis, while leaving the door open for others to join later.* It also avoids such radical interference with national prerogatives as to multiply the opposition at the outset. Hence, we believe the U.S. should support this approach wherever possible — taking the lead if necessary. We suggest below some of the more promising logistic options which the U.S. might promote. They are not ranked in any particular order of priority. Many of them are old ideas, or already the subject of current study.

1. A Common Center Region LOC

(U) Perhaps the most quickly feasible and desirable incremental option is to move toward a common Center Region LOC to meet the needs of the U.S., U.K., Canada, FRG, and Benelux countries. Because of the French defection from NATO, all seven allies are now planning to use LOCs through Benelux. But so far, the indispensable arrangements necessary to this end either have not been made or are handled via a complicated series of separate bilateral agreements (many of which have not yet even been finally negotiated, at least in sufficient technical detail). There are also a host of long-standing NATO civil bodies with responsibilities in these fields (see Appendix) such as the Senior Civil Emergency Planning Committee (SCEPC) and the Planning Board for European Inland Surface Transport (PBEIST). The Authority for Coordination of Inland Transport in Central Europe (ACTICE) is supposed to coordinate *wartime* use of inland transport.

(S) But this patchwork of agreements and committees seem wholly insufficient to meet wartime needs, especially in the crucial first few weeks, when confusion will be greatest. Moreover, the problem has gotten even more critical in recent years because of loss of the French LOC, the

*(U) Another possibility would be regional agreements under AFNORTH, AFCENT, or AFSOUTH.

U.S. Congress' refusal to fund LOCPORT, dual-basing of U.S. forces, and the drawdown of Dutch and Belgian forces in the FRG. The LOC problem will be further aggravated by ongoing U.S. efforts to expedite deployment of CONUS-based augmentation forces and to use them flexibly outside the Seventh Army area if necessary.

(U) However, SHAPE and AFCENT have to date shown "marked reluctance" to coordinate reinforcement and resupply plans. In 1967, the U.S. and FRG proposed that AFCENT should take on the coordination of movement through Belgium. But "AFCENT rejected the suggestion on the grounds that arrangements should be made nationally, by bilateral negotiations between the countries concerned, and that coordination would be undertaken only if required and if necessary."*

(U) We think it only prudent to assume that, with seven countries using one LOC complex, such coordination will indeed be necessary, and that all six allies would have to use largely the same port and transport network. Dutch and Belgian home-based units must move forward to their emergency defense positions; the U.K. must reinforce and supply the BAOR; the U.S. would be deploying massive augmentation forces; and the Bundeswehr too expects to use the LOC through Benelux for overseas supply needs. Canadian air and ground units would also be depending on U.K. and U.S. logistical support through this system.

(C) Moreover, some authority must be created to cope with the *inevitable wartime competition between national forces for priority access to facilities and transport*. As much must be preplanned as possible, but in wartime some centralized command will have to adjust priorities on movement and utilization of facilities according to shifting AFCENT tactical needs. As Gen. Ferber, the present CINCCENT told us, AFCENT badly needs: (a) a strengthening of its own logistic staff; (b) some agency or agencies under AFCENT control to execute AFCENT directives on allocation of transport means and movements control; and (c) clear multilateral NATO arrangements to get this new system working.

(C) Lastly, if NATO is to use effectively whatever warning time is received for reinforcing NATO's forward defenses, all national requirements

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*(U) Ashcroft, Part II, op. cit., p. 9.

need to be developed into an integrated plan for the forward movement of men and supplies. As Secretary Schlesinger emphasized to the 14 June 1974 Ministerial Meeting of the Defense Planning Committee:

> Clear and convincing U.S. capability to reinforce NATO rapidly should be a powerful deterrent against attack.... We must insure that an enhanced reinforcement capability will not founder for lack of rapid unloading, cargo clearing and aircraft turnaround. We need a comprehensive central region LOC plan which would allow us to send any reinforcements where they are most needed.*

The points seem uncontestable, *but there is no single NATO body charged with insuring that proper LOC arrangements will exist to permit reinforcements to reach where they are needed most, or to manage this process.* As the Logistic Subgroup put it in addressing the problem of movement and transportation LOC: "No appropriate existing body or NATO command appears to have the full capability for addressing this issue in its entirety."

(U) The best solution to all these problems, at least in the crucial Center Region, would be a common LOC to serve all forces in the AFCENT area. Instead of six different LOCs running across Benelux, why not have wartime single management under a combined command? This could avoid the underutilization of existing civil facilities, enormous duplication, and the confusion and competition for LOC resources otherwise inevitable. Given the profusion of existing civilian facilities, a comfortable margin of redundancy could be built into the system to hedge against wartime problems.

(S) The catalyst for going in this direction could be the current U.S. proposals for a new LOC across Benelux. EUCOM was stimulated to take a new look at its LOC requirements when Congress refused to invest in the LOCPORT package to create a unilateral American LOC in Europe. Its studies showed that the estimated daily port discharge capability of Benelux ports is almost ten times NATO's combined military and civilian wartime requirements. Similarly, Benelux throughput capacity (rail, truck, and barge) is over 14 times estimated wartime military needs. Hence, EUCOM developed a plan that would save at least 12,000 wartime Army logistic

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*(U) USNATO Message No. 3414, June 1974 (Confidential).

spaces and eliminate the need to preposition 115,000 tons of equipment, thus freeing transport to deploy combat forces.

(U) We believe this new-look LOC concept should be expanded in the direction of a *common Benelux LOC*. The U.S. decision to create a U.S. cell at AFCENT headquarters to coordinate reception requirements of some U.S. augmentation forces is a step in the right direction. But what is really needed is some form of AFCENT LOC Command to manage all AFCENT movement of men and supplies from ports and airheads to the army group or even corps rear boundaries.* In keeping with our incremental approach, its functions would initially be limited to peacetime planning and coordination of personnel and supply stockage and transport. In wartime, however, it would assume control of transport means allocated to the military, use them as a common pool, and set movement priorities. Thus it would be more akin to what in U.S. Army terminology is called a transportation command. Such an incremental step falls short of the elaborate "multinational logistics command" proposed in a recent Brookings study,** or the common AFCENT logistics system discussed by Ashcroft.*** Such further-reaching measures may ultimately be desirable, but realism dictates they be approached step-by-step (see pp. 235-240).

(U) Despite its initially limited functions, the new AFCENT LOC Command should be made at the outset a principal subordinate command on the same level as NORTHAG and CENTAG, and should probably be headed by a Belgian or Dutch full general. This would help insure the necessary attention to logistics and enhance growth potential. Under the AFCENT LOC Command, each host country would be responsible for providing the following wartime LOC facilities and services to all NATO forces operating

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*(U) The issue of how far forward its authority would extend would have to be resolved. There is a strong case for pooling all transport means behind corps rear boundaries, however. The FRG territorial commands have responsibility for movements control behind corps rear boundaries in the FRG, but obviously some higher echelon is needed to coordinate their activities with those in the Benelux area.

**(U) *U.S. Force Structure in NATO: An Alternative*, op. cit., pp. 80-84.

***(U) Ashcroft, Part I, op. cit., pp. 28-29.

on its national territory behind corps rear boundaries: (a) area security; (b) port facilities; (c) APODs; (d) transport facilities of all types; and (e) some depot facilities. Most such facilities simply would be earmarked from existing civil assets. While this entire network would be planned and exercised in peacetime, it would not normally come under AFCENT until mobilization.*

(U) Who will pay? This key obstacle to agreement on joint programs seems easily surmountable in this case. *Peacetime costs would be modest*, since the LOC would utilize existing facilities and become operative only in wartime. Any peacetime facility costs (for example, a headquarters building or an ammo pier to be used by more than one country) could be funded under the NATO Infrastructure Program, while administrative or personnel costs could be under NATO's military budget. At present, facilities to support external reinforcements that might use the LOC do not qualify for infrastructure funding, except on a case-by-case basis. However, SHAPE has initiated a study with the intent of developing a new category that would qualify for infrastructure funding; the facilities needed to support external reinforcements would be included in that category. The U.S. should give high-level political and military support to SHAPE's effort. Wartime costs of using the LOC would be paid to the host country under some form of lend-lease clearing arrangements.

2. Increase the Exchange of Logistic Data within NATO

(S) Without more precise information as to the type and scope of national logistic holdings, it is impossible for NATO military commanders realistically to plan for wartime support of NATO forces. Within the U.S. community, concern has been expressed that if we gave our allies full information on the scope of U.S. holdings, they would tend to rely on U.S. supplies rather than stockpile their own. There may be some foundation to these fears, but it is only in the post-SEA era that our stocks have grown large enough for this to be a possibility. In fact, when the JCS were seeking U.S. national support for 90 days' stockage as

*(U) NATO could decide to augment its forward defenses prior to M-Day and partially activate the LOC to aid in the deployment of external forces to Europe, e.g., Crested Cap and Reforger units from CONUS.

a NATO criterion, the U.S. did not submit a complete logistic annex in its response to the NATO DPQ because a large portion of our stocks were in the CONUS rather than in Europe. Now the U.S. is becoming more forthcoming. EUCOM will provide the information required by the new computerized SHAPE logistic status reporting system (LOGSTARS), which will provide NATO commanders with an increased capability to make systematic assessments of the logistic support status of U.S. forces in ACE.

(S) In any event, NATO's military commanders must have accurate data as to how much is on hand and where it is.* Indeed three senior U.S. military officers in Europe raised the subject with us. One said bluntly that the U.S. had deliberately withheld logistic information and that there was a real need to be more forthcoming. We may not be able to shift divisions overnight, but if we can rush ATGMs to an ally that is bearing the brunt of an armored attack, it seems to us that it makes sense for NATO commanders to know precisely what reserve stocks are available, and where they are located.** Now that SHAPE has accepted the U.S. methodology for calculating air WRM requirements, this will be easier.

(S) Use of a common LOC will require more exchange of logistics data among all of our allies. For example, if we are to rely on host nation capabilities for our wartime LOC, then our allies will need to know what is coming, when, and its final destination.*** EUCOM's J-4

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*(S) Secretary Schlesinger's recent initiative to release U.S. Special Distribution Tables of the Defense Planning Questionnaire to all of our allies and to seek their agreement to release theirs is a major improvement. But U.K., Greek, and Turkish refusal to agree is an indication of the problems yet to be resolved. We have taken the first step, but there is a long way to go.

**(S) It is reported that the Israelis mounted TOW on their vehicles in one day.

***(C) For example, Secretary Schlesinger, at the June 1974 Ministerial Meeting, proposed a study of factors affecting the flexible use of NATO forces. The study would include, but not be limited to, reinforcement planning, logistics, standardization, command and control, common supporting programs, communications, and support from the civil sector. The study would take into account all forces that might become available in the defense of the Center Region, whether or not they are formally committed to the Alliance.

staff has stressed the need for a peacetime logistics liaison unit to work with the host nations on any new LOC for U.S. forces. Such personnel — who would be fluent linguists and have a technical background in commercial transportation — would serve as "expediters." EUCOM would like to have these people in place and then run CPXs to search for flaws in the system. But we cannot make realistic plans or exercise them until more data are released to our allies, and they in turn express their requirements.

(U) Increased exchange of logistic information could also save procurement costs. All nations are not on the same fiscal year or procurement calendar. One nation may be buying WRM, ammunition, or spare parts for a weapon system that another nation may be planning to phase out. If nations would advise one another of plans at the earliest possible date, then savings are possible. What is surplus to one nation may be of value to others. A prime example at this time is the U.S. phase-out of CONUS-based Nike units while the Nike system continues in use throughout NATO-Europe. There are or will be further instances where trade-offs of logistic stocks are possible.

(U) Allied to the problem of exchanging information is that of *inventory control*, which has been a classic means of holding down stocks and hence costs. But as the NATO allies shift increasingly to ADP systems for inventory management, incompatibility among these national systems may actually make rationalization more difficult rather than less. Thus, Ashcroft, while questioning the economic gains from a European Defense Supply Agency (DSA), see p.239, suggests that "creation of a small body within NATO to exercise some of the administrative functions of the DSA, for logistic procedures, might well be worthwhile."*

3. Use NAMSA More as a Clearinghouse for Excess Equipment, WRM, and Supplies

(U) If nations would report all WRM, ammo, and spares *projected* to be surplus to their needs *when decisions are made* that weapon systems

*(U) Ashcroft, Part I, op. cit., p. 15.

are to be phased out, NAMSA could relay this information throughout the Alliance. This would permit longer-term planning and NAMSA could then serve as a clearinghouse and maintain credits and debits.* We would not propose that the surplus or excess equipment be given away free, but rather that a fair price be agreed between the nations concerned and NAMSA authorities. The purchasing nation might have limited purchasing power; if so, agreement could be reached for payment over an extended period — say, three to five years — and prices could be reduced to the minimum possible level. This could help less financially able allies (Greece, Turkey, and Portugal) *to improve* existing equipment and make their procurement funds go further. Payments would be credited to the NAMSA account of the nation furnishing the supplies or equipment. Ideally, funds so credited could be used to procure NAMSA maintenance or supply support in other areas. If one nation accrued credits beyond its needs, the surplus could be used to meet its other NATO financial commitments, such as its yearly infrastructure obligations or its share of the Central Europe pipeline operation.** In the case of less financially capable buyers, the selling nation could agree to a rock-bottom price as well as a stretched-out payment plan to make acquisition easier.

(U) Nations with stationed forces that offer equipment through NAMSA could accept another form of payment that might make the offer more attractive and ease any balance-of-payments problems. Because much of the NATO Infrastructure Program projects are in the civil-engineering area, such as aircraft shelters, runways, forward storage sites, and site preparation, the bulk of such contracts go to the host nation. On a case-by-case basis, the nation with stationed forces could agree to furnish X dollars of surplus logistic spares in return for the host

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*(U) Ashcroft makes a strong case for more emphasis on the NAMSA approach, Part I, op. cit., pp. 15-19 and 22-24.

**(U) This is not as complicated a transaction as it may seem, and we think Congress would agree. For example, under today's infrastructure procedures, Congress *authorizes* the expenditure of funds necessary to meet the United States' yearly infrastructure share. However, it adjusts its *appropriation* of funds to take into account funds *recouped* by NATO's payments to the United States for prefinanced infrastructure projects. Our suggestion would entail agreement that funds *recouped* from military sales of surplus items within NATO be handled the same way.

nation's furnishing X dollars of civil engineering for infrastructure approved projects. This could stretch the infrastructure budget for the next five-year period. Such a barter system might be particularly attractive to Greece and Turkey. *But the most important aspect is to get the nations working together.*

(C) We understand that NAMSA initiated a program to test the clearinghouse concept last spring and that the first attempt failed because it covered too many items, and a second try failed because of lack of response. Given a rational plan, high-level NATO and national support, and time to establish a program, there is no legitimate reason that NAMSA cannot serve as a clearinghouse. We would suspect lack of high-level support as a key element in NAMSA's lack of success.

4. The U.S. Should Set the Example by Increasing Our Use of NAMSA for Theater Support

(C) In early 1972, USNATO and ASD/I&L urged the Secretary of Defense to support increased allied use of NAMSA at the May DPC Ministerial Meeting. The Secretary did so, noting that:

> Whenever we entrust a logistics support role for a common weapons system to this agency, we save in support costs and we enhance the logistic readiness. ...We can, we feel, *free additional personnel spaces* by greater use of this agency and, by freeing these personnel, we can devote them to combat units, and therefore again make substantial improvements in the combat effectiveness of our limited manpower resources.*

But have the services acted aggressively to support the Secretary's initiative?

(C) Our discussions in Europe indicate that NAMSA could handle considerably more business and has the capability to expand its current functional areas, given reasonable lead time for planning purposes. However, U.S. support cannot be desultory. Maintenance contracts on a multiyear

*(U) Verbatim record of May 1972 Ministerial Meeting of the Defense Planning Committee.

basis would give NAMSA greater stability. For example, the U.S. initiated a contract for aircraft tip-tank repair with NAMSA, but did not renew it because of budgetary constraints. The issue was not whether a NAMSA contractor could handle tip-tank maintenance; rather USAFE's budget was cut to the point where funds were not available for contract maintenance. However, USAFE had uniformed manpower slots available that could be used to establish an in-house tip-tank maintenance capability, so it followed this course of action. Our point here is not to criticize USAFE, they have, in fact, taken the lead in trying to use NAMSA's capabilities. However, if we and NATO are going to reap the benefits of increased logistic cooperation, we are going to have to stay with a program once it is initiated, unless it fails to meet specified contract standards. Individually, it may well be cheaper for one nation to do its own maintenance than to contract through NAMSA, but a multinational contract can bring economies of scale. Further, neither we nor our NATO allies can afford to revert to in-house maintenance when our services are so manpower poor. On the contrary, we need an action program within DOD to back up the U.S. challenge to the MODs two years ago.

5. Launch a Sustained Drive to Have Nations Move More Forces from National Command to the Earmarked or Assigned Category

(S) One obstacle to increased cooperation and logistics is that most nations feel a need to maintain national control of resources for non-NATO contingencies. This is one major reason why logistic support remains a national responsibility. However, as we keep stressing, overall interdependence is so firmly established that no nation — the United States included — can go it alone against the Warsaw Pact. *While European NATO nations do have defense requirements beyond their NATO obligations -- internal security, agreements with former colonies, CENTO, United Nations peace-keeping forces, etc. -- these roles are secondary to deterring and, if necessary, defending against a Warsaw Pact attack. If the primary NATO role can be met, the capability to meet other national defense commitments then exists within their commitment to NATO.*

Therefore, with the possible exceptions of Canada, France, the U.S., and the U.K., national logistic capabilities ought to be geared to NATO requirements, with a reserve capability for unilateral requirements, instead of the other way around. In the case of Canada, the U.S., and the U.K., WRM, particularly POL and ammo, should be stockpiled in Europe for all forces assigned, earmarked, *or listed as national command forces* that could be available to NATO by M+30 (or longer in the U.S. case).

(S) This will only occur if most national forces are assigned or earmarked for NATO use. So long as forces are kept under national command, nations can evade their responsibility to provide WRM and ammo; however, once forces are assigned or earmarked, the nations can be prodded into meeting NATO standards. For example, we have known for some years that the FRG has more aircraft in their inventory than shown in their response to the Defense Planning Questionnaire. What we or NATO's military authorities don't know is precisely how many aircraft are involved, whether they are manned, and whether WRM and ammo have been stockpiled for wartime operations. General Jones, when CINCUSAFE and 4-ATAF Commander, estimated there were several hundred aircraft unaccounted for in the Center Region. We would recommend that the U.S. take the lead and earmark all forces that can reasonably be expected to be available in a NATO conflict. Since forces engaged in combat in SEA were retained in the earmarked category, the U.S. reluctance to do this seems more a matter of bureaucratic inertia than anything else.

6. Create a SACEUR Stock of WRM and Munitions

(S) Despite the apprehensions of some U.S. authorities that our allies may be counting on the use of U.S. WRM and munitions in lieu of stockpiling their own reserves, the emphasis placed on war-reserve stocks by the AD-70 program and by Secretary Schlesinger has proved productive. Our allies have accepted a 30-day level as a minimum goal and Center Region nations have reported firm plans to attain that goal by 1978 (with the exception of stocks for weapon systems being phased out or introduced into their armed forces). Progress is also reported from the flank areas. While U.S. goals are higher than those of our

allies, it is significant that some allies have also recognized the need to ensure that there are sufficient stocks on hand to last until resupply can be implemented.* However, little has been done to identify beforehand what the resupply requirements will be or where they will come from.

(S) In view of the progress to date, we suggest that the U.S. subdue its apprehensions about our allies' reneging on their commitments to attain a 30-day level and move out on further improvement efforts. We need improvements simply because of the vagaries of war and because PGMs and other modern munitions must be introduced into NATO's inventory.

(S) We know from years of seemingly endless and somewhat fruitless debate that what constitutes a "day of supply" is a matter of judgment. We also know that national judgments vary with their perception of the threat and that nations bend their judgment to fit their pocketbooks and their concept of NATO's strategy, as well as their own doctrinal concepts and tactics. We see no reason to let debates in the Military Committee over consumption rates delay further progress. As General Jones put it, a more constructive approach would be "an attempt to define stocks in terms of sorties and tasks, and the munitions, fuel, etc., required to perform those tasks.** Our allies have also accepted the phrase *outlast the enemy* as more acceptable than *days of conflict*. SACEUR listed this as a key element in generating NATO interest and told us that it was far more productive than talking about a long or short war posture or initial defense. NATO will have to continue an aggressive evaluation of the Warsaw Pact's logistic capability before it can accurately define what it takes to outlast them.

(S) But how can NATO ever outlast the enemy if stocks of WRM and munitions remain completely a national responsibility, and hence are artificially tied to geographic command boundaries? Who can accurately

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*(U) *NATO Common Funding for War Stocks*, DRC/N(73)16, August 13, 1973.

**(S) CINCUSAFE Memorandum to Secretary Schlesinger, *Challenges to NATO*, April 13, 1974. (We understand that U.S. and SHAPE staffs are cooperating on such an approach; it deserves strong and continued U.S. backing to assure it is accepted by the Military Committee and the DPC.)

predict what the consumption in a given corps area or ATAF will be? This situation seems as critical as the artificial boundary between the 2 and 4 ATAF, and it adds to the layer-cake problem on the ground. For example, Secretary Schlesinger recently told the Congress that two of the lessons from the Middle East war were: (1) the heavy attrition of equipment and supplies that can result from modern, intense conventional conflict; and (2) the importance of a warm production base and sufficient reserve stocks of ammunition, spare parts, and equipment.*

(U) If we apply these two points to a NATO/Warsaw Pact conflict, the problem is multiplied a hundredfold. However, we now have some good building blocks to make the case for further improvements:

- Allied plans to attain 30-day stock levels as an interim goal.
- General acceptance of outlasting the enemy as a criterion for planning.
- A more constructive approach to defining stocks in terms of tasks, rather than days.
- The affirmation of prior judgments on heavy attrition and the need for a warm production base and sufficient reserve stocks, as evidenced by the Middle East war.
- The recognition by some allies that 30-day stock levels will not last in most cases until resupply can be effected.

(S) If we face economic and political realities, individual NATO nations are not (at least in the near term) going to increase their reserve stocks to the point where they can outlast the enemy, handle attrition, and expend reserve stocks at the rate generated during the Middle East war. Therefore, *we recommend the lower cost option of creating a SACEUR stock of WRM and munitions* that can be held in reserve and used when and where SACEUR deems necessary.

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*(U) *Annual Defense Department Report, FY 1975*, by Secretary of Defense J. R. Schlesinger, pp. 14-15.

(S) Establishing a SACEUR stockpile will not be easy. The allies recently gave rather short shrift to an Italian proposal for common funding of war-reserve stocks. While aspects of that proposal may be undesirable, the objective of procuring seven days' supply of commonly used munitions above each nation's 30-day level for SACEUR's allocation has merit.* If, as our instructions to USNATO stated, "additional efforts in this field must await agreement on such basic issues as consumption and attrition rates, optimum munitions mix, and improved reporting procedures, all of which are being considered by the EWG,"** then we may wait a long time. A later proposal by SACEUR to SYG Luns suggesting a common procurement fund for armaments was similarly rejected by the SYG on the basis that member nations are not politically ready for such programs.

(S) *Since common funding has been unacceptable, we suggest a multipronged cooperative approach to the problem.* For example, the current DOD PPGM for FY 1976-1980 calls for procuring enough munitions and equipment to support operations through D+90, with no less than 60 days prepositioned in Europe. The PPGM also calls for necessary construction of storage facilities for the 60-day prepositioned stocks, and instructs service component commands in Europe to have their requirements processed in accordance with NATO procedures for consideration for NATO infrastructure funding, preferably by slice XXVI (CY '75), but not later than slice XXVII (CY '76).***

(S) This U.S. improvement program is going to run into two basic obstacles: (1) acquisition of the necessary real estate; and (2) the limited availability of funds in the next five-year infrastructure program. EUCOM and its component commands have experienced great difficulty in acquiring munition storage for the stocks now in hand, and in

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*(U) We recognize that it is difficult to define what stock levels should actually be set. Who can define what wartime consumption rates will be with precision? It is even harder to define what outlasting the enemy entails. But some arbitrary level has to be selected for planning purposes; we pick 30 days because it is already accepted by NATO.

**(U) State Message No. 225-407, November 15, 1973 (Confidential).

***(U) Secretary of Defense Memorandum, *FY 1976-1980 Planning and Programming Guidance*, February 25, 1975 (Secret).

some instances the present sites do not meet U.S. safety standards. The personal psychological value that Europeans place on land, and the high price of real estate, make it politically difficult for the host nations to secure condemnation agreements in their courts. The less we have to ask for, the better our chances. Further, it is already apparent that the next five-year infrastructure program will not be funded at the level preferred by the United States. It will probably be hard pressed, at the lower level that is likely, to meet all the demands already placed on it — aircraft shelters, NICS, and forward storage sites (FSTS) to name a few. The FSTS program will help alleviate the "maldeployment" problem by stockpiling seven days' expendable supplies near the emergency defense positions of NATO-committed forces. However, it does not meet SACEUR's need for reserve stocks that can be shifted between corps sectors.

(S) Therefore, we suggest the U.S. take the initiative and submit a proposal along the following lines:

- The recent Middle East war has demonstrated the heavy attrition of equipment and supplies that can result from modern, intense conventional conflict, as well as the importance of a warm productive base, and sufficient reserve stocks of ammunition, spare parts, and equipment. Both sides had to rely on resupply from outside resources or succumb.
- There should be a lesson in this for NATO. Insistence that logistics is solely a national responsibility could be an unnecessarily dangerous handicap.
- The U.S. agrees that each nation should be responsible for attaining the first 30 days of WRM and munitions for its own forces.
- But beyond that, there is a requirement for a SACEUR stock of WRM and munitions that are not bound to the geographic limits of national emergency defense positions, corps areas, army groups or numbered allied tactical air forces.

- It is recognized that there are still differences on such basic issues as consumption rates and optimum munitions mixes that are being studied by the EWG.
- However, the U.S. feels that the urgency of the problem is such that NATO should take action now and not wait until these issues are fully resolved and other issues such as common funding are debated.
- Therefore, as an interim measure, the U.S. proposes that each nation, on the basis of its own consumption rates and its current weapons mix, agree to earmark to SACEUR seven days of its holdings of ammunition now in common use in NATO countries.*
- Stocks so earmarked would come initially from current stockpiles, but whenever this action depleted national holdings below a 30-day supply, the nation concerned would agree to again attain the 30-day minimum level by 1980.
- Stocks earmarked for SACEUR would be identified to him as to type, quantity, and location, and would be made available to him at the same time as earmarked national forces are assigned.
- Since U.S. ability to furnish seven days of SACEUR stocks of WRM and munitions is constrained by lack of storage sites, SACEUR is requested to: (1) survey the possibility of nations' providing storage space for U.S. stocks to be earmarked in existing facilities, providing their location meets his needs; (2) request nations to consider colocation or consolidation of national stocks so that SACEUR's earmarked stocks might be consolidated in strategic locations; (3) in the event neither of the foregoing is possible, authorize infrastructure construction of SACEUR-controlled sites for his stocks of WRM and munitions at locations which meet his needs. Funds for

*(U) DRC/N(73)16 contains a draft list of commonly held munitions.

maintenance and security to be provided under NATO's military budget and operation of the sites to be under the supervision of NAMSA.

(S) This is not an altruistic approach; it is probably the most practical means we can take to improve U.S. and NATO holdings of WRM and munitions in the near term. If we are to meet the PPGM's requirement for 60 days of prepositioned stocks by FY 1976, it may be the only way, because acquisition of land, engineering surveys, and construction will take four to five years at a minimum. If this is doubted, the pace of the aircraft shelter program should be ample evidence that even priority programs move at a very slow pace in NATO.

(S) We also feel it would meet with the general approval of U.S. commanders and logisticians in Europe. One senior Army logistician told us that we needed 30 percent of our munitions in forward areas, 50 percent behind the Rhine, and 20 percent in the U.K. He also suggested that U.S. reserve stocks above the first 30 days be considered as a SHAPE reserve, providing that storage and maintenance costs were funded on a multinational basis. We have taken a more moderate approach designed to secure allied participation. However, with the completion of the FSTS program, which will provide seven days of storage besides stocks held by units, we should come near his goal of 30 percent, or 18 days of stocks, in the forward areas.* This program could help free additional storage areas behind the Rhine and in the U.K. for SACEUR's reserve. Military budgeting and NAMSA supervision of SACEUR's stocks would be another incremental step toward increasing NATO logistic coordination.

7. Civilianize the Central European Pipeline System (CEPS)

(U) Something obviously needs to be done to rationalize CEPS, since its support facilities face mounting deficits; reportedly only

*(U) A key issue that needs to be analyzed is whether common reserve ammo stocks *in strategically located and sheltered locations* would reduce the overall requirement. The sum of national reserve stocks may be more adequate than we realize.

one-fifth of the system is much used in peacetime. Moreover, since CEPS was installed, European civilian pipeline systems have dramatically expanded. Therefore, to facilitate more economically rational peacetime as well as wartime operation, it would make sense to organize a European oil company cartel to run CEPS as part of an interconnecting civil-military system, with the NATO military becoming just another customer. Why keep CEPS under military control, as SHAPE apparently still insists, when civilianization would save costs and relieve the military of an unnecessary burden?

8. Lastly, NATO Headquarters Needs an Assistant Secretary General to Deal Only with Logistics

(U) Ashcroft points out how NATO higher organs have played very little role in the logistic field — a situation that needs to be changed. He revives the old U.S. suggestion that the CNAD should establish a logistic subcommittee.* However, experience with CNAD has clearly shown that its concentration on armaments and research and development programs precludes use of that forum for logistics — particularly "user" logistics. Therefore, we would go further and suggest creating a full-time ASYG for logistics as a highly desirable incremental step to provide the necessary added focus on the crucial logistic problems confronting NATO. The present ASYG for defense support charged with this responsibility is grievously overburdened by having to deal also with the CNAD and R&D, joint production schemes, the infrastructure program, and a host of other matters. We suggest that his functions be divided with a new ASYG charged solely with overseeing consumer logistics. Only in this way can sufficient NATO emphasis on this neglected area be achieved.

D. THE CASE FOR LOGISTICS AS A MULTILATERAL RESPONSIBILITY

(U) We have made the case that logistics as a national responsibility is a myth because interdependence is already so firmly established that no NATO nation can go it alone in Europe. We have also cited its

*(U) Ashcroft, Part I, op. cit., p. 33.

economic and military inefficiencies and suggested some incremental steps to increase logistic cooperation and coordination within NATO. But we doubt that such incremental measures will suffice to meet the need. Over time NATO must move toward an integrated logistic system, if it is to overcome the military and economic inefficiencies inherent in the present lack of system, while keeping costs under control. This logic is inescapable in our view; NATO can no longer afford the luxury of fragmented national logistics if it is to generate a high confidence defense posture at acceptable cost. Financially, it is increasingly unable to fund the peacetime waste and excessive costs involved. Moreover, tomorrow's logistics problems will be far more complex and far more technology-oriented. It is increasingly apparent that over the long run operating and maintenance costs are as important as procurement costs and will often equal the original cost of the weapon system. Economies of scale are essential. Militarily, we would still doubt that NATO would be able to defend effectively (at least in the crucial Center Region) without a more unified logistic system.

(U) Experience amply indicates, however, that logic alone will not get us from here to there. Whatever the felt needs, solutions to them will not be reached until institutional means to implement them are set up. Thus NATO must develop over time unified, high-level logistic management machinery, both for policy/planning and for operations. Even if these start out with only limited functions, they will tend to generate their own institutional pressures for a more rationalized NATO logistic posture.

(U) On the other hand, we are far from suggesting total logistic integration as a viable model. Obviously countries like Canada, the U.S., and the U.K. will still need to posture some of their national forces for other contingencies — and need their own logistic-support base for flexibility. In these cases, we are only proposing that they use the NATO logistic system for their NATO-oriented forces. In other cases, sheer geography — for example, in Greece and Turkey, and perhaps Italy — will dictate continued reliance on separate wartime logistic support structures, though even they could benefit greatly from participating in

centralized procurement, maintenance, and supply. However, the Center Region is a case where geography almost dictates integrated support. Here a number of specific reasons support the case for logistics' gradually becoming a NATO responsibility.

1. NATO Needs Better Control of Existing Logistic Organizations

(U) One factor driving NATO toward logistic integration is the current proliferation of logistic organizations, procurement schemes, and the like. The Logistic Subgroup of the EWG lists more than 60 multinational bodies dealing with various aspects of NATO logistics problems (see Appendix to Chapter V, pp. 241-243). The latest report comments diplomatically on the need for pulling these together in some fashion:

> The list of ongoing logistics cooperative efforts within the Central Region is impressive, as is the list of NATO agencies and other bodies involved in logistics cooperation and coordination. It appears that an overall coordination of the activity of these bodies and agencies might result in a more efficient and systematic organization of their structure. Such coordination might be entrusted either to some existing agency or to a new organization with a view to correlating the interrelated efforts and to encouraging expanded participation in cooperative efforts both within and among these groups.*

(U) While the very proliferation of these agencies is de facto proof that logistics as a national responsibility is outmoded and that interdependence has been recognized, if not established, some full-time body is desperately needed to pull together the activities of the present conglomeration of existing agencies. NATO simply cannot develop a rational logistic posture as a result of incremental improvements by ad hoc groups that lack centralized direction. In fact, *we frankly doubt whether this pattern of dozens of NATO committees and bodies with logistic responsibilities could possibly function effectively in an emergency or in wartime.* The whole system needs to be overhauled.

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*(U) DS/OPL(LOG)(74)50, Report by the subgroup for a study, *Logistics Specialization in the Central Region*, April 11, 1974 (NATO Confidential).

2. NATO Needs a Full-Time Centralized Agency to Integrate Its Logistic Requirements in Peace and War

(U) On pp. 204-206, we discussed some of NATO's logistic shortcomings and how our present logistic posture might even preclude an effective defense — even for the first 30 days. On pp. 213-217, we suggested a common Center Region LOC command to overcome some of the difficulties in movement and transportation of war consumables to forward defense positions. But this was only a modest incremental step. Since this LOC will have to support all nations with forces in the AFCENT area, we really need a full-time NATO or AFCENT logistic organization for peacetime coordination and exercising of the system and for wartime control. For optimum effectiveness, priorities need to be established on a NATO rather than a national basis. This requires an organization that has complete information on what has to move and where it must be delivered, and the authority to coordinate movement requirements with the multitude of agencies involved. The magnitude of the task can be illustrated by referring to paragraphs 2, 3, and 4 of the Appendix to Chapter V, and noting the host of military and civil agencies involved in the procurement, storage, and transport of war supplies. An ad hoc approach by separate committees will not meet NATO's wartime needs. NATO needs an organization set up in peacetime to coordinate its logistic requirements on an integrated basis, and to manage them centrally in event of emergency. It seems to us that the time has come for NATO's political authorities to face up to this reality and to start the necessary study effort and political dialogue leading toward a NATO organization that has both the authority and the capability to do peacetime planning and wartime logistic coordination and operation.

3. A Logistic Organization Is Necessary to Help Overcome the Political and Economic Obstacles to Specialization and Standardization

(S) In addressing the industrial and economic implications of logistic specialization, the Logistic Subgroup made the following points:

> It must not be overlooked that specialization can have an important impact on industry and the economy of participating nations. This is particularly true in the fields of

development and procurement of equipment and supply and maintenance. On the positive side specialization by concentrating similar activities previously scattered over several countries or facilities into the most efficient form and by grouping orders together will bring about economies of scale, and reduction of costs and prices. Furthermore, wasteful duplication of effort will be avoided. On the negative side some nations or firms may be faced with some unemployment and loss of technological know-how. There are also the dangers of reduced flexibility and lack of competition through concentration on a limited number of sources.

These disadvantages may prove to have an inhibiting effect on certain countries when faced with decisions on logistic specialization. The solution would appear to lie in treating projects together over as broad a field as possible and not in isolation. This will give scope for compensation between countries so that the benefits and disadvantages can be shared out. If necessary the arrangements could be spread beyond logistics specialization into rationalization as a whole to enlarge the field in which the trade-offs can be found.

Such a system would need a central clearing house for its organization and supervision, but this would not need to be unduly complicated. The objective should be to obtain the best value for defence expenditure in logistics by specialization, while ensuring that all participants share equitably in the economic, technological and industrial advantages which accrue therefrom.*

4. Why Not a Logistic Matrix?

(S) They may or may not have recognized it, but the Logistic Subgroup's scheme in paragraph 2 above to overcome obstacles to specialization is precisely what OASD/PAE have advocated in their recent study, *NATO Rationalization Potential*. Following their formula, it should be possible to develop a logistics matrix covering the production and procurement, supply and maintenance that would balance out the impacts on the industry and economy of participating nations. Moreover, the energy crisis and the adverse impact the high cost of POL will have on the European balance of payments is an added incentive for logistic specialization not addressed by the Logistics Subgroup. We cannot permit energy-generated BOP problems to drain NATO's defense capabilities. We suggest

*(U) Ibid.

NATO would have a better chance to balance defense-related BOP expenditures by the matrix approach.

(C) We can overcome some political and economic obstacles to standardization by a logistic matrix. Many of the political and military authorities we talked to in Europe saw standardization as the key to increased logistic cooperation and improved military mobility and flexibility. We certainly do not disagree with the desirability and practicality of standardization. But NATO's track record has not been too good and decisions on weapon systems have been based as much on political and economic considerations as on military requirements. However, the U.S. matrix approach applied to logistics would inevitably help over time to foster standardization too. If each nation is getting a fair share, the international political squabbles and pressures can be squelched. Internal pressures by defense industry lobbyists can be resisted easier and the facts brought forth for the public to see. One set of lobbyists may be displeased, but another set should be pleased. Military considerations can be given more weight. The responsibility would then fall on the military authorities to resolve differences in doctrine or tactics so that standardization could become a reality. Parochial military views that stalled or delayed a practical proposal would be highlighted and the political authorities could intercede to resolve the issues.

E. WHAT INSTITUTIONAL FORMS SHOULD COMMON NATO LOGISTICS TAKE?

(U) It is naturally easier to develop the need for common NATO logistic systems than to prescribe their organizational forms or spell out their functions. To solve these problems would require separate and expert study in depth. Moreover, as we noted at the outset, logistics itself is an elastic term, and more than one common body would probably be required to cover the gamut of logistic functions. We can, however, outline in general terms the guidelines NATO might adopt for study. And we can say at this point that *none* of the existing collection of proliferated NATO logistics committees, boards, agencies, and groups has the terms of reference or bureaucratic clout to perform these functions.

1. NATO badly needs some kind of high-level organization to pull together and perhaps rationalize the activities of the myriad existing logistic agencies, committees, and working groups. We suggested earlier a new ASYG for logistics, but his would be essentially a staff function, and the more NATO moves toward common logistics the more a full-time directing body will be needed.
2. Either the above body or a separate one is needed for overall NATO logistic planning, especially to develop a matrix of logistic trade-offs, while (as the Logistic Subgroup put it) serving as a central clearinghouse to prevent unnecessarily adverse impact on the industry of participating nations. Such a body would need lots of clout and ready access to NATO and national authorities.
3. The Center Region, at any rate, needs a full-scale common logistic command for optimal planning and exercising LOC functions in peacetime and conducting them in wartime.
4. Some form of European defense supply agency might be useful to achieve needed efficiencies and economies in many categories of maintenance and supply.
5. In the field of *producer* logistics, some much more authoritative body with stronger terms of reference than CNAD is needed to develop and propose common production programs.

(U) No existing NATO agency has the planning capacity and institutional clout to develop and set forth authoritatively an organizational structure to meet these needs, if only because of the myth that logistics is a national responsibility hangs so heavily over NATO and its staffs remain so tied to national apron strings. What is needed is a powerful group whose findings will not easily be shunted aside without full consideration and who have the status to challenge unwarranted negativism or parochialism. Therefore, *we suggest a "wisemen" approach to study the problem.* Whatever the number of wisemen chosen, the group would have to include both military and civilian members. To cut down on the learning

process of how NATO works, it would be well to choose prominent leaders with previous NATO associations and to assign them assistants with similar experience. This should not be too hard. The name of General Steinhoff comes immediately to mind, given his recent strong support of rationalization, specialization, and standardization.

(U) In our view, most key NATO allies would support such an idea. The U.K. should be interested, since they have much to gain and are in tight financial straits. The Dutch have a responsibility to become engaged because of their strong advocacy of specialization. The Southern Region allies would favor the idea because they would scent potential gains. The Logistic Subgroup has developed real expertise and could serve as a ready-made staff, if divorced from its present allegiance and assigned to the wisemen. The CNADs should also be able to give good advice. But to launch such a group would probably take a high-level U.S. initiative. Indeed, a high NATO official made a strong case to us for a U.S. initiative on R/S at the Presidential level, saying that was the only way to get progress under way. Because it has political, economic, and defense implications, it would be appropriate as a Presidential initiative; this would also serve notice on U.S. agencies that it was a program to be fully supported.

(U) Meanwhile we wish to offer the following observations on possible NATO logistic organs, with particular reference to the AFCENT area. As NATO's own experience has shown, there are many gradations possible between full national responsibility and full NATO integration on a NATO-wide basis. Therefore, it should be borne in mind that the options discussed below can be sliced many different ways. They need not comprehend all logistic functions (some could still be performed nationally) or all NATO allies (some would not want to join). Rome can't be built in a day.

1. A Multinational Logistics Command (MLC)

(U) When we suggested as an incremental step on pp. 216-217 an AFCENT LOC command with limited functions (primarily movement troops and supplies), we noted that it could be the nucleus for expansion into more of a full-blown logistic command. As also noted, a recent Brookings

study has gone much further and proposed just this. Lawrence and Record propose an MLC "similar in organization and function to the U.S. Army's Theater Army Support Command." The MLC commander's functions would be:

> ... to assure uniform support for all national forces operating in NORTHAG and CENTAG, to establish logistics policy, conduct detailed logistics planning, assign missions and allocate resources to multinational support forces under his control, and to set priorities for support. His area of operation would be the zone extending from the rear of each national corps boundary throughout the entire rear area, including the airheads and ports of entry into the Central Region. For most resupply, the unilateral logistics support responsibility of each national force would be limited to that within its own corps, and the interface with the MLC would take place at depots and facilities to which national forces would go for support.*

(U) Subordinate multinational transport, supply, area security, and engineering commands would be organized, with only personnel and medical functions being performed by national forces (because of their uniquely national character) under MLC supervision. Lawrence and Record argue that this scheme would (a) permit more effective support while reducing support manpower, especially for the U.S.; (b) facilitate joint basing of national forces in rear areas, thus further saving U.S. costs in particular; and (c) increase the wartime flexibility of AFCENT forces.**

(U) They recognize the real obstacles entailed, including the wide variety of equipment, supply scales and procedures involved, together with the inevitable inertia and bureaucratic resistance. Ashcroft is even more skeptical when analyzing a similar scheme. He particularly questions, using BAOR as an example, whether significant cost savings could be achieved, and argues cogently that any common AFCENT logistic system "must be justified on military rather than economic grounds."***

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*(U) *U.S. Force Structure in NATO: An Alternative*, op. cit., p. 80.

**(U) Ibid., pp. 81-83.

***(U) Ashcroft, Part I, op. cit., pp. 28-29.

On the other hand, Ashcroft clearly feels that SHAPE has been less aggressive than it should have been in pressing the military advantages of logistic integration.*

(U) We join Ashcroft, Record, and Lawrence in feeling that the need for such a logistic command should be a subject of SHAPE study, either on SACEUR's own hook, or in response to a DPC versus NAC invitation.

2. A European Defense Supply Agency

(U) Harking back to the substantial economies achieved by the U.S. through the creation in 1961 of a consolidated Defense Supply Agency, several suggestions have been made for a European or NATO defense supply agency modeled on it. In 1969, Timothy Stanley, then Defense Adviser in USNATO, pointed out how DSA had saved DOD millions via consolidated procurement, common depots, and above all better inventory management, and suggested that NATO could do the same -- provided that some higher degree of standardization could be achieved. Granting that it was probably not practical to include items like food, clothing, and much expensive weaponry, Stanley contended that at least five billion dollars in procurement of consumables could nevertheless be consolidated over a five-year period, at considerable savings. He further suggested some form of balancing accounts, so that no ally would be procuring more over an extended period than it contributed.

(U) Ashcroft examines this proposition in still greater depth. He focuses on the expansion of NAMSA, as having going-concern value; however, he feels that it would have to be extensively reorganized, as it has "little growth potential" if it continues to operate as at present. Ashcroft also is skeptical that large-scale savings can be achieved, but sees a European DSA as being of potentially real military value in fostering NATO mutual support, generating pressure for increased standardization, and promoting common logistic procedures.**

(U) Because of the severe financial constraints on NATO defense budgets, the rationales advanced by Stanley and Ashcroft for movement

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*(U) Ibid., Part II, pp. 27-28.

**(U) Ashcroft, Part I, op. cit., pp. 15-19, 22-24, 30-32; and Part II, op. cit., pp. 21 and 30.

toward a European DSA are even more cogent now than when they were advanced. Even a 10 percent saving in defense outlays appears more significant today than it did in 1969-1970. The gains in military effectiveness loom as even more important. Therefore, despite all the practical and political obstacles to large-scale common procurement and stock maintenance via an EDSA, we believe that NATO must eventually move a long way in this direction, if it is to field a credible conventional posture at acceptable cost. Since this process will inevitably be gradual at best, this argues for a high-level initiative to start developing plans right now. Moreover, the U.S. matrix approach for sharing costs (see pp. 30-31) would facilitate equitable burden-sharing by placing it in a larger framework.

(U) We further believe that the U.S. should participate in an EDSA, at least with respect to its Europe-based forces. Although the European allies (or some of them) could create it without the U.S., in practice, U.S. participation is likely to be an essential catalyst. Moreover, we may have much to gain by purchasing consumables for our forces in Europe from a common source. And, as we have said repeatedly, Washington's concept that U.S. forces in Europe must be fully capable of unilateral action is not only infeasible within current constraints, but has stood in the way of optimum organization of the collective defense.

F. CONCLUSIONS

(U) Like other chapters in this study, this analysis of logistic rationalization is preliminary and exploratory. At this early point, it is feasible only to suggest new directions and propose options for more definitive study. But the rationale for moving out is clear. As Ashcroft much earlier pointed out, NATO has neglected its indispensable logistic base — a sin of omission on the part of both its political and its military authorities. Collective remedies are long overdue: Indeed, they now seem indispensable on grounds of budget savings, as well as effectiveness.

Appendix to Chapter V

LIST OF NATO AGENCIES AND OTHER BODIES INVOLVED IN LOGISTIC COOPERATION/COORDINATION

1. Individual Agencies and Committees

Military Agency for Standardization (MAS)
NATO Maintenance and Supply Agency (NAMSA)
Conference of National Armament Directors (CNAD)
NATO Air Defense Ground Environment (NADGE)
NATO HAWK Production and Logistics Organization (NHPLO)
NATO MRCA Development and Production Management Agency (NMDPMA)
NATO Integrated Communications System Organization (NICSO)

2. ACE Military Bodies

The ACE Logistics Coordination Center (LCC)
North European Command Logistics Steering Group
Allied Command Baltic Approaches Logistics Coordinating Group (ALCG)
Center Region Logistic Steering Group (CRLSG)
AFCENT National Liaison Staffs (NALS)
AFCENT Joint Coordination Center (JOC)
NORTHAG and TWOATAF Logistics Coordination Centers
CENTAG Logistic Planning and Coordination Board (CLPCD)
LANDSOUTHEAST Logistics Operations Coordination Center

3. NATO Peacetime Civil Emergency Planning Committees/Agencies

Petroleum Planning Committee (PPC)
NATO Pipeline Committee (NPC)
  Regional NATO Pipeline Authorities
    Central Europe Pipeline Policy Committee (CEPPC)
    Central Europe Pipeline Organization (CEPO)
    Central Europe Operating Agency (CEOA)
Industrial Planning Committee (IPC)
Food and Agriculture Planning Committee (FAPC)

Planning Board for European Inland Surface Transport (PBEIST)

Northern Europe (NE) Sub-Committee

Central Europe (CE) Sub-Committee

Southern Europe (SE) Sub-Committee

Railroad Transport (RRT) Sub-Committee

Road Transport (RT) Sub-Committee

Ports and Beaches/Inland Waterway Transport (PB/IWT)

Civil Aviation Planning Committee (CAPC)

Planning Board for Ocean Shipping (PBOS)

Civil Defense Committee (CDC)

4. NATO Civil Wartime Agencies/Boards

NATO Wartime Oil Organization (NWOO)

Central Supply Agency (CSA)

European Supply Agency (ESA)

Authority for Coordination of Inland Transport in Central Europe (ACITCE)

Authority for Coordination of Inland Transport in Southern Europe (ACITSUD)

Central European Wagon Pool (CEWP)

Northern European Transshipment Organization (NETSO)

Cross Channel Coordination Center (CCCC)

Board of Coordination of Civil Aviation (BOCCA)

Defense Shipping Authority (DSA)

Defense Shipping Council (DSC)

Defense Shipping Executive Board (DSEB)

Regional Shipping Boards -- East and West (RSB, East; RSB, West)

5. NATO Project Steering Committees Administered by CNAD

NATO Maritime Patrol Aircraft (NMPA)

NATO Jaguar Tactical and Training Aircraft

NATO Seasparrow Point Defense Ship Missile System

NATO Azores Fixed Acoustic Range (AFAR)

NATO FH-70 155mm Towed Howitzer

NATO Acoustic Communication with Submarines

NATO SA/330 (Puma), SA/341 (Gazelle), and WG/13 (Lynx) Helicopters

NATO Combat Vehicle Reconnaissance (Tracked) (CVRT)

NATO 155mm Self-Propelled Howitzer (SP70)

NATO MK20 RH202 Rapid Fire Gun and Antiaircraft Mount HS669N

NATO PHM (Patrolcraft Hydrofoil Missile)

6. EUROGROUP and Associated Bodies

EUROLOG

EUROSCHED

EURONAD

EUROMED

EUROTRAINING

VI. COMPATIBILITY, INTEROPERABILITY, AND STANDARDIZATION

(U) The preceding chapter looked at *consumer* logistics. This one is devoted to *producer* logistics — ways of promoting standardization, or at least interoperability and compatibility, of munitions and equipment to enhance the common defense and, it is hoped, save costs. Of course procuring common or at least compatible equipment, spare parts, and other supplies will greatly facilitate common consumer logistics, so the two are intimately related.

(U) While such programs would achieve the greatest results if NATO-wide, this is not essential. If even the seven Central Region allies collaborate, notable gains could result. Indeed, even FRG/U.S./U.K. collaboration could drive other allies to join them over time. Some 91 percent of NATO (excluding France) outlays on major military equipment in 1973 came from these three nations anyway.* But the catalyst for any significant progress will have to be a change in U.S. attitudes. Based on our discussions in Europe, we cannot overstress the extent of European suspicions that U.S. advocacy of standardization is a device to enhance further the dominance of U.S. industry, already NATO's largest arms producer.

A. NATO'S SAD EXPERIENCE WITH STANDARDIZATION

(U) Since full-scale standardization of equipment — like defense integration on the EDC model — is theoretically the optimum road to collective defense, it has always enjoyed devoted lip service in NATO. The lack of it is regularly deplored. In practice, however, it has generally been stymied by the nationalism and parochialism cited in Chapter I. As one U.S. expert with twenty years' experience in the field bluntly put it:

> NATO standardization is much talked about but very little has ever happened to accomplish meaningful standardization. When the chips are down, the U.S. does not act to

*(U) If France is included, the big four account for 95 percent of the expenditures.

support NATO agreed standardization policies. NATO standardization that does exist happened more by accident than by design.*

(U) Witness the death of SHAPE's noble effort to promote standardization by promulgating NATO Basic Military Requirements (NBMRs). Some 49 were promulgated before the scheme was abandoned in 1965 because "not one NBMR had resulted in the common production of an item specifically designed to meet it."** What happened was simply that national services and armaments directors ignored the SHAPE requirements whenever it suited them to do so.

(U) Even the creation in 1966 of a Conference of National Armaments Directors with a mandate backed by vigorous ministerial exhortation to promote joint R&D and procurement has had only limited impact. In innumerable meetings, the CNAD and its many subgroups have thrown much light on the problem, and done a large number of studies. The CNAD has properly focused mostly on coordinating longer-term programs, while still in the early R&D stage. However, they have not accomplished much, owing largely to lack of national support. At a recent CNAD meeting, one national representative summed up the CNAD's accomplishment very well when he noted that it was essential for the CNADs to move from motherhood statements to genuine progress in standardization. Another national representative suggested that a basic CNAD problem is that *staff officers from all NATO nations work problems in the NATO groups and then report back to national military authorities.* The CNADs do not give orders directly to those national staffs, which tend to go their own way unless otherwise directed.*** In the U.S. case, this is painfully apparent in OSD's lack of awareness of or control over the service representatives to many of NATO's 300-odd committees. While these representatives ostensibly represent the U.S. Government, in all too many cases they will veto anything unsatisfactory to their particular service, or ignore overall DOD interests when convenient.

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*(U) Memorandum for Deputy Director (Tactical Warfare) DDRE from Chairman Air Munitions Requirements and Development Committee, September 5, 1974, p. 1.

**(U) Ashcroft, Part II, op. cit., p. 5.

***(U) *USNATO 6128*, dated 051815 November 1974 (Confidential).

(U) We do not mean to imply that NATO has accomplished nothing toward standardization. In some 25 years, a number of joint projects have emerged. But the fact remains that NATO attained its highest level of standardization in the fifties because most postwar European forces were equipped via MAP with U.S. models, largely World War II surplus. Subsequent standardization occurred mostly when one country's equipment was obviously superior, or available only from that source, and when the supplier was willing to license production (at least of components) and/or to provide spares and other logistic support to promote export sales. In practice this has meant mostly U.S. equipment. Thus NATO standardization on such SSMs as Honest John, Sergeant, Pershing, and new Lance, was a case of a unique source, plus U.S. control of the nuclear warheads. The only other allies that developed their own SSMs have been the U.K. and France, which are nuclear powers. American artillery weapons, such as the 155mm, 8-inch, and 175mm, are used by many allies. Similarly, the U.S. has tended to dominate in the SAM field, providing most allies with Nike and Hawk (partly through MAP), and now Improved Hawk. The Hawk program was a production consortium; other production consortia were created for such U.S.-designed systems as Sidewinder, Bullpup, the Mark-44 Torpedo, and the F-104G Starfighter. European coproduction schemes have included the Atlantic maritime patrol aircraft and the G-91 lightweight fighter. Currently, various bilateral or trilateral European consortia are developing the Jaguar (Anglo-French) and MRCA (Anglo-German-Italian) aircraft.

(U) A notable success in standardization, and one that did not involve single-nation dominance, was the agreement on a common rifle/MG round of 7.62mm. Of course, as our allies always love to point out, it was the U.S. that (because of Vietnam needs) switched from the common NATO caliber to the M-16. The fact that the British produced a superior 105mm tank gun led the U.S. and FRG to adopt it, but now these three nations are debating what characteristics the next generation tank gun should have. Other examples of joint production schemes, such as NADGE and NICS, are mentioned in Chapter V.

(U) But standardization has really been the exception rather than the rule. For example, four different types of main battle tanks are

operating in eight allied armies. There are 17 different types of antitank missiles in use, 13 in development, and 6 more under study. NATO navies are equipped with 36 different types of radar, 26 types of mines in 41 modifications, 8 different SAM systems, 6 different antiship missiles, and 40 different types of guns of 30mm or larger caliber. The 2 ATAF has eleven different types of aircraft.* Regrettably, when we do standardize, we sometimes choose a poor standard. For example, by standardization on an older flange coupling, NATO ships require up to one hour's dead time during refueling operations. This compares unfavorably to the newer USN probe/receiver system, which requires about 4 to 5 minutes to hook up and only 2 minutes to disconnect. The extra dead time means increased vulnerability of ships during refueling.

(S) The waste is enormous. According to Dr. Tromp, former Chairman of the NATO Industrial Advisory Group, NATO wastes over $2 billion annually due to lack of standardization.** In 1971, Dr. John S. Foster, Jr., then Director of Defense Research and Engineering in DOD, estimated as much as $1 billion of overlapping research and development alone among the U.S. and its Western European allies.*** This has doubtless grown since. In FY 1975, the U.S. and the rest of NATO are spending about $8.7 billion and $3 billion, respectively, on R&D, largely for the same purposes.

(S) The deleterious effect on military capability is tragic. For example, at the EUROLOG Ministerial Meeting on June 13, 1974, British Secretary of State for Defense Mason stated that lack of equipment standardization was one of the major reasons for lack of rationalization of logistics in the NORTHAG area.† SACEUR told the CNAD in April 1974 that "NATO is not getting a satisfactory return on investment for our vast expenditures. We are losing at least 30 percent, and in some areas 50 percent of our capability due to lack of standardization." In

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*(U) See Callaghan, op. cit., pp. 25-27, for a good summary of equipment proliferation.

**(U) *USNATO 6128*, op. cit., Section 1, p. 3.

***(U) Address by John S. Foster, Jr., before the Aerospace Industries Association, October 28, 1971, in Williamsburg, Virginia.

†(U) *USNATO 1731*, dated 291430 March 1974 (Confidential).

December 1974 Admiral Sir Peter Hill Norton, Chairman of the NATO Military Committee, told the national defense ministers regarding standardization:

> ...it is high time to seek multinational remedies, and I might remind the Committee that as long ago as 1960, Monsieur Spaak commented, "Each one wants to keep his rifle, his machine gun, his tanks, his shells." Each one wants his air force, his own national aircraft, which can only be used under restricted conditions, and sadly his strictures are still true today, although the examples may be different.
>
> I would like, this morning, to cite one or two practical examples of the waste of money, duplication of scientific effort, misuse of talent, waste of manpower and, of course, finally, the impact of military efficiency that has resulted already from a failure to tackle this problem cohesively and with determination.
>
> The first example is in the field of naval communications. Very considerable sums have been devoted to data link systems by the United States and the United Kingdom, and you now find in the Alliance two different systems, one fitted by five nations and the other by three. They cannot speak to each other. Nor can they speak to shore stations. A partial solution to this absurd situation is going to cost not less than IAU 5,000,000.
>
> The next example concerns our land forces, where national elements in adjacent sectors of the four defense areas cannot help each other with supplies of hardware because they need different fuel for their tanks, different calibre ammunition for their guns and a massive range of entirely different spares for virtually all their equipment.
>
> Finally, in the air forces, for example, in the Second Allied Tactical Air Force, there are five different types of gun ammunition, four different bombs, six different napalm containers and sixteen different drop tanks.
>
> The duplication in the support costs because of this is only one factor, but it does enable the Soviets to use one man in support -- and we need two. If I may give a further illustration of the difficulties and dangers inherent in failure to ensure standardization, or at least interoperability, I must tell you that, in a recent naval exercise which has just been analyzed, due to incompatibility of communications, aircraft and missiles frequently engaged the same target simultaneously and ships and aircraft involved were so often unable to communicate with each other that, as a result, of the 56 maritime patrol aircraft deemed to have been destroyed, 30 were assessed as having been shot down by their own side.

Now, I would suggest that errors have been made over the years by ourselves and our predecessors in failing to recognize the wisdom of Monsieur Spaak's strictures and that both political and military authorities have failed to appreciate that national interests are not always best served when members of an Alliance indulge themselves in unco-ordinated production and unnecessary competition.*

(U) In a recent NATO publication, Dr. Gardiner Tucker, Assistant Secretary General for Defense Support, used the ACE Mobile Force (AMF), which consists of 5000 men in units from seven member countries, complemented by an air arm, as a sad example of the lack of standardization.

> The units in the force train together; they operate together; in any crisis they would deploy together to critical areas, and could well be the first integrated NATO forces on the scene. They symbolize the cohesiveness of the Alliance. But let us look at how well they are standardized. With seven nations contributing, there are seven different types of combat aircraft in the air arm; there are six different types of recoilless rifles, four different types of wire-guided antitank weapons, and three different types each of mortars, rifles, and machine guns. This force is prepared to deploy to a number of different critical areas in time of crisis and obviously cannot preposition its supplies in each of these possible areas. Because their weapons and supplies are so diverse, each of the seven national units in this force must maintain its own logistic personnel and establish its own logistic support. Because the weapons and supplies of the AMF units are not standardized with those of the host countries into which they are prepared to deploy, they cannot plan initially to draw on host country supplies and replenish them in due course; they must bring their full supplies with them ab initio.
>
> The commander of the AMF has determined that, if armaments were standardized both within his force and with the potential host country, then the time for his forces to deploy and be combat ready could be cut to less than half what it is today. To put this factor of two into perspective, it should be recalled that in virtually every analysis of East-West balances, NATO's response time is one of the most critical determining parameters. The AMF commander has also estimated that with such standardization the seven logistic staffs could be consolidated and their tasks simplified so as to get the same job done with one-half the logistic personnel. To put this factor-of-two reduction in logistic personnel into

*(U) DPC-VR(74)28, Part 1, December 10, 1974, p. 13 (Secret).

perspective, it should be recalled that total manpower is the largest cost element in military budgets and its escalation is eating into modernization budgets throughout the Alliance. Finally, the airlift requirement would be cut in half, thus generating a major equipment saving. All of these improvements and savings might have resulted had the allies spent the same level of resources they actually did spend, to acquire the same numbers of the same classes of weapons, if they had first agreed to adopt common standards. The important thing about the AMF is that its experience is indicative of the problems and opportunities presented by the joint operation of larger units.*

Moreover, *NATO has been moving over the last several years toward destandardization, rather than the reverse.* Callaghan cites a French general who lectured SHAPE in 1961 on "twelve years of destandardization within NATO."** The situation has gotten worse since then. As ASYG for Defense Support Tucker has put it, a basic problem has been "the conflict between the goals of NATO standardization and armaments cooperation on the one hand, and national industrial and economic goals on the other." Hence, as he sees it, the development and protection of national arms industries has led to:

> ...a progressive destandardization of NATO armaments, to a limitation of production volumes to below economically efficient levels, to an inhibition of international competitive factors which tend to produce efficient industries, and to technological efforts which are fragmented and overlapping.***

Diseconomies of scale are a particularly serious problem in driving up unit costs because of small national production runs.†

(U) *Again, the U.S. has been the worst offender.* Despite all our lip service, cooperative development and procurement with NATO has "always been peripheral to the mainstream of the American weapons acquisition

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*(U) *NATO Review*, January 1975.

**(U) See Callaghan, op. cit., pp. 25-27, for a good summary of equipment proliferation.

***(U) *USNATO 1731*, 291430 March 1974 (Confidential).

†(U) Cf. Marshall, op. cit., pp. 359-360.

process."* This has undermined the credibility of U.S. exhortations to NATO to standardize. As the same U.S. expert cited earlier said, U.S. policy seems to be "buy what I offer, standardize on what I produce." He cites how U.S. services keep NATO and national interests in separate channels, and a NATO policy seldom becomes a U.S. national policy, and how NATO considerations are seldom addressed in considering U.S. programs. He concludes that we will have to put more candor in standardization at home before NATO will even listen to us.**

(U) But because of the vastness and complexity of the subject -- many countries, many agencies within a country, political and economic constraints, and language and cultural barriers -- the execution and management of standardization efforts within DOD is decentralized to the service or agency having primary responsibility. In light of what appears to be an enormous task the very small number of project officers assigned to standardization offices among our services indicates an extremely low priority.*** In fact, a better indicator of the lack of U.S. Government interest is the total absence of a national standards program. By comparison, *the British, French, and Germans each has a national standards program* partially financed by the government. *The U.S., developing an amount of equipment eight times its nearest competitor, has none.* This sad state of affairs is only partly owing to the restrictive policies imposed by Congress and the superiority of our own equipment. It largely reflects sheer insularity. And whatever the causes, the results are clear. In the sixties alone, we sold over $8 billion worth of equipment to our NATO allies, while buying only $700 million worth.† It is no wonder that Secretary Schlesinger, in the NATO Ministerial Meeting on December 10, 1974, began his remarks on standardization by acknowledging that the Europeans should be somewhat

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*(U) Callaghan, op. cit., p. 49.

**(U) Memo for Deputy Director/DDR&E/OSD from Chairman of Air Munitions Requirements and Development (AMRAD) Committee, September 5, 1974, p. 1.

***(U) Army has four, Navy has three, and Air Force has two project officers.

†(U) Callaghan, op. cit., p. 41.

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skeptical concerning U.S. willingness to make concessions in the name of greater Alliance standardization.*

(U) Past resistance among the services has been tremendous. A recent GAO report to Congress outlines DOD's failure to achieve standardization goals:

- On April 23, 1965, the Department of Defense established a single, integrated DOD standardization program controlled and directed by the Office of the Secretary of Defense. One of its objectives is to encourage the broadest possible application of an item among the military services so that a minimum of similar items will be developed and produced.
- In 1966, because variations in 20mm aircraft ammunition prevented transfer among the services, the Director of Defense Research and Engineering reemphasized the standardization program to the services.
- In February of 1969, because the services were not effectively eliminating unnecessary duplicative developments of air munitions, DDR&E established the Air Munitions Requirements and Development (AMRAD) Committee consisting of four officers and a secretary. (It's interesting to note that the GAO investigators were unable to locate any organization that addresses development requirements for minor systems in areas other than air munitions and related equipment.)
- In 1971, so diverse were the 1091 separate development efforts involving lasers that neither the services nor the AMRAD Committee were able to identify and eliminate overlapping projects. Consequently, DDR&E established an ad hoc working group just for laser-guided munitions.**
- As of June 1974, except for the AMRAD Committee, DDR&E has no procedures to insure that the services are performing required coordination or eliminating duplicative development.***

B. OBSTACLES TO STANDARDIZATION

(U) Despite much lip service paid to standardization, and so many meetings, why has so little been accomplished? The simple answer is

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*(U) *USNATO 6909*, dated 111635Z December 1974 (Confidential), Section 2, p. 1.

**(U) See GAO Report 32 to Congress, *Plans and Proposals for Avoiding Unnecessary Duplication in Developing New Military Equipment — Department of Defense*, June 10, 1974, pp. 5-8.

***(U) Ibid., p. 25.

that those who are motivated to standardize are not those who make the key decisions in research, development, and procurement of equipment. It is easier and relatively more profitable for a single producer or agency or government not to standardize. As a result, there are many barriers to standardization.

1. The Not-Invented-Here Syndrome

(U) Any time standardization requires change in design of a piece of equipment on the shelf, there is loss of money, time, and sometimes prestige to those who must change. Thus, the U.S. has resisted a changeover to the metric system in spite of its obvious advantages. Not until recently were the European countries able to agree on a common trailer hitch. As already mentioned, even when a common refueling coupling was chosen for NATO ships, it was not the most efficient one.

2. Conceptual Differences

(U) Parochial views and practices manifest many obstacles. (a) Production of U.S. defense systems is usually privately funded, whereas European manufacturers mostly rely on government-sponsored and -owned facilities. (b) The trend in the U.S. is toward maximum automation, whereas the Europeans still rely on individual craftsmanship. (c) U.S. systems are designed for worldwide deployment, whereas the Europeans only need look to operations in a temperate climate. (d) The U.S. requirements for high levels of safety exact more attention to reliability and quality control.* (e) The British inclination toward planning for a short tactical nuclear war, with its classical defensive barrier system, suggests different types of weapons and equipment from those suggested by the U.S. concept of highly mobile, conventional warfare. (f) Norway and Denmark want an aircraft designed for local air superiority; Belgium wants one with an offensive air operations capability.

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*(U) ASD/I&L, *Report on U.S. Procurement and Production of Foreign Weapon Systems*, December 1972 (FOUO), Appendix C.

3. National Interests

(U) Each nation, whether it can afford it or not, wants to develop and produce the most sophisticated and powerful weapons possible. Furthermore, to hedge against the possibility that other nations may shift allegiances, each nation tries to remain independent. This requires that each maintain an independent industrial preparedness base. Each nation would also like to sell more than it buys to insure full employment.

4. Pressures of Industry

(U) The industrial capacity of NATO is already greater than the demand for production. So the pressure applied by private industry is away from standardization and toward the development of unique equipment and parts that can be produced only in the developer's plants. Developers are reluctant to offer a foreign license to a competitor. Consequently, foreign-designed systems produced through licensing agreements result in sole-source conditions in each nation.

5. Military Requirements

(U) The drive toward the ultimate weapon in each field of warfare leads to performance requirements that strain the state of the art. As a result, costs skyrocket, the numbers of weapons that can be replaced are reduced, and as production runs go down, the unit costs go up, and life-cycle costs rise correspondingly. As a result, the sophisticated weapons bought by the U.S. are often too expensive for most of its allies. Their choice is either to produce a cheaper model, which leads to more destandardization, or to buy fewer U.S. weapons and further tilt the numerical balance towards the WP. The difficult question is whether *one super* weapon is better than the *one-plus* weapons it replaces. As Minister Leber put it, "...in our efforts to get perfection, we are escalating costs in such a way that in the long run and in the end we must limit the number of major hardware items procured. But as a result, we get much less than the increment in cost, and by seeking perfection we are increasing the asymmetry between ourselves and the Warsaw Pact...."* Admittedly,

*(U) DPC-VR(74)23, Part 1, December 10, 1974, p. 44.

there are some instances where a reduction in effectiveness may result when certain weapons are standardized. For example, because of differing electronic signatures, an enemy would have much more difficulty jamming many uniquely produced radars rather than one design. But even in this example, it is imperative that the friendly radars be fully interoperable.

C. NATO MAY BE GETTING A SECOND WIND

(U) Despite the above sad experience, we see signs that the NATO allies may be taking a more positive approach to standardization, compatibility, and interoperability. The reasons are obvious. They lie in the growing dilemma created by the soaring cost and sophistication of new equipment at a time of declining real resource availabilities (see Chapter I). This resource bind is forcing even the U.S. to recognize more fully the need for commonality and the potential savings involved. Tucker, the new ASYG for Defense Support, has taken an aggressive stance in pressing these needs.

(S) Since it is almost a rule of thumb in NATO that little can be done until the ministerial level gets behind it, Secretary Schlesinger proposed at the June 1974 DPC that each ministerial level session should address at least one specific CNAD recommendation ready for decision. At the December 1974 DPC, the ministers agreed to concentrate their efforts, both individually and collectively, on standardization in five specific areas: airborne early warning, electronic warfare, ammunition for portable infantry weapons, communications, and antiship missiles.

(U) The EUROGROUP has also taken some potentially useful steps toward standardization, though relatively little has resulted as yet. It has focused on purchasing a common replacement for the F-104 by Belgium, the Netherlands, Norway, and Denmark (see Chapter III). It adopted common principles of equipment production in 1972. EURONAD is concentrating on two priority areas, the AALS and a new medium SAM, although "results so far have hardly been promising."* A list of

*(U) Record of EUROGROUP Ministerial Meeting, 13 June 1974, op. cit.

priority items have been developed. In general, the EUROGROUP members are coming to realize that only via collaboration can European armaments industries retain their place in the sun.

The U.S. itself seems at long last to be taking a somewhat more positive approach to standardization. U.S. Ambassador to NATO Rumsfeld pressed it as a ripe issue during his all too short tenure. Secretary Schlesinger has proposed concrete steps on numerous occasions. The Nunn Amendment to the FY 1975 DOD Appropriation Act tasked SecDef to report to the Congress his assessment of the costs to NATO of failure to standardize and remedial actions that could be taken.

(U) What is driving all these initiatives is the growing defense resource bind, which practically dictates that NATO must increase the cost-effectiveness of its defense outlays or see the credibility of its posture decline. Clearly, this means that NATO must eliminate duplication in R&D and defense production, achieve the economies of scale inherent in longer production runs of standardized equipment for more than one national user, and avoid unnecessarily wasteful proliferation of national weapons systems. In the following sections we offer some practical suggestions as to how this might be done.

D. THE CASE FOR COMPATIBILITY AND INTEROPERABILITY

(U) NATO must adopt more realistic policies. Its limited success in standardizing over the last 25 years makes it obvious that this is perhaps the most difficult goal to achieve. For some time yet, full-scale standardization, even among the EUROGROUP, is simply not in the cards. Indeed, it is hard to avoid the conclusion that the best has proved the enemy of the best. The overfocus on standardization has led to neglect of lesser halfway measures such as compatibility, harmonization, and interoperability. In fact we suspect that, as in the case of past "blue sky" force requirements, the NATO military authorities in particular have used standardization as an alibi to avoid pressing harder on such lesser but more realizable goals.

(U) On the other hand, the growing resource bind in NATO could be utilized to give new vigor to the movement toward greater commonality,

if shrewdly utilized. As in the case of joint logistics (Chapter V), we urge a realistic incremental approach. To this end, while pressing standardization as much as feasible (see next section below), we urge that NATO focus more on lesser step-by-step measures that would add up over time to significant progress toward ultimate standardization. Moreover, a great deal can be done via such measures to move from a situation where NATO operates as a collection of separate national forces toward one where these forces can actually operate together — even though retaining their separate national identities.*

(U) What we have in mind are such measures as: (1) insuring interoperability of equipment; (2) insuring compatibility of forces when operating together by harmonizing doctrine and procedures; (3) joint training; and (4) joint use of facilities and equipment. All these are halfway houses that will help promote standardization. Rather than deal with these concepts in detail here, we have discussed specific ground, air, naval, and logistic applications in chapters II-V.

(U) Here we might just state a few general propositions. For example, even if small arms and artillery cannot be standardized because of various obstacles, it is crucially important that they be made compatible by having common calibers and interchangeable rounds. This is particularly important with high-consumption and high-tonnage items such as small arms or most artillery ammunition of 105mm, 155mm, and 205mm calibers. It is also essential with small AAA weapons and aircraft guns. Even if weapons can't be standardized, surely most ammunition should be. In our view, minor differences in size or caliber, preferred from a national viewpoint, may be insignificant compared to the operational and logistic advantages of each nation's being able to use others' ammunition. This seems so obvious that it is surprising it has not been pushed harder. It is the type of issue that the ministerial level should decide by fiat, and we suggest how on p. 271 below.

(U) Similarly, whether or not the allies use common tactical communications equipment, there seems to be an overriding requirement in many cases that these use *common frequencies and procedures* so that allied units can at least talk with each other. SHAPE's briefing on the

*(U) SecDef Statement to June 1974 DPC, paras. 10 and 31.

lack of standardization in the ACE Mobile Force notes how the five allies contributing land forces use quite different frequencies and channel spacing.

(S) SHAPE's call for each ally to develop facilities for cross-servicing each other's aircraft at national air bases is a constructive example of what needs to be done. This need extends beyond nozzles for refueling and engine starters to common bomb racks, missile pylons, and interchangeable avionics. SecDef Schlesinger has proposed that there should be similar policies to ensure land force interoperability, especially to enhance flexible deployment of Center Region reserves.*

(S) Since greater rationalization in the naval field is also operationally essential, it is encouraging that the current SACLANT in particular has been actively pressing it. As his Deputy told CNAD, "if we cannot attain commonality, we must at least achieve maximum interchangeability in system components, spare parts and weaponry." SACEUR's representative told the now familiar story of how, in the recent NATO naval exercise *Strong Express*, 30 out of 56 maritime patrol aircraft shot down were friendlies, because of lack of standardized IFF. The CNAD found that lack of interoperable and secure communications and data links was of paramount importance, and agreed to take action in the areas of passive link display equipment, antiship missiles, and naval C^3.**

(U) If all NATO surface ships could be replenished with one type of oiler and one type of fuel, if all NATO tactical aircraft could be serviced at any airfield with the same fuel, ammunition, and repair parts, and if all NATO tanks could be reserviced with the same fuel, ammunition, tracks, and batteries, the military effectiveness of NATO [illegible] increase by at least 50 percent. In addition, the recurring cost [illegible]on of a nation's defense budget is very large, so this has a high [illegible] Since the military have recognized this as the best approach [illegible]ardization, the MC has been pursuing a standardization program along these lines for many years. A Military Agency for Standardization (MAS) has been organized and Standardization Agreements (STANAGs) have

*(U) SecDef Statement to June 1974 DPC, para. 31. Interchangeability of tank tread pads is an example of a high wear item (as shown in the Yom Kippur War) where compatibility seems highly desirable.

**(U) *USNATO 6128*, November 5, 1974, pp. 2-4 (Confidential).

been published; however, only a small dent has been made thus far in the achievement of equipment interoperability. Few STANAGs have been written on equipment, and in any case, nations are under no obligation to comply. We urge that this program be given ministerial attention. We would suggest MOD agreement that no new STANAG can be rejected below Chief of Staff level in NATO's capitals.

E. PUTTING SOME STEAM BEHIND STANDARDIZATION

1. Does Standardization Make Sense Economically?

(U) There is little doubt that standardization could produce savings when the different countries' industries complement each other. For example, if Germany was more efficient than Britain at producing tanks and if Britain was more efficient than Germany at producing aircraft, then both countries would benefit by standardizing on British aircraft and German tanks. However, during recent years NATO's armaments industries have not been complementary in this sense, because U.S. industries have been more efficient on most types of equipment. Thus, although there may be some potential for standardization based on complementary defense industries, this rationale will probably not support standardization on a large scale.

(U) However, even if U.S. industries were more efficient than the European industries on *all* defense products, standardization would still make sense for both the U.S. and the Europeans. This is true because the European inefficiency relative to the Americans would probably be less on some products than on others, and the Europeans would be able to concentrate on making the item at which they were least inefficient. A simple example based on the economic principle of comparative advantage can clarify this concept. The U.S. might produce both rifles and ships more cheaply than the Europeans, but the U.S. advantage over the Europeans in producing ships could be less than the U.S. advantage in producing rifles. Assume that:

- U.S. industry can produce a rifle for $5, as compared to $10 for European rifles.

- U.S. industry produces ships for $10, as compared to $12 for a European ship.
- The U.S. purchases 20 U.S. rifles and 5 U.S. ships before standardization.
- The Europeans purchase 10 European rifles and 3 European ships before standardization.
- Under standardization, the U.S. offers the Europeans a package deal in which the U.S. would sell the Europeans all their rifles for $7 each and would buy all its ships from the Europeans for $11 each. If the Europeans would agree to this arrangement, the U.S. would save $15 and the Europeans would save $25, as is illustrated in the table below:

	United States	Europe
	Before Standardization	
	20 rifles x $5/rifle + 5 ships x $10/ship =	10 rifles x $10/rifle + 3 ships x $12/ship =
Total cost	*$150*	*$136*
	After Standardization	
Production cost	30 rifles x $5/rifle = $150	8 ships x $12/ship = $96
International purchase cost	5 ships x $11/ship = $55	10 rifles x $7/rifle = $70
International sales cost	10 rifles x $7/rifle = $70	5 ships x $11/ship = $55
	$150 + $55 - $70 =	$96 + $70 - $55 =
Total cost	*$135*	*$111*
Total saving	$150 - $135 = *$15*	$136 - $111 = *$25*

Therefore, in this simple example, standardization would save the U.S. $15 and the Europeans $25. These savings could be used to fund other force improvements — together, they would be enough to produce two extra ships and almost four extra rifles.

(U) A further positive effect of standardization could be to increase the efficiency of the producing industries through economies of scale. Standardization might allow the U.S. and European industries that were still operating to organize their production lines more efficiently and to cover fixed costs with greater production volumes, and thus to achieve greater learning curve economies and, ultimately, lower average unit costs. In the previous example, if economies of scale such as these led to price reductions of five percent, then over time the U.S. and the Europeans would each save over $6 in addition to the savings noted above.

(U) To cover the subject of standardization completely, this example would have to be expanded to consider all of the NATO countries and all of the military equipment items that NATO requires. Also, economic data would have to be assembled to determine what were the different countries' relative efficiencies. But this simple example does suggest that standardization has considerable savings potential for NATO.*

2. Thus, the Key to Standardization Is Trade-Offs

(U) Experience shows, however, that the relative merits or cheapness of a given weapon system are not by any means the deciding factors in any allied agreement to standardize. Far more important in most cases are national desires to preserve industrial and commercial advantages. Any realistic approach to standardization cannot blink this fact.

(U) Therefore, in standardization, as in other aspects of rationalization, trade-offs must be the name of the game. Each nation must be given a fair share of NATO's overall development and production, or be otherwise compensated. This is why the broad matrix approach to rationalization proposed by OASD/PAE (see p. 30) is so indispensable. Only by some such device can the potential costs and savings be balanced out. We suggest in Chapter V that a submatrix be developed for logistics; this submatrix should include R&D and, above all, common procurement.

(S) Implicit in this approach is that some allies must buy equipment from others even if it is not the best and cheapest. Only in this

*(U) F. W. Barnett, *Economics of Standardization* (working draft), OASD/PAE, December 19, 1974.

way can the accounts eventually be balanced (except in the case of smaller countries that must buy foreign equipment anyway). We wish to suggest a rule of thumb cited by a German general. He said that if a foreign system met 85 percent of their (German) requirements, then they felt they ought to buy, rather than developing their own system to meet 100 percent of their needs. His reasoning was that the gains from standardization, compatibility, and interoperability — including life-cycle maintenance and support — would far outweigh the added marginal 15 percent in performance. We believe that he is dead right! MOD Leber went further, saying that even if German industry could produce equipment totally suited to national requirements, they would not adopt it, if everyone was prepared to adopt another solution, even though that other solution met only 50 percent of the original requirement.

3. The U.S. Must Buy European If We Want the Europeans to Buy American

(U) The next key to successful progress toward rationalization and standardization of equipment is that it cannot be a one-way street. Of course, this applies particularly to us Americans. It is painfully apparent that this lopsided situation is no longer acceptable to our allies. They all too rightly suspect that in calling for standardization we see it as an added argument for selling U.S. equipment at the expense of their defense industries. As MOD Mason put it: "Indeed if the United States was prepared simply to state in principle that it was ready to procure some equipment in Europe, this would be a great step forward."*

(U) Therefore, the U.S., if it is to exert an effective lead in calling for rationalization through standardization and common procurement, must put its money where its mouth is, as we said in Chapter I. Since the U.S. has a great technological edge in highly sophisticated air and naval weaponry, and is also usually the major single purchaser of such equipment, we must find a way to expand our purchases of European equipment in other categories.

(U) As suggested in Chapter II, this should be largely in the field of ground force equipment, where we do not have the same technological edge. Hence, we suggested in Chapter II a number of items that

Summary Record, EUROGROUP Ministerial Meeting, June 13, 1974.

the U.S. might logically buy from its allies. Moreover, the U.S. should purchase items that will encourage other NATO allies to buy them too, thus lengthening production runs, increasing economies of scale, and lowering unit costs to all concerned.

(U) The BOP problem and the threat of troop reductions if the issue is not resolved favorably for the U.S. is another major political and economic argument against large U.S. purchases in Europe. However, unless we can solve the BOP problem, any purchase of European-made military equipment is going to be difficult. And unless the U.S. buys in Europe, then the Europeans are not going to buy from the United States. Defense rationalization goes hand in hand with economic rationalization. Therefore, the more the EEC grows, the more European defense cooperation will emerge. But increased European defense cooperation might well be at the expense of decreased purchases of U.S. military equipment. The best current example is the F-104 replacement problem, where EEC pressures may outweigh the military and economic advantages of our allies' procuring a superior replacement aircraft from the United States.

(U) Buy American edicts and BOP deficits related to U.S. defense expenditures for its forces in Europe should not be allowed to endanger U.S.-European cooperative armament programs. As one political-military analyst, A. R. Turrentine, puts it, efficiency should be emphasized and economic benefits should be maximized. Savings should be distributed equitably, with economic and commercial activities outside of the defense sector being used as needed; what should not be done is to permit uneconomical division of the program.*

(U) Turrentine goes on to point out that, in approving the North Atlantic Treaty unanimously, the Senate Foreign Relations Committee recognized the potential economic advantages in an alliance by citing the following as one of its reasons for recommending ratification:

> It will greatly stimulate the efforts of the North Atlantic states to help themselves and to help each other and, through proper coordination of these efforts, to achieve

*(U) A. R. Turrentine, *Joint Procurement of Military Equipment among NATO Members*, Massachusetts Institute of Technology, September 1974, p. 3.

maximum benefits with minimum costs and bring far greater strength than could be achieved by each acting alone.

4. Specialization in Procurement, Maintenance, and Supply — The Single Manager Approach

(U) The optimum approach to achieving efficiency as well as economy entails one ally's specializing in the provision of certain equipment and in its life-cycle maintenance and support. This is especially desirable in the case of low-volume, highly sophisticated weapons systems, such as aircraft or large missiles. For example, the Pershing was sold to the FRG, but the U.S. provides all spare parts, etc., and even trains FRG crews on our White Sands missile range. In the case of the F-4 too, the U.S. has invited its allies simply to plug into our supply system.

(U) The possibility of an individual nation's serving as a single manager for new weapons systems deserves more energetic assessment, and analysis of possible trade-offs. For example, it might be logical for the U.S. to be the single source for AWACS, Maverick, and ECM pods (see Chapter III), the U.K. or FRG for tank guns, the FRG for scatterable mines and mine dispensers, and the Dutch for radio components. It would also be possible to balance the one-time high procurement costs of a given weapon system against a long-term maintenance or supply support contract. Establishing nations as single managers has only one real problem — lack of redundancy and the possibility of losing a warm production base in the early stages of hostilities. This needs to be studied, but much of the danger could be averted by maintaining adequate levels of WRM for national forces and by creating the SACEUR reserve stocks as discussed in Chapter V.

(U) We do not see transportation from the supplier nation to the user forces as a problem, since closed-loop maintenance is a time-tested capability. The U.S. Air Force has gotten by without European-based depots for about a decade, and the U.S. Army has proven the utility of a similar system for helicopter-engine maintenance. Nor are transportation costs a prohibiting factor, since there are savings from reduced inventories of high-value items and reductions of duplicate maintenance facilities and storage depots.

5. Single-Source Development and Joint Production

(U) This would be a variant of the above. Obviously NATO must go much further toward common weapons systems and economies of large-scale production, if it is to field a more credible defense at acceptable cost. Here again, what has been done already shows what could be done. But substantial U.S. participation is the keystone. If we are going to overcome the political and economic obstacles, the U.S. will have to participate on a large scale. The U.S. selection of Roland II as its short-range air defense system (SHORADS) is a step in the right direction, but it is only a step. We are not as cynical as one army type, who claimed that after selection and modification to include polar-cold and desert-heat extremes to meet U.S. worldwide deployment needs, the only thing still standard about the system selected would be the European name. But it is significant that Roland has been categorized as being under "engineering development."

(U) However, licensed production or coproduction usually does not save costs, especially if modifications are entailed. While it is easier to reach agreement on such techniques and it does promote standardization, experience shows that split projects cost from 20 to 30 percent more than a single project.* Production consortiums producing U.S. weapons have tended to do so at prices that (even including no write-off of R&D) are much higher than if these weapons were bought directly from the U.S. Marshall guesses that on the average our allies pay 10 to 20 percent more for such U.S. equipment.** The reverse is, of course, also likely to be true, if the U.S. insists on producing European equipment on license here. A recent study on U.S./European economic cooperation had this to say about licensing arrangements:

> Transferring production of an allied weapon system to the United States presents problems and trade-offs. If it must be redesigned to meet American standards, specifications and production methods, and modified to incorporate

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*(U) Callaghan, op. cit., p. 49.

**(U) Marshall, op. cit., pp. 362-364, citing Brigadier General E. Vandevanter, Jr., *Coordinated Weapons Production in NATO: A Study of Alliance Processes*, The Rand Corporation, RM-4169-PR, November 1974.

American improvements, start-up costs will be high -- and long production runs will be required to amortize those costs. Moreover, the redesigned American system will no longer be the same as the original allied system, thereby nullifying any logistic or standardization savings.

Licensed production was used in the British acquisition of the American F-4 Phantom. This was done to maintain employment at home and to minimize foreign exchange costs. Approximately 50 percent of the aircraft value (including the engines) was produced in Britain. As a result, the British Phantom has less performance than the American or German Phantoms, and cost twice as much to procure. And the costs do not stop there: When an RAF Phantom with engine trouble lands at a USAF or Luftwaffe air base in Europe, it is deadlined. It cannot be repaired until it is removed to an RAF base.*

(U) It would be far more effective from both an economic and a military viewpoint to rely on direct purchases, and use the matrix approach to balance off overall costs and savings. Purchasing nations could then hook directly into the producer nation's logistic support system for spares, modifications, R&D technical advice, and technical training.

6. Realism Dictates a Combination of Single Manager and Joint Production Approaches

(U) Complete reliance on one source flies in the face of every obstacle mentioned previously. So, we again recommend an incremental approach. We need hard bargaining with our allies to decide whether to use the single manager or the joint production approach on future weapons and we'll probably have to settle for a combination of the two. Moreover, exhortations are fine, but a small set of successful examples would be far more compelling. Since the U.S., U.K., FRG, and France produce over 95 percent of NATO equipment, what they decide will have a major impact on the other allies. In fact, we believe any U.S. bilateral agreement with the U.K., FRG, or France on key items could coerce the other two allies into line as well. Trade-offs can be developed under the logistic matrix we previously suggested and other nations could be added as the idea catches on. The following examples illustrate what we have in mind:

*(U) Callaghan, op. cit., pp. 44-45.

a. U.S. standardization on European trucks. One interesting possibility would be to procure wheeled vehicles for USAREUR and USAFE from European commercial sources. From what some U.S. Army generals told us in Europe, they would be delighted to have trucks such as those produced for the FRG forces, and to have them maintained on a contract basis. Some of the advantages are that we would have a ready-made support base with stocks of spare parts, maintenance facilities, and skilled workmen throughout the FRG and along the ground LOCs. Under combat conditions, there would be a greater degree of confidence that trucks moving behind corps areas could be supported, far greater opportunities for emergency repair, and damaged trucks could be cannibalized for additional spares. This in turn would enhance mobility and make lateral movement of ground forces and supplies more practical — particularly between USAREUR forces and FRG forces in their II and III corps areas. It is not a very glamorous proposal, but it is practical — and it is a project that could be started in the near term. We might even get the Netherlands, Belgium, and the U.K. to go along by finding compensating programs for them in the logistics matrix.

b. A three-way cruiser-tank-fighter aircraft trade-off. In theory, it would be sensible for the U.K. to produce the through-deck cruiser, the FRG the Leopard II tank, and the U.S. fighter aircraft. Each nation appears to be best in these fields. The U.S. shipbuilding facilities are already at capacity. The Leopard has been impressive — an FRG Leopard crew won top honors in an exercise with USAREUR and French tank forces last spring. And the U.S. has proven its prowess in building all-weather and lightweight fighters. Each nation could buy from the others according to its needs and offset any unbalanced payments through the rationalization matrix. Balancing might be effected by the FRG's throwing in scatterable mines and mine launchers (see p. 73), the U.S. adding precision air-to-ground guided missiles, and/or the U.K. contributing SKUA, an all-weather antiship missile for helicopters. If an unbalance still remains in procurement of equipment, other functional areas, such as logistics, training, communications, etc., could be considered. Perhaps the hardest selling job here would be to convince the U.S. Navy to accept the British through-deck cruiser. Efforts are already under way

for selecting a common gun for the next series of FRG/U.K./U.S. tanks (and possibly French), and the U.S. has invited the FRG to test a Leopard II against the XM-1 prototype in 1976. Surely here is an opportunity to come up with a common Center Region tank, or at least a common tank gun and round. Negotiations on a LWF aircraft to replace the F-104G are under way. Thus, a three-way trade-off might be the clincher in our efforts to ensure a common replacement aircraft.

c. Standardize on Maverick as NATO's air-delivered precision-guided missile. The Maverick is the only proven aircraft antitank weapon and just entering the U.S. inventory in significant numbers. As cost-effective as PGMs may be, their acquisition in significant numbers will be very expensive. This is a splendid opportunity to achieve greater standardization and the economies offered by large purchases. The Italian proposal for Common Funding of War Reserve Stocks (see p. 226) may have been too ambitious, but a more moderate start on a cooperative basis could be more successful. For example, the U.S. could make an offer along the following lines:

- Request NATO nations to accept the improved Maverick as the standard airborne antitank weapon; each nation to make a five-year commitment as to the number to be purchased yearly for national needs.
- Each nation to contribute a pro rata share to an armament fund to procure weapons for SACEUR's reserve stock during that same five-year period; the total number in the SACEUR reserve would depend on the total number nations agreed to purchase and the number of aircraft to be equipped for Maverick delivery; the agreed infrastructure formula would be used to determine the pro rata cost shares of SACEUR's reserve stock; NAMSA would be contracting agency and responsible for maintenance of reserve stocks.
- The U.S. would ensure continuance of the production line by allowing allies to begin equipping their forces from weapons already ordered for U.S. forces; NATO nations

would share the production-line output thereafter on a proportional basis with the U.S.

- The U.S. would provide 10 percent of the SACEUR reserve stock initially and reconstitute its own reserves from weapons produced in the last year of the five-year period.
- Any savings from the increased production negotiated with the contractor would be shared proportionally with our allies.
- In addition, the U.S. would undertake to train instructor pilots from each NATO air force, continue its R&D effort to improve the existing system, and share the results of any improvements with its allies.

(U) Our arguments for this proposal are simple. If PGMs are going to get introduced into NATO's air force structure, the U.S. cannot wait until it gets all it wants and then hope to sell American products. By that time, airborne PGMs will, like NATO's ATGMs, come in 17 varieties; we will have lost standardization and interoperability and have wasted defense dollars needlessly.* Creating an initial SACEUR reserve along the lines proposed would not cost us anything at the end of the five years. If our allies selected squadrons for Maverick configuration from those based on airfields to be designated as U.S. COBs, it could save further funds. The host nation could furnish peacetime maintenance of U.S. stocks, test equipment could be used jointly, and SACEUR's reserve stocks would be available to the U.S. as well as the host nation forces.**

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*(U) A recent Rand study on NATO's tactical air power stresses the importance of improved CAS munitions for NATO. It concluded that "if Maverick is as effective as assumed [in that study], there is a powerful case for providing ample Mavericks (or a comparable munition) for both U.S. and other NATO fighter-bombers." See E. Dews et al., *Tactical Airpower in a Mid-Seventies NATO Defensive Contingency (NATO Alpha)* (U), The Rand Corporation, R-1192-PR, October 1974, p. xii.

**(U) We see no reason why similar offers cannot be generated around other weapon systems, or why they should be confined to U.S. weapons. On this score, USNATO's suggestions regarding U.S./U.K./FRG standardization on both U.S. and European antitank and antiair missile systems, and their cooperative procurement, are most imaginative. Our proposal could be incorporated with theirs ("Standardization and Cooperation in Armaments," *USNATO 3510*, dated 211340 June 1974, Confidential).

F. STANDARDIZATION NEEDS BETTER MANAGEMENT

(U) As we have pointed out, there have been many and varied attempts to standardize, but almost all have failed. A major reason for this poor record is failure to establish responsive management machinery at the proper level. We can know what to do and how to do it, but if the decisionmaker is not willing, everything else is merely a waste of time and money. Effective standardization management requires that the bureaucratic machinery in the defense establishments of each nation be cohesive, responsive, and have authority to make decisions.

(U) First, national governing bodies must modify laws designed to discourage procurement of foreign goods and pass new laws to insure progress towards standardization. The "Buy American" Act of 1933 needs to be repealed. For the U.S. to promote standardization of equipment in the face of a Congressional Act that places great penalties on the procurement of foreign goods doesn't make much sense to Europeans. In addition, the legislative branch should require executive certification that major weapon systems are not duplications of already existing NATO systems, or if they are, the duplicative system is absolutely necessary to meet military needs.*

(U) Second, NATO defense planning procedures must be altered so as to include a ten-year development program for major items of equipment. We must determine who is going to concentrate on what systems ten years ahead of production time so that appropriate research and development allocations can be made nationally and internationally.

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*Paragraph 6-104.4 (b) of the Armed Services Procurement Regulation says that bids and proposals shall be evaluated so as to give preference to domestic bids. Each foreign bid (other than a low bid offering a Canadian end product) shall be adjusted for purposes of evaluation either by excluding any duty from the foreign bid and adding 50 percent of the bid (exclusive of duty) to the remainder, or by adding to the foreign bid (inclusive of duty), a factor of 6 percent of that bid, whichever results in the greater evaluated price, except that a 12 percent factor shall be used instead of the 6 percent factor if (i) the firm submitting the low acceptable domestic bid is a small business concern, or a labor surplus area concern, or both, (ii) small purchase procedures are not used, and (iii) any contract award to a domestic concern which would result from applying the 12 percent factor, but which would not result from applying the 6 percent or 50 percent factor, would not exceed $100,000.

(S) Third, ministerial teeth need to be put into NATO's present standardization program. As we have stated so often in other contexts, hard experience shows that progress in standardization, common procurement, compatibility, and the like cannot be achieved by leaving it to the NATO or national bureaucracies — or even to the CNAD. Basically, the CNAD, with its subgroups, is organized to manage individual projects on major items of equipment, but it is powerless to overcome discussion deadlocks and national lobby influences. It is almost a rule of thumb that nothing much will happen until the ministerial level gets solidly behind it (and perhaps not even then). So the best way to promote standardization is by political-level decisions taken well in advance of production. Thus it is encouraging to note that the DPC has agreed that the defense ministers will consider at least one item proposed by the CNAD at each DPC session. This is a big step in the right direction.

(U) But more is needed. We suggest *a procedure of ministerial veto in advance* (for want of a better term). Obviously ministers cannot usurp the professional judgment of their military and civilian experts as to what new design is optimum or on what technological parameters they should standardize. For this they must rely on their technical and service advisers. But there is one thing that ministers can do — and that is to agree among themselves not to procure anything in a given category until their advisers have agreed on a common standard. Here again the U.S., as the worst offender, must take the lead if it is to overcome the reservations of its suspicious allies.

(S) Let's take one example that might also prove a good test case. The U.S., U.K., and FRG defense chiefs have already agreed that it is vital to have a common tank gun caliber and round for their next generation of battle tanks. But the three services concerned have still been unable to agree on what these should be. Our proposal is that Schlesinger, Mason, and Leber go one step further and agree among themselves that none of them will approve procurement of a single new production model until their services have reached agreement.* This might have a cathartic effect.

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*(U) A precedent is the CNAD-14 agreement in October 1974 that until NATO has made a common choice, no ally (with two exceptions) would introduce any other caliber than 7.62mm into its inventories (*USNATO 6128*, November 5, 1974, Confidential).

(U) To get the ministers to act on standardization and joint procurement, it is also imperative that the NATO military authorities make a stronger case for such measures -- and keep pressing them harder -- than has been the case in the past. For example, though SACEUR has always been an American officer, to our knowledge he has never vigorously insisted that the U.S. buy a European design. Encouraging SACEUR and SACLANT and the MNCs to take a tougher stand on such matters is one reason why we suggest providing more institutional clout to the NATO bureaucracy in Chapter VII below.

(U) Obviously, ministers do not have time to give attention to any but the more costly systems, so we suggest that the list of projects be kept to a manageable level. This list could be limited to those projects having estimated R&D costs of $250 million or more, or estimated production costs in excess of one billion dollars. A specific nation or consortium of nations should be designated as manager for each project selected, and program management procedures similar to the DOD process for making decisions on acquisition of major defense systems should be implemented.

(U) The fourth essential part of any viable standardization and coproduction program must be the creation of a NATO agency to manage it. The allies must face the fact that this process will never get adequately squared away via the cumbersome NATO committee structure, which works only by fits and starts. Full-time machinery is needed to catalogue all components worth standardizing, to contract for coproduction where indicated, and constantly to inspect and monitor conformance. Since NAMSA has already been involved in doing some of this on specific projects, it might be desirable to expand its functions along these lines as an interim measure. But over the longer term, more will be needed than an expanded NAMSA. One knowledgeable expert has suggested that what is needed eventually is a full-fledged NATO Material Command under military auspices to procure common equipment and munitions.

(U) Lastly, if the U.S. is really to put its money where its mouth is, a major DOD management effort is required to force the services to consider allied equipment, to educate the Congress on the potential gains,

and to get such restrictive legislation as the Buy American Act waived for defense items. If the U.S. wants to go beyond fine words by successive secretaries of defense, words that are rarely followed through by the DOD bureaucracy, some institutional changes are needed. In particular, it stands to reason that DDRE, which controls the U.S. R&D program and which is understandably protective of U.S. designs, cannot be allowed to dominate within DOD. After years of this setup, many experienced bureaucrats have told us that some other element in the Pentagon must be tasked to follow up energetically on SecDef's promises to buy European, if any results are to be achieved.

(U) DOD and our services are going to have to get more involved in NATO logistics, if real progress is to be made. We cannot wait until decisions are about to be made and then bring in high-level support in an attempt to sell American or create a cooperative program. More work is going to have to be done on a day-to-day basis, and there needs to be greater contact between professional staffs of NATO nations. To illustrate this point, a recent report by the Senate Armed Services Committee noted an anomaly that they could not understand. The DDRE office responsible for international cooperative research and development had seven professional staff members in 1963, but had dropped to only three in 1973. The anomaly as they saw it was that on the one hand, the Department of Defense has been arguing greater emphasis in cooperative research and development, while at the same time reducing the staff available to support an expanded effort. If they had looked a little further, they would have discovered yet another anomaly in DOD. The staff within ASD Installation and Logistics responsible for international programs has undergone more severe reductions and now also consists of a three-man professional staff with one secretary. We do not see how a staff of that size can foster cooperative logistic actions or hope to maintain cognizance over the multitude of NATO agencies and boards involved in logistic functions.

G. A BROADER SOLUTION -- THE CALLAGHAN APPROACH

(U) Up to this point our approach has been quite incremental and has focused principally on concrete suggestions. We frankly doubt,

however, that they are sufficient unto the need. If the resource bind is likely to be as tight as we suggest in Chapter I, a much bolder approach to restructuring the whole North Atlantic defense market would be indispensable to getting the most from rationalization.

(U) The most imaginative program we have seen to this end is T. A. Callaghan, Jr.'s proposal for a grand political trade-off: American technological burden sharing in return for European financial burden sharing. He proposes that Europe agree:

> (1) To establish an institution within the North Atlantic Alliance (provisionally called the European Defense Procurement Agency), which would permit Europe to plan, finance, and manage bilateral, nonduplicative, multiannual, multi-project defense research, development, production and support programs with the United States.
>
> (2) To offset America's troop deployment foreign exchange costs through the savings Europe will realize in system acquisition and support practices.
>
> (3) To maintain European defense expenditures at current levels for as long as there is a substantial imbalance in American and European defense budgets, or until lower levels are mutually agreed.*

(U) In return, he would have the U.S. propose, with full Congressional approval, a three-pronged initiative: (1) a North Atlantic common defense market; (2) cooperation in civil as well as military technology; and (3) open government procurement on the part of all allies. To generate the necessary pressure to make the defense common market work, he would seek U.S./European agreement to: (1) an initial three-year goal of $2 billion of defense procurement from Europe and the U.S.; (2) a three-year goal for harmonizing all basic defense research; (3) an initial three-year goal of $4 billion in complementary development projects under way in Europe and America, respectively; (4) a four-year goal of common logistic support for all common weapons and equipment; and (5) an ultimate goal of achieving complete military-industrial interdependence in the

*(U) Callaghan, op. cit., pp. 7-8.

development, production, and support of general purpose forces within twelve years. What all this means is that nations would specialize in providing and supporting the equipment they are best able to make. Attendant benefits would be long production runs and economies of scale with lower unit costs. Moreover, this would in turn permit real savings in support.*

(U) This grand design for a transatlantic defense bargain has many appealing features. We suspect that the U.S., with its current dominance in defense markets, and many non-NATO needs, would be the slowest to accept it. But in our view, it may well be just this sort of bold initiative that is needed to lift the issue to the level where statesmanship can operate.

(U) In summary, success in standardization will require a simultaneous three-pronged effort:

1. A quick-fix program aimed primarily at compatibility and interoperability, such as interchangeable ammunition and identical communications frequencies. This has the biggest short-term payoff to increasing military effectiveness.
2. An incremental approach to the development of common hardware by promoting the standardization of a few key systems still in the development stage with the intention to build on success in ever-widening circles.
3. A revamping of the management procedures and policies associated with standardization. These three efforts must be initiated simultaneously if private industry, defense ministries, and national parliaments are to be mobilized to reverse the present trend toward destandardization. Making equipment interoperable would get the military lined up, an incremental approach to development of common hardware would help counter industry resistance, and improving management would discipline bureaucratic procedures.

*(U) Ibid., pp. 8-10.

VII. MODERNIZING NATO'S MULTILATERAL STRUCTURE

(U) NATO's own elaborate and cumbersome machinery and procedures are themselves significant obstacles to rationalization. Instead of facilitating, they all too often seem in practice to impede evolution toward a more rational collective defense. The additional layer of complex multinational machinery, superimposed on existing national defense structures, is itself frequently an obstacle to timely adaptation to changing circumstances. And this machinery has naturally tended to become more complex and diffuse over time. New committees, offices, and boards have proliferated, while few have ever been abolished. A recent FRG survey indicated that the FRG alone served on over 300 committees, working groups, and task forces.*

(S) NATO's multilateral military command structure in particular numbers no less than about 65 definable headquarters, staffed by some 20,000 people, and funded by a military budget of about $120 million. Moreover, this is only the tip of the iceberg: To it should be added the national services, facilities, support staffs, and communications that support NATO headquarters. The communications bill alone (including prorated investment costs) would probably exceed the official budget cited above. All this has led to recurrent criticism, and even led the MC to mandate a 5 percent reduction in NATO headquarters staffing by the end of 1974.** More such criticism is inevitable, given the growing resource bind.

(U) But the size and cost of NATO's multilateral military structure are not the real issues; indeed they seem reasonably modest for Alliance forces totaling well over a million active personnel and deployed over such a wide geographic area. Nor does the number of general and flag officers seem excessive, if one bears in mind that this structure's

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*(S) This led FRG Defense Minister Leber to propose shrewdly that his colleagues agree not to set up any new body without abolishing an old one.

**(U) Even the very favorable Randall Committee report, *The American Commitment to NATO*, HASC No. 92-64, August 17, 1972, expressed concern at the high percentage of personnel in headquarters and the appearance of inflated rank structure.

primary purpose is to assume immediate command of greatly expanded wartime forces.* Such a structure cannot be created full blown on M-Day, but must be available, staffed, functioning, and extensively exercised in peacetime. Hence it is oversimplistic to criticize the peacetime NATO command structure as fat and overstaffed without taking into account its predominantly wartime role.

(U) It is equally important to recognize that *the Alliance structure is shaped as much by political imperatives as by defense considerations*. This is inherent in the very nature of any alliance of 15 sovereign and disparate national entities. The elaborateness and awkwardness of NATO's machinery arises largely from the fact that it must accommodate the special political requirements of all the allies, and reflect a painfully developed multinational consensus. Each contributor of forces must be given a share of headquarters slots and command lines must be drawn with an eye to national preferences. As often as not, political sensitivities have directly influenced staff composition, the rank and nationality of commanders, and the location of headquarters.

(U) But these political facts of life are also the nub of the problem. For the real dilemma NATO faces is whether its multilateral organs, insofar as they serve not just symbolic purposes, can in fact contribute as much as they should to a more cost-effective collective defense. If their record has not been terribly impressive to date (see pp. 7-13), the prime fault lies less in their own excessive size or lack of initiative than in the handicaps imposed on them by NATO's very nature as a loose coalition of allies motivated more by national particularism than the needs of collective defense (see pp. 9-10). The weaknesses of NATO as a collective defense organization are faithfully reflected in its peacetime decision and command structure.

(U) In short, what is wrong with NATO's machinery is not its size and complexity but its lack of comparable influence. Indeed, *the very*

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*(U) The particularly large number of American senior officers holding NATO commands also reflects more than the fact that the U.S. is the largest ally. Our allies have generally found it easier to have American commanders than to agree on one of their own. They are also acutely conscious that U.S. officers would have more influence on Washington when nuclear responses were under consideration.

elaborateness of NATO's machinery tends to mask its central weakness -- its lack of sufficient clout to influence national policies and programs more effectively. This is nowhere more evident than in its repeated inability to impose priorities on national programs; in Chapter I we cited the ability to impose such priorities as one of NATO's most pressing needs. It is also painfully evident in the NATO machinery's inability to achieve much standardization, compatibility, or even harmonization of national defense contributions.

(U) Moreover, such authority as NATO's combined organs once had tended to erode over the years. When the NAC decided in December 1950 that an integrated force should be constituted under the supreme command of an American officer, President Truman nominated General Eisenhower, with the understanding that he would have the authority to train the national units assigned to his command and to organize them into an effective integrated force.* But this enormous step forward was never really carried out in practice. SHAPE was created in 1951, SACLANT in January 1952, and Channel Command a month later. Since then NATO headquarters have proliferated, while their influence has tended to decline. To oversimplify, as NATO's structure has grown its influence appears to have waned.

(U) Nor can one take much comfort in [illegible], however circumscribed the NATO command structure's peacetime influence, all this will change overnight when it assumes the wartime role for which it was primarily designed. Can a command structure that is so often ignored in peacetime suddenly assume credible authority in war? We doubt it. In any case, as repeatedly suggested elsewhere in this study, unless common or at least compatible logistics, tactics, doctrine, communications, and the like are fully planned, developed, and exercised in peacetime, how cohesively can NATO's national forces be expected to fight in wartime?

(S) While there is undoubtedly some overstaffing and redundancy in NATO's command structure, these are insignificant compared to a much larger source of duplication and redundancy — *the overlap between NATO and national command structures.* The cost in duplicatory C^3 facilities

*(U) Lord Ismay, *NATO: The First Five Years, 1949-1954*, Bosch-Utrecht, Amsterdam [no date].

alone is horrendous (see pp. 318-319). For example, the U.S. has a completely separate command structure for all its forces in NATO, and our impression is that U.S. national commanders in Europe are overwhelmingly preoccupied with their national roles, often as if NATO did not exist. Only the FRG, for obvious reasons, opted not to have its own parallel national command structure, but this too is gradually changing faute de mieux. The most rationalized NATO command arrangements are those where one nation provides such an overwhelming preponderance of the forces that it essentially staffs the NATO headquarters as an offshoot of its own, with a small allied augmentation (SACLANT and CINCCHAN are cases in point). Similarly, the most promising examples of command structure rationalization are the existing colocation and quasicombining of headquarters USAFE with 4 ATAF and NORTHAG with 2 ATAF. Even if the savings proved minor, the increase in operational effectiveness is far more important, especially in terms of transition from peace to war. Locating peacetime headquarters in hardened wartime facilities is also advantageous, as is being done at least temporarily with the new AAFCE (see p. 294).

(U) An equally strong case can be made that NATO's cumbersome planning and decisionmaking processes and its complex alert system and mobilization procedures are serious impediments to an optimum collective deterrent/defense posture. We dealt with some of these problems in Chapter I, particularly the lack of effective machinery for deciding on priorities, and then pressing them on individual allies. Again, the tendency of most allies to go their own way is the core problem. For example, each nation's insistence on deciding for itself how and when it will proceed to mobilize renders NATO's alert system a near empty farce (see pp. 327-329).

A. AVENUES TO RATIONALIZATION

(U) NATO's own cumbersome and feeble machinery and procedures are prime candidates for rationalization. Any organizational structure that is for the most part over 20 years old needs review and possible overhaul. And at a time of severe resource constraints, any savings that could be

gleaned would certainly be welcome. But the overriding need is not so much to generate savings for trade-off, which would be modest in any case, as to strengthen the necessary central role of NATO's machinery in rationalizing NATO's defense posture as a whole. To this end we urge strengthening NATO's common institutions, rather than further weakening them (though some streamlining might help rather than hurt). The aim would be to increase the institutional ability of the NATO structure to help weld allied national forces into a more effective collective defense. For we are convinced that a vigorous assault by NATO's combined organs on national particularism is essential to getting any large-scale rationalization program off the ground.

(U) It is well to recognize at the outset that such political facts of life will be difficult to alter. Differences in national outlooks, priorities, structures, even sheer geographic dispersion simply dictate that NATO is unlikely to achieve the same degree of institutional cohesion or centralized direction as the Soviet-dominated Warsaw Pact. Nor should it be forgotten that being flexible enough to accommodate a high degree of diversity is one of NATO's strengths as well as weaknesses.

(U) Thus, though our argument may seem logically to call for full defense integration, we recognize this is politically impracticable in the foreseeable future. Hence the measures we suggest in the remainder of this chapter are all incremental. Furthermore, we recognize that modest changes in procedures and command arrangements are no panacea. Of and by themselves, they cannot change long-standing habits. But they *can* help force new patterns of thinking to the fore. Our numerous suggestions also are meant to be merely suggestive of directions that might be explored. We are the first to admit that we don't have all the answers on so complex a field as NATO command arrangements and procedures, where political sensitivities bulk so large.

(U) Another daficiency in our report is our inability to assess the hidden costs associated with the various headquarters. There are U.S. units that exist wholly or partially for the support of U.S. personnel (and their dependents) assigned to various NATO headquarters. *This support includes necessary elements*, such as U.S. unilateral communication

links, with attendant cryptographic personnel, aircraft and vehicle support, administrative staffs, and life support functions, including dispensaries, dining halls, exchanges, and clubs. Although we agree with their necessity, we feel their costs in dollars and in manpower need to be known in order to assess the real costs of any given NATO headquarters.* For example, what are the real U.S. support costs associated with LANDSOUTHEAST and 6 ATAF in Izmir?

(U) Another major factor to be considered is the need to determine *now* what the ACE command structure should be in the late 1970s. The final costs of the NATO Integrated Communication System (NICS) cannot be firmly established now for many reasons, *but the number and location of the headquarters it must service will have a major impact on a system that will run to a cost of at least $500 million.* This alone should cause the Alliance's political authorities to push for a revamping and streamlining of ACE command arrangements.

(U) What is needed more than anything else at this point is for NATO and national staffs to stop thinking so much in national terms and start thinking more in NATO terms. As noted in Chapter I, this will only recognize an existing fact of life — that insofar as defense of Western Europe is concerned, the NATO allies are already interdependent. For example, we think that one of the healthiest developments along this line would be to give more peacetime planning and operational authority to NATO commands at the expense of national commands. This would tend to force commanders to think NATO. It could also generate the largest savings by reducing the overlap and duplication between NATO and national commands. This is particularly true in the case of the U.S. (see p. 293).

(U) However, we advance the ideas in this chapter without much hope that they will have more than educational value. We are painfully aware that it will not be easy to reverse the existing trend toward weakening NATO's combined institutions. And financial stringency may make it even harder, rather than easier, to get individual allies to yield more authority to NATO's central organs. But the issue needs to be faced. It might be well if a high-level civilian-led task force were appointed to

*(S) Nor have we addressed the added costs entailed in the need for separate mobile or hardened static war headquarters. These can be sizable indeed.

go thoroughly into the problem — one appointed by and responsible only to the Secretary General — in order to diminish the influence of national particularism and bureaucratic inertia.

B. REVAMPING NATO'S CIVIL STRUCTURE

(U) The civil side of NATO's superstructure, mostly located in Brussels, reflects the coalition nature of the Alliance. The North Atlantic Council presides over a diffuse complex of no less than 18 major committees (see Fig. 1 on p. 283), served by an International Staff (IS) of 1127 authorized spaces for 1975 (see Fig. 2, p. 284). The civil budget is about $40 million, of which the U.S. contributes 24.2 percent. But the leadership role allowed the Secretary General and the IS is naturally circumscribed by the need to secure consensus, even on relatively minor issues, from the participating allies. This process is also very time-consuming, though, as suggested earlier, it is largely inherent in the nature of the Alliance.

(U) Within these built-in limits, however, we think it possible to strengthen their role in rationalizing NATO's defense posture. For example, the NATO bureaucracy should be encouraged, and even given more authority, independently to initiate studies and to critique national programs. To this end, it should also be given greater access to national costs and other data. The guiding principle should be to strengthen NATO's central organ vis-à-vis national staffs.

(U) Second, the rather small IS has become increasingly stretched by the growing diffuseness of NATO's activities over the years. While the North Atlantic Council has served as a very useful forum for political consultation, the expansion of NATO's role into a variety of scientific, economic, social, environmental, and even cultural fields has not been terribly successful, while entailing some inevitable distraction from NATO's focus on its central purpose. Moreover, other international bodies have grown up to handle such issues. Hence NATO might go back to first principles and concentrate more on the common defense itself.

(U) To this end, those committees dealing with peripheral issues might well be phased out, or sloughed off to some other international body, in favor of reallocating effort and manpower to key NATO functions.

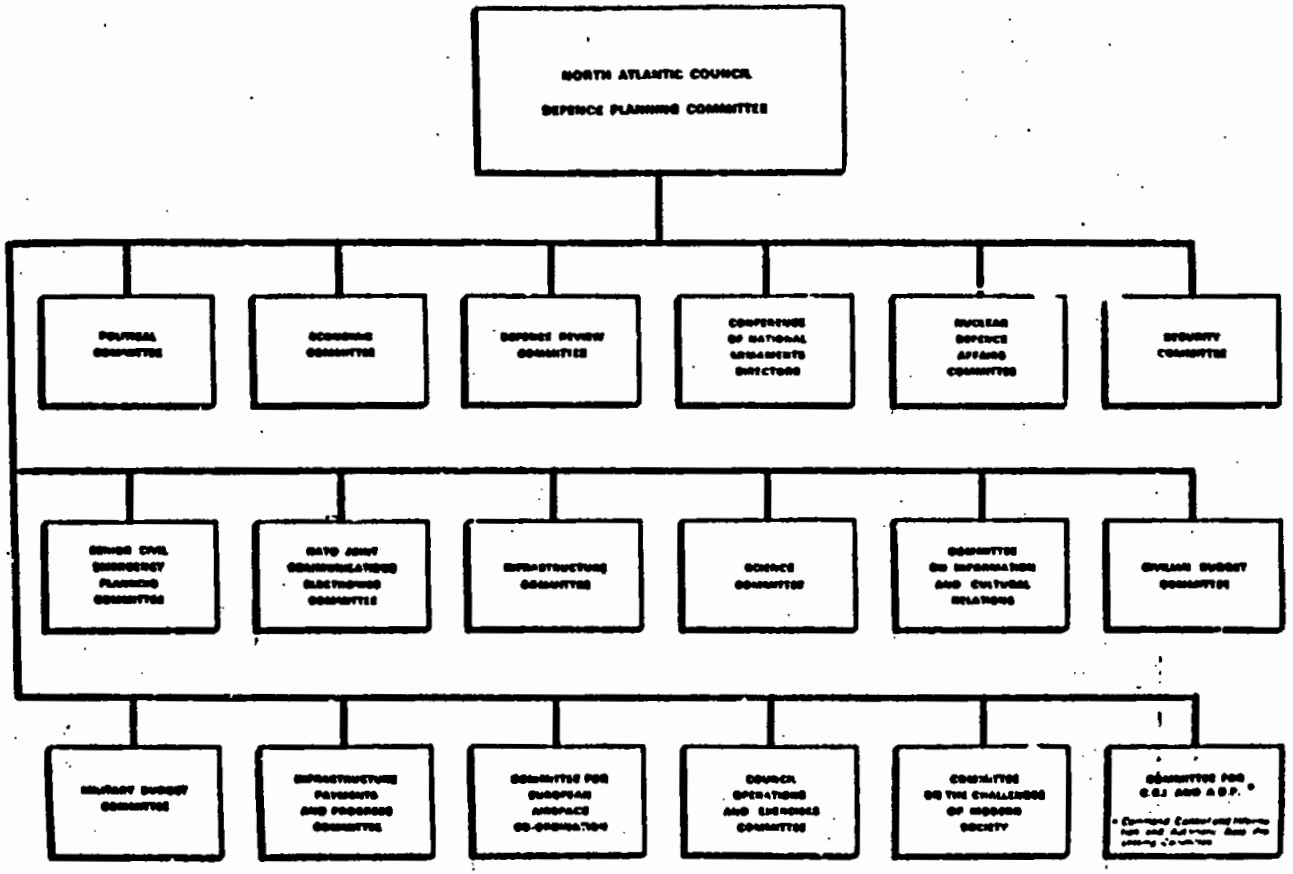

Fig. 1 — Principal committees of the North Atlantic Council

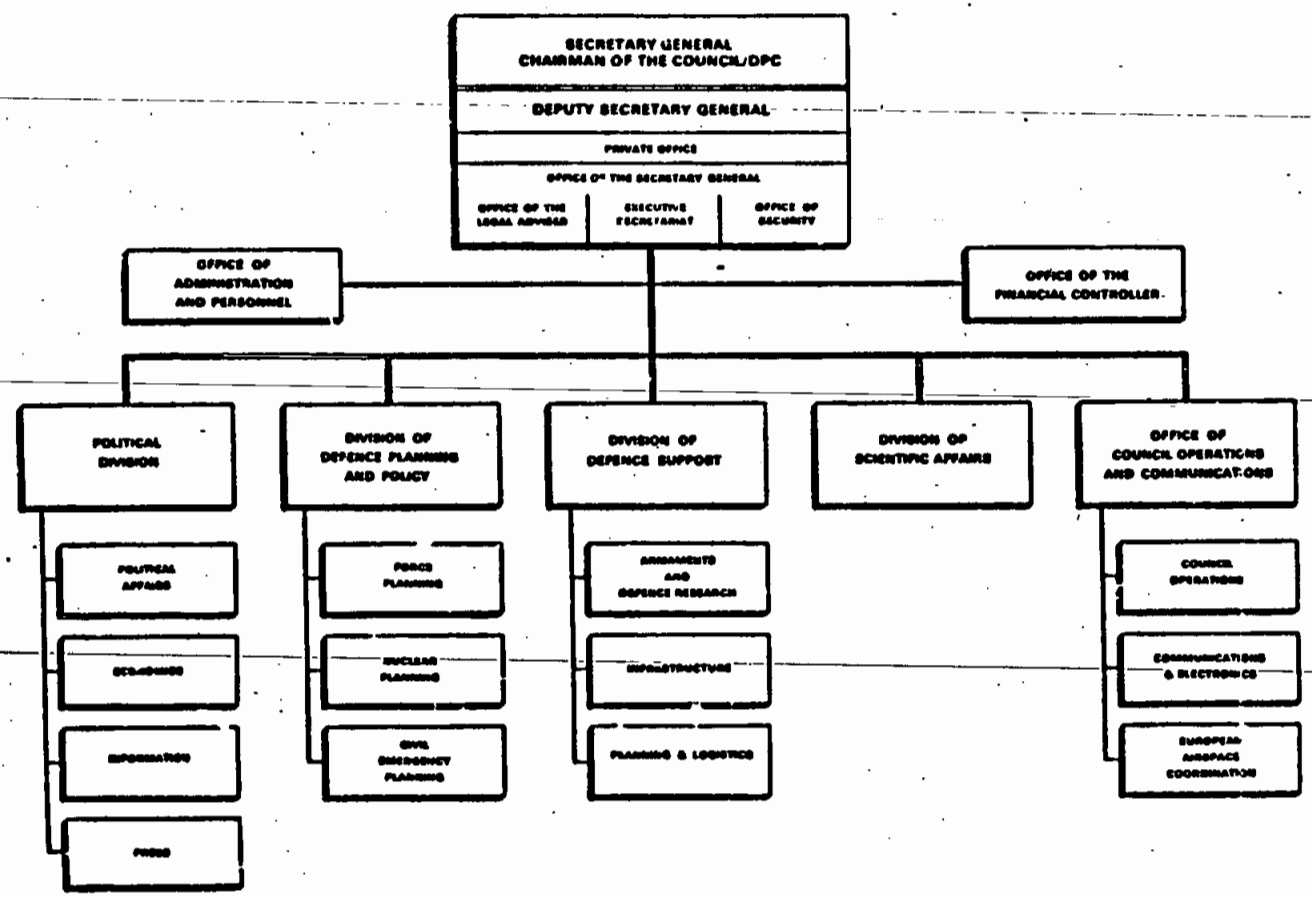

Fig. 2 — NATO International Staff (IS)

Obvious examples are the committees on Information and Cultural Relations and on the Challenges of Modern Society. We also wonder whether scientific matters can be suitably dealt with in NATO until they reach the point of R&D when they logically come under the purview of other NATO organs.

(U) On the other hand, certain NATO civil bodies and functions need strengthening if the Brussels bureaucracy is to assume more of a leadership role in achieving effective collective defense. The Defense Planning and Policy Division of the IS is clearly too lean to do full justice to its crucial functions: it probably could profitably be doubled in size. And as we stressed in Chapter I (pp. 33-39), the IS badly needs a strong analysis and costing shop to provide the indispensable data base for rationalization measures. Perhaps the SHAPE Technical Center should be strengthened along these lines and made responsible to the IS instead. The ASYG for Defense Support and the IS division under him also seem grievously overburdened with the task of energizing and monitoring not only the whole R&D, standardization, and common procurement problem, but overseeing the myriad NATO consumer logistics bodies as well. As a result, the latter functions have been neglected. Hence we proposed in Chapter V a new ASYG for Logistics and a Logistics Division (see p. 230). A case could also be made for having a small long-range planning office directly under the Secretary General, perhaps headed by a leading outside scholar who would be changed every two years or so.

(C) Much more attention also needs to be paid to NATO's network of civil planning agencies and their shadow NATO Civil Wartime Agencies (NCWAs), which operate under the aegis of the Senior Civil Emergency Planning Committee. Since 1967 these agencies have gradually shifted their focus from primary concern with postnuclear recovery to support in a conventional conflict. Now it is time for them to focus on what needs to be done in the crucial premobilization period, before the formal NATO alert system comes into effect. A big problem here is getting more commonality into the national emergency legislation of the NATO allies. All this is directly relevant to greater initial NATO military reliance on civil assets, as well as to the concept of more flexible employment of NATO forces.

(U) While interminable haggling over NATO's small civil budget and IS spaces has all too often been the rule, if the allies are serious about making NATO more effective, they must be brought to realize that even doubled civil budget costs would still be minuscule compared to the potential results. If worst came to worst, trade-offs could be employed here too, and old slots abolished to make room for new ones. Another alternative would be to diminish the size of the often bloated national delegations at Brussels in favor of a stronger IS. Taken together, these delegations are already larger than the IS itself. The guiding principle should be to strengthen NATO's central organs, if necessary, at the expense of national ones.

C. REMODELING THE MILITARY COMMITTEE

(U) NATO's highest military body, the Military Committee (MC), epitomizes the dilemmas inherent in getting unified military advice to the ministers from essentially a committee representing national chiefs of staff (except when it meets at chief of staff level, it is composed of their senior representatives in continuous session). As such it has proven institutionally unable to provide military advice other than that acceptable to national military staffs. It is their prisoner rather than an independent voice. Only the chairman, who is rotated among the major European allies, is occasionally allowed to offer his personal views. Institutionally, SACEUR or SACLANT have considerably more influence and authority.

(U) From 1949 to 1966, the U.S./British/French Standing Group in Washington dominated the MC. But France's withdrawal, plus the need to accommodate the growing role of the FRG in particular, led to the abolition of the Standing Group in favor of the considerably less powerful MC. About 30 general or flag officers are assigned to the MC, or to the International Military Staff (IMS), which serves it. The IMS, which numbers about 200 in all, was created in 1967 to replace the smaller Standing Group staff. But it is similarly condemned to sterile exercise of consensus politics.

(U) Thus the problem confronting the Secretary General and the NATO ministers is that they really have no consistent source of

independent military advice. What they do get from the MC and IMS has generally been tailored to achieve unanimity; it is almost a foregone conclusion that any MC member has been instructed by the national staff that he represents. Moreover, it must be recognized that the MC and the small IMS cannot possibly have the expertise to develop positions on NATO defense without relying heavily on inputs and technical advice from national staff.

(U) The MC has recently come under justified criticism by a young American officer who served on the deputy chairman's staff. He argues that the MC "should either be radically reorganized or disbanded." He sees the MC as needing to play a key role in rationalizing NATO's defense posture, for example, in such areas as common tactical doctrine.* But he accuses the MC and IMS of failing to "exercise forceful leadership, especially where controversial matters are concerned, usually achieving a modicum of agreement only through ambiguous wording."** In effect, he sees it as having become little more than a "transmission mechanism." Rather than berating an overstaffed MC and IMS for not doing what they really cannot do because of the rule of unanimity, Partlow urges severely pruning the IMS, and drawing on national staffs present in Brussels for ad hoc groups to do many of its functions. He points out that most national delegations to the MC already contain officers performing functions roughly equivalent to those on the IMS, and numbering in all about as many as the IMS. Beyond these are numerous officers in the defense adviser sections of the major national diplomatic delegations.*** Therefore, he would merge the MC fully into the NAC committee structure and replace the IMS with a much smaller civil/military staff reporting directly to the chairman. Finally, he would upgrade the post of SACEUR's representative to the MC by giving the deputy SACEUR this added function.

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*(U) Major F. A. Partlow, Jr., "Deterrence in NATO -- The Role of the Military Committee," *USACGSC Review*, December 1974, p. 6; idem, "The NATO Military Committee and the International Military Staff: Some Rationale and a Proposal for Reorganization," *RUSI Journal*, September 1974, pp. 29-38.

**(U) Partlow, *RUSI Journal*.

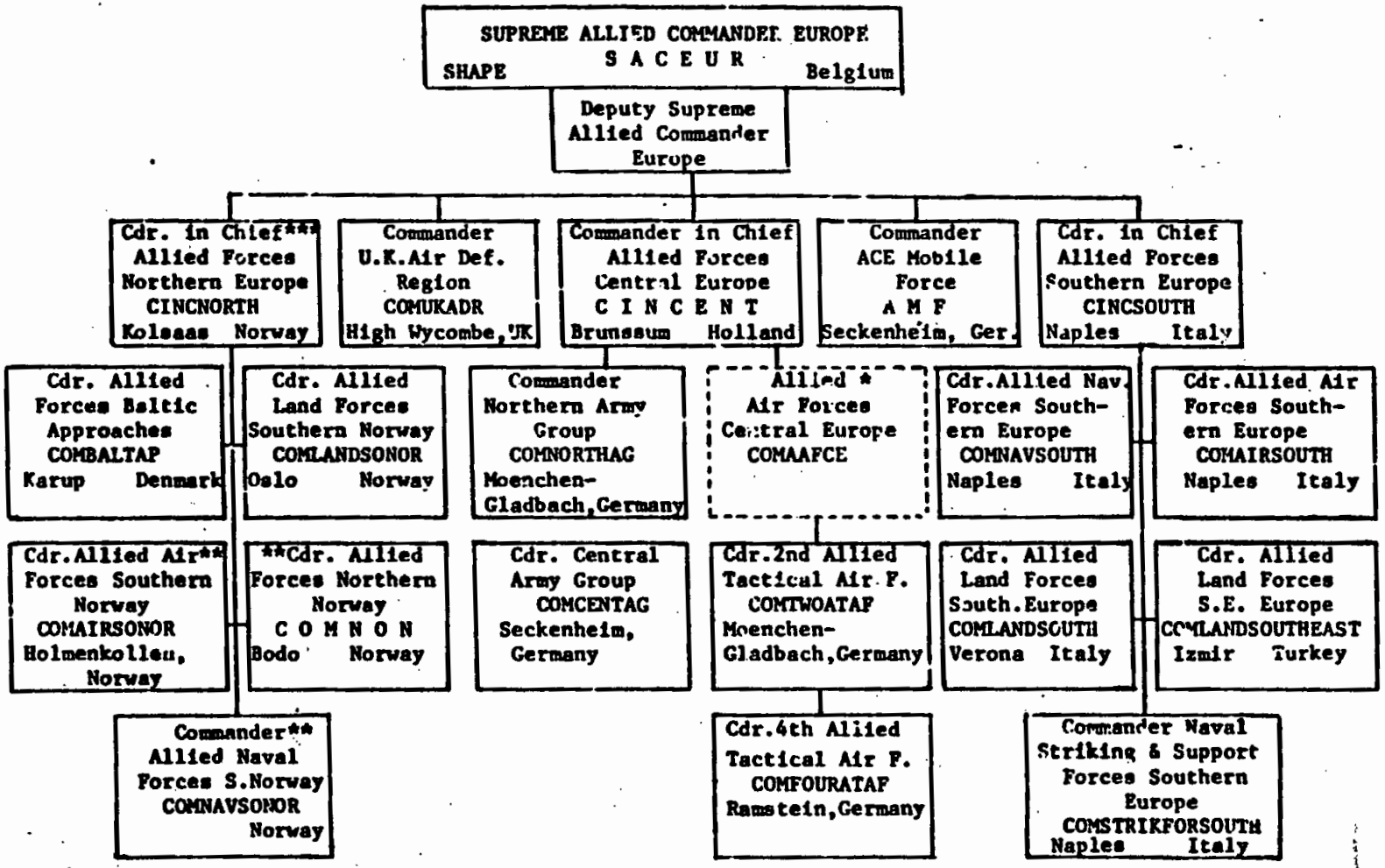
***(U) The U.S. has by far the most duplicatory staffing pattern, so Partlow suggests (as have many others) merging the U.S. MC representation into the U.S. Mission to NATO.

(U) The chief difficulty with Partlow's proposals is that they would even further downgrade NATO's central military organ and further strengthen national roles. We would favor strengthening the MC instead of weakening it by: (1) increasing the powers of the MC chairman, giving him the right and obligation to offer independent military advice; (2) putting the IMS directly under the chairman as his staff for the purpose — it is not at present; (3) requiring the MC to be responsive to ministerial guidance regardless of national positions. Partlow's idea of co-opting national MC delegations to serve on IMS task groups makes sense too. The guiding principle would be to enhance the role of the chairman and his staff.

(U) A more far-reaching suggestion, which would generate substantial savings, would be to remove a whole layer of NATO structure by: (1) abolishing the Military Committee as redundant and reverting to a chiefs of staff committee, which would meet periodically just before the ministers do; (2) converting the post of chairman of the MC into that of senior military adviser to the Secretary General and DPC, with a small staff (he would also chair the COS Committee when it met); (3) alternatively, making SACEUR and SACLANT the senior military advisers to the ministers — each could have a small staff under a three-star officer at Brussels; and (4) delegating more of SHAPE's planning and operational functions to AFNORTH, AFCENT, and AFSOUTH so it could concentrate on policy and programming (see p. 296). Such a radical change would do much to strengthen SACEUR and SACLANT, while removing a body (the MC) most critics regard as only a pale reflection of the national chiefs of staff anyway. This also would remove any need for high-level national delegations to the MC, on top of the national military representatives at SHAPE and SACLANT.

D. RATIONALIZING ALLIED COMMAND EUROPE

(U) Inasmuch as the far-flung Allied Command Europe under SACEUR is by far the most extensive multinational headquarters system in NATO (see Fig. 3), it is the only one big enough to offer significant savings



*Under formation.

**National Command in peacetime, Allied Command in wartime.

***CINCNORTH - Directly commands all the Air Defense forces.

Fig. 3 -- ACE command structure today

1. Rationalizing the U.S. Contribution to Headquarters in Europe

(U) The U.S. is not only the largest contributor to NATO headquarters, but maintains a large parallel but separate national command structure in Europe. Since their size has come under increasing domestic criticism, we focus first on this issue. While we furnish only around 27 percent of ACE's peacetime establishment, this includes a rather higher percentage of true staff positions, as the following table suggests. It also illustrates that with few exceptions the percentage of U.S. military personnel assigned to support functions is below the average of our allies.

Percentage of National Contributions to ACE for:

	Staff	Signals	Support
Belgium	25	39	36
Canada	59	38	3
Denmark	52	35	13
Germany	23	59	18
Greece	43	47	10
Italy	27	42	31
Netherlands	26	42	32
Norway	22	47	31
Portugal	0	100	0
United Kingdom	32	49	18
United States	33	52	15

NOTE: Figures rounded to nearest percentage. Luxembourg is omitted from the table.

The U.S. contribution hardly seems excessive, and even sharp cuts would not produce very large savings for trade-off. Moreover, the utility of a U.S. military presence in NATO headquarters should not be ignored. As noted by John Newhouse: "After more than two decades of experience, NATO has become a society whose members instinctively look to the strongest amongst them for direction. The European governments would rather coordinate defense arrangements with Washington than with each other."* In many instances, it is the U.S. element in a NATO headquarters that acts as a catalyst to induce desired actions. The U.S.

*(U) John Newhouse, *U.S. Troops in Europe: Issues, Costs, and Choices*, Brookings Institution, Washington, D.C., 1971, p. 100.

presence also affords channels of communications that have proven useful in times of tension, when normal diplomatic channels have not been successful. For these and other reasons the Nixon administration held in abeyance a REDCOSTE recommendation for an overall 15 percent reduction in U.S. personnel.

(U) If further U.S. cuts become politically imperative, we doubt that an additional 5 percent cut in the U.S. contribution would critically impair ACE's capability to perform its mission. The net cut would only be about 450 spaces. Secretary Laird twice challenged NATO's military authorities to streamline their support and headquarters structure in a manner similar to actions taken by the United States (Project Fender, for example), and the Military Committee's action in directing a 5 percent reduction was a partial response. ACE also felt able to dip into its own resources in recent years to produce spaces for the NICS Management Agency, the NATO Programming Center, and SACLANT's IBERLANT Command near Lisbon. On the other hand, this is a rather arbitrary solution and one that does not necessarily improve NATO's combat capability — nor will it materially reduce costs. We'd find it more attractive if the resources saved were specifically earmarked for such improvements as helping staff a new NATO cost facility (p. 33) and a new AFCENT LOC Command (pp. 216-217), or allotted to the new AAFCE (pp. 83-84). In the Southern Region it might be possible to gain agreement that the personnel and monies saved be used to speed the activation of the Standing Naval Force Mediterranean, or to increase maritime patrol activities under Headquarters Maritime Air Mediterranean (MARAIRMED).

(S) While another small U.S. reduction would not appear to have a critical effect on ACE's command capabilities, much would depend on where the cuts are taken. Most U.S. personnel are assigned to key staff or signal support functions. It is more difficult to assess allied reactions to a unilateral U.S. reduction. There would doubtless be vibrations unless such an action was carefully explained and phased so as not to suddenly leave vacancies in critical posts. The savings realized are also modest at best, which sugrests that operational effectiveness is a better criterion to be followed.

(U) However, *if sizable cuts must be made in U.S. overhead in Europe, we believe they must be found in reducing the overlap between U.S. and NATO headquarters.*[*] This dual structure, with largely separate communications, is what really creates the high overhead cost of the U.S. forces in Europe. There has been much discussion concerning the duplication of U.S. and NATO headquarters and senior commanders and their staffs. This very complexity of command structure could be a potential source of danger in times of crisis and could hinder rather than enhance the rapidity of NATO's response. The Randall report noted that: "When it is remembered that NATO is a community of nations with officers from many different armed forces and with different languages, there is a special requirement for the clearest command lines possible."

(C) One key problem is that the U.S. unilateral command structure in Europe has responsibilities well beyond the NATO area. Unless these are modified, the U.S. military case for unilateral command arrangements, necessary communications, and support personnel is justified. Of course, the U.S. continues to have political interests in areas beyond those recognized by the NATO Treaty or by individual allies within the North Atlantic Alliance. The 1967 and 1973 Arab-Israeli conflicts are excellent examples, and are by no means the only instances when U.S.-only commands in Europe have been called upon to perform in support of U.S. political objectives beyond the scope of their NATO commitment. Until U.S. political authorities relieve our military headquarters in Europe of contingency responsibilities or better delineate these responsibilities, there is a limit as to how far we can go in consolidating headquarters and double-hatting U.S. commanders.

(S) We believe the time has come for the U.S. to bite this bullet.[**] The sharp divergences between us and our allies over Middle East policy make it quite unlikely that any contingency actions could be taken under a NATO umbrella. Use of European facilities is also likely to be even

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[*] (U) Both USAFE and USAREUR have already gone a long way toward reducing and merging subordinate headquarters under them in the last few years.

[**] (S) The proviso in the FY 1976 DPPG that U.S. forces in Europe are to be considered for planning purposes as available only for European contingencies suggests that this bridge is being crossed.

more severely circumscribed than in October 1973. In any case, the bulk of U.S. forces for any plausible Middle East contingency operation would have to come from CONUS. Hence, the cleanest and most sensible way to rationalize the U.S. headquarters structure in Europe would be to shift most unilateral non-NATO contingency missions, especially those outside the NATO area, to other U.S. headquarters. Then the planning and operational functions of EUCOM, USAREUR, USAFE, and NAVEUR could be merged with those of parallel NATO headquarters insofar as possible, and their purely U.S. functions confined to administration.

(U) EUCOM is the most vulnerable of the four major unilateral U.S. headquarters in Europe, because the other three really administer the forces, and EUCOM deals only with joint functions. The existence of such a separate triservice headquarters far removed from SHAPE also has tended to deprive SACEUR (wearing his USCINCEUR hat) of effective control over the U.S. contribution to NATO, while perpetuating the American go-it-alone syndrome. For this reason alone it might be better to shift any U.S. unilateral contingency planning outside Europe to a unified CONUS Command, such as REDCOM, despite the disadvantages, and to move a slimmed down EUCOM next to SHAPE at Casteau. More administrative functions could be delegated to the three service headquarters.

(S) Other options include colocation of USAFE and AAFCE in their hardened war headquarters at Boelfink, which is already planned as at least a temporary measure, and colocating CENTAG and 4 ATAF with USAREUR at Heidelberg, which is being considered by USAREUR and would be a major step forward. If communications as well are consolidated, the present and potential future savings could be substantial. These planned changes also make it difficult to colocate EUCOM at either USAFE or USAREUR, since the latter two are already planning other mergers that make more operational sense.

2. Revising the SHAPE Role

(C) SHAPE is authorized 2868 personnel, of which 313 are civilian. Of the 2455 military positions, the U.S. is allocated 907 spaces or 35 percent (we furnish 34 percent of the staff, 47 percent of signals, and

potential.* Hence, we focus particularly on it and on the U.S. components. Table 8 shows the peacetime headquarters establishment authorized for ACE as of July 1973.

Table 8

ACE PEACETIME HEADQUARTERS
(Authorized July 1973)

	Personnel Authorization			Personnel Authorization	
	All	U.S.		All	U.S.
SHAPE HEADQUARTERS	*2868*	*907*	AFSOUTH	1818	746
AFNORTH	859	149	AIRSOUTH	309	130
BALTAP	247	13	NAVSOUTH	267	18
AIR BALTAP	65	5	Subcommands	82	19
NAV BALTAP	63	4	STRIKEFORSOUTH	69	62
JUTLAND	180	6	LANDSOUTH	469	22
Total	*1414*	*177*	5 ATAF	350	57
AFCENT	2324	491	LS/5-ATAF JSSG	638	42
NORTHAG	2008	0	LANDSOUTHEAST	726	204
CENTAG	2396	1238	6 ATAF	350	109
2 ATAF	1067	0	LSE/6-ATAF JSSG	504	243
4 ATAF	655	296	*Total*	*5782*	*1652*
Total	*8450*	*2025*	ALLIED MOBILE FORCE	*43*	*7*
			Grand Total	*18,557*	*4762*

(C) Only 17,455, or approximately 94 percent, of the authorized personnel slots were manned as of July 1, 1974. Each member nation has assigned over 90 percent of the military personnel allotted to it, except for Turkey and Canada. The Military Committee directed a 5 percent reduction in NATO headquarters by January 1, 1975, including 928 fewer spaces in ACE. But this meant little actual change in overall manning levels, since ACE already had 1102 slots unfilled. We suggest below some additional rationalization measures.

*(U) Since the U.S. Navy bulks so large in ACLANT, Hq SACLANT is primarily a U.S. headquarters with a modest allied augmentation, colocated with U.S. CINCLANT. Its total strength is only 810. Similarly, CINCCHAN is primarily a U.K. headquarters of only 61 people.

24 percent of other support). The U.S. contribution to SHAPE ranks as one of our best investments. It is probably the best source of pure military advice available to NATO's political authorities. Its staff is more international in character and freer from national political and military constraints than the Military Committee and IMS. Each nation does have a National Military Representative (NMR), and nations do of course send political/military inputs through that channel. However, such inputs are not formal positions that must be accepted by the SHAPE staff. SACEUR has authorized access to ministers of defense and chiefs of staff, and is thus often able to find compromises that still meet his objectives.

(U) On the other hand, it is time for the U.S. to recognize the changing image and role of SACEUR. While we have military leaders of demonstrated ability from the Korean and SEA conflicts, we have none that enjoy the same relationship that earlier SACEURs such as General Eisenhower and his successors had during NATO's first 20 years. The days of such father figures are over. Future SACEURs will not enjoy the same political clout when dealing directly with national political and military authorities. This is yet another reason for more forceful ministerial guidance to the NATO military authorities.

(C) Moreover, SACEUR/SHAPE's role has been changed considerably by the MC 14/3 strategy. While SACEUR's responsibility may remain the same, he and SHAPE would have difficulty directly controlling a conventional defense against the WP in three such widely separate geographical areas. SHAPE's tasks of peace and war planning and coordination have multiplied, and it seems overloaded — as reflected in its slow response time on studies requested from it. Plus, we believe that *the detailed planning and execution of a conventional defense must fall increasingly on the major subordinate commanders (MSCs) — AFNORTH, AFCENT, and AFSOUTH.* This truth is often overlooked, as are national contacts with these commands (particularly on the part of the U.S.). In our view, more high-level contacts with the MSCs and more recognition of their role would, in turn, tend to focus their attention on priorities.

Perhaps they should report annually to a meeting of each region's defense ministers. It is even more essential to delegate more operational planning and logistic responsibilities to the MNCs in order to free SHAPE to devote more attention to strategic and policy issues. This is a matter requiring detailed study, but we do not see why it should require significantly more personnel. At present the MSCs seem underemployed, while SHAPE is overloaded. Colocating a slimmed down EUCOM with SHAPE at Casteau (see p. 294) would also help relieve the work load of the U.S. element of SHAPE, which is not able to pull its full weight on NATO matters because it is so preoccupied with purely U.S. business.

3. Allied Forces Northern Europe

(S) AFNORTH is authorized 859 spaces of which 149 or 17 percent are allocated to the United States. When the subordinate commands of BALTAP are included, the total international command structure is authorized 1414 spaces, with only 177 spaces or 12 percent allocated to the United States (see Table 8, p. 290). It is interesting to note that while the AFNORTH headquarters authorization has increased from 811 in 1967 to 859 in 1973, the U.S. authorization has decreased from 199 to 149.

(S) NATO's military organization in the AFNORTH area has carefully adapted itself to political realities. Norway rejected a bid from the Soviet Union to conclude a nonaggression pact in order to join the Atlantic Alliance, but made it clear that she would not allow armed forces of foreign powers to be stationed on Norwegian territory as long as the country had not been attacked or threatened with attack. Norway has held firmly to this position through the years. NATO military authorities have solved the problem by double-hatting Norwegian commanders and designating their peacetime headquarters as coming under allied command in wartime. In the early days of the Alliance there was also an AIRNORTH commander subordinate to AFNORTH, but it was disestablished in the early 1960s. AFNORTH's deputy was designated as an Air Force billet to ensure adequate Air Force representation. Since the total Norwegian aircraft inventory was approximately that of a U.S. Air Force wing, and foreign

forces were barred in peacetime, this was acceptable. Given the political imperatives involved, we see no strong case for modifying the AFNORTH structure. Since U.S. manning has already decreased 24 percent in the past five years, further U.S. reductions seem unnecessary. Because Norway's defense is dependent on outside augmentation, the comparatively modest existing headquarters and communications form an indispensable nucleus for receiving and operating the deploying forces.

4. Allied Forces Central Europe

(S) AFCENT is authorized 2324 personnel (of which 151 are NATO civilian spaces). The U.S. military allocation of 491 spaces (23 percent) is less than the United Kingdom allocation of 631 spaces and Germany's 612 spaces. Since 1967, AFCENT's total authorization has decreased by four spaces, while the U.S. share has decreased by 43. This is surprising because it was in 1956 that NATO adopted the MC 14/3 strategy, with its vastly increased requirements for planning and coordination as well as communications. Part of the stability can probably be attributed to the forced move to Brunssum and the need to pare the staff to fit the facility, and part to U.S. insistence on compensatory reductions in the last few years.

(U) Since CINCCENT must conduct the crucial land/air battle in the Center Region, his authority and capabilities must be strengthened. If NATO forces are to be employed more flexibly, CINCCENT is the one who must so employ them, so he must be given the communications and logistic capabilities to do the job. For this reason, we recommended in Chapter V an AFCENT LOC Command be created under him (pp. 216-217). The creation of AAFCE (see pp. 83-84) to pull together AFCENT's air assets is another notable advance.

5. NORTHAG and 2 ATAF

(U) The Northern Army Group (NORTHAG) and its associated Second Allied Tactical Air Force (2 ATAF) are currently authorized about 1900 and 1000 spaces, respectively. Under British commanders, they control U.K., Dutch, Belgian, and FRG forces. There is no U.S. contingent. We know so little about them that we do not feel qualified to offer any views.

6. Central Army Group

(C) CENTAG is authorized 2396 personnel, of which 22 are NATO civilian spaces. Of the military spaces, the U.S. allocation is 1238, or 52 percent. U.S. personnel are distributed as follows: 12 percent to staff, 80 percent to signal support, and 8 percent to other support. Although the U.S. percentage share is the highest of all NATO headquarters, it must be remembered that only the FRG and Canada also contribute forces, that Canada's contribution is only a token .8 percent, and that the bulk of USAREUR combat forces, as well as the dual-based forces and reserve divisions in CONUS, are assigned or earmarked for CENTAG. Approximately 750 of the 985 U.S. slots currently authorized for CENTAG's signal support resulted from the assignment of USAREUR's mobile communication assets to CENTAG to fill the requirement for a mobile war headquarters. This capability is essential to make it possible for CENTAG to get out in the field when action starts. This has also resulted in significant U.S. savings, inasmuch as part of the costs are now borne by NATO's military budget, rather than funded entirely by the U.S. This is the type of action that simplifies transition from a peace to wartime posture, cleans up command lines, and is an excellent example of rationalization of forces. Now the colocation and partial combining of CENTAG and USAREUR would in our view be a sensible rationalization measure. USAREUR should be confined to being a purely administrative headquarters.

7. Fourth Allied Tactical Air Force

(C) The U.S. also dominates 4 ATAF. Of the 630 authorized military spaces (there are also 25 civilian spaces), the U.S. allocation is 296 or 47 percent, including 43 percent of the staff, 52 percent of signal support, and 42 percent of other support. Though Headquarters USAFE has now been colocated at Ramstein and some integration has taken place, 4 ATAF total manning has increased only 15 spaces, or 2.3 percent, and the U.S. share two spaces, or .6 percent, since 1967. Given the additional planning requirements created by MC 14/3, this is a rather remarkable achievement. The complexity of planning for multiple conventional attacks is far greater than the planning required for a nuclear strike against any given target. Also, 4 ATAF is far ahead of 2 ATAF in its

planning for close air support and in the use of its available resources for a rudimentary tactical air control system; 4 ATAF also has functioned with approximately 400 less personnel than 2 ATAF. To us, this is a firm indication of the advantages gained by the colocation of U.S. and NATO headquarters in terms of manpower, and of the influence U.S. leadership can have on our NATO allies.

(C) For the past two years, the nations contributing air resources to the Center Region have been engaged in a heated debate generated by the U.S. suggestion to reorganize AFCENT's air power (see pp. 89-95). The new air organization will provide a foundation for more effective utilization of available assets. Once it is fully functioning, it may be that both ATAF headquarters could be substantially reduced in size. This might be particularly feasible if the advent of AWACS greatly facilitates centralized C^3 of Center Region air forces.

E. THE SPECIAL COMMAND PROBLEMS OF NATO'S SOUTHERN REGION

(C) Since Southern Region command problems have proved the most complex in NATO, still have not been optimally resolved, and present perhaps the greatest possibilities for rationalization, we cover them separately. The North Atlantic Council's concept of an integrated force has run into many obstacles since 1950, but none more difficult than those encountered in AFSOUTH. Lord Ismay noted that "both the Northern and Central commands were formally established on April 2, 1951, the date SHAPE came into being. The problem of command in the southern area was more difficult to resolve, complicated as it was by the special position of the British naval force, which had for so long wielded control of the Mediterranean." The problem was further complicated by the accession of Greece and Turkey. After two years it was resolved by creation of Headquarters LANDSOUTHEAST (LSE) at Izmir, Turkey, and establishment of Headquarters Allied Forces Mediterranean (AFMED) under a British admiral, with six separate naval subarea commands — one French, one Greek, one Turkish, one Italian, and two British. Times have not changed much. AFMED was disestablished, but NAVSOUTH established, and five of the subarea naval commands are still in existence. NAVSOUTH has been forced to move from Malta to Naples, and naval command arrangements in the Mediterranean again have been under official study for two years without solution.

(U) The current headquarters and command arrangements (see Fig. 4) may fit the difficult political situation in the Southern Region, but we doubt their operational utility. They do not take advantage of the flexibility of NATO's naval and air power in the Mediterranean area (see pp. 84-89). Moreover, since early 1963 the operation of headquarters LANDSOUTHEAST and 6 ATAF in Izmir, Turkey, have been impaired by the Greek-Turkish dispute over Cyprus; there have been long periods without Greek representation in these two headquarters. In our view, the authority of NATO headquarters in the Southern Region ought to be either considerably strengthened (strengthening would entail firm national commitments) or severely pruned on the grounds that they are not able to perform their mission through no fault of their own. Given present tensions over the Middle East and Cyprus, the time is hardly politically propitious to raise such issues, but sooner or later they ought to be faced. Granted that its NATO role in the Mediterranean gives the U.S. access to many bases and facilities. But if these cannot be used in non-NATO contingencies, their value is circumscribed.

1. Allied Forces Southern Europe

(C) AFSOUTH at Naples is authorized 1818 personnel, of which 140 are NATO civilian spaces. Of the military spaces, the U.S. allocation is 746 (45 percent). When AFSOUTH's subordinate commands are included, the total international command structure becomes authorized 5782 spaces, with 1652 spaces (29 percent) allocated to the U.S. This compares with 24 percent in the AFCENT area, where the bulk of U.S. land and air forces are stationed and where most of our CONUS-based land and air forces are committed. Since the U.S. naval commitment to ACE is predominantly in the Mediterranean, one would assume an overriding U.S. Navy representation in AFSOUTH and subordinate commands. However, almost 50 percent of U.S. personnel are assigned to NATO land and air headquarters in the AFSOUTH area.

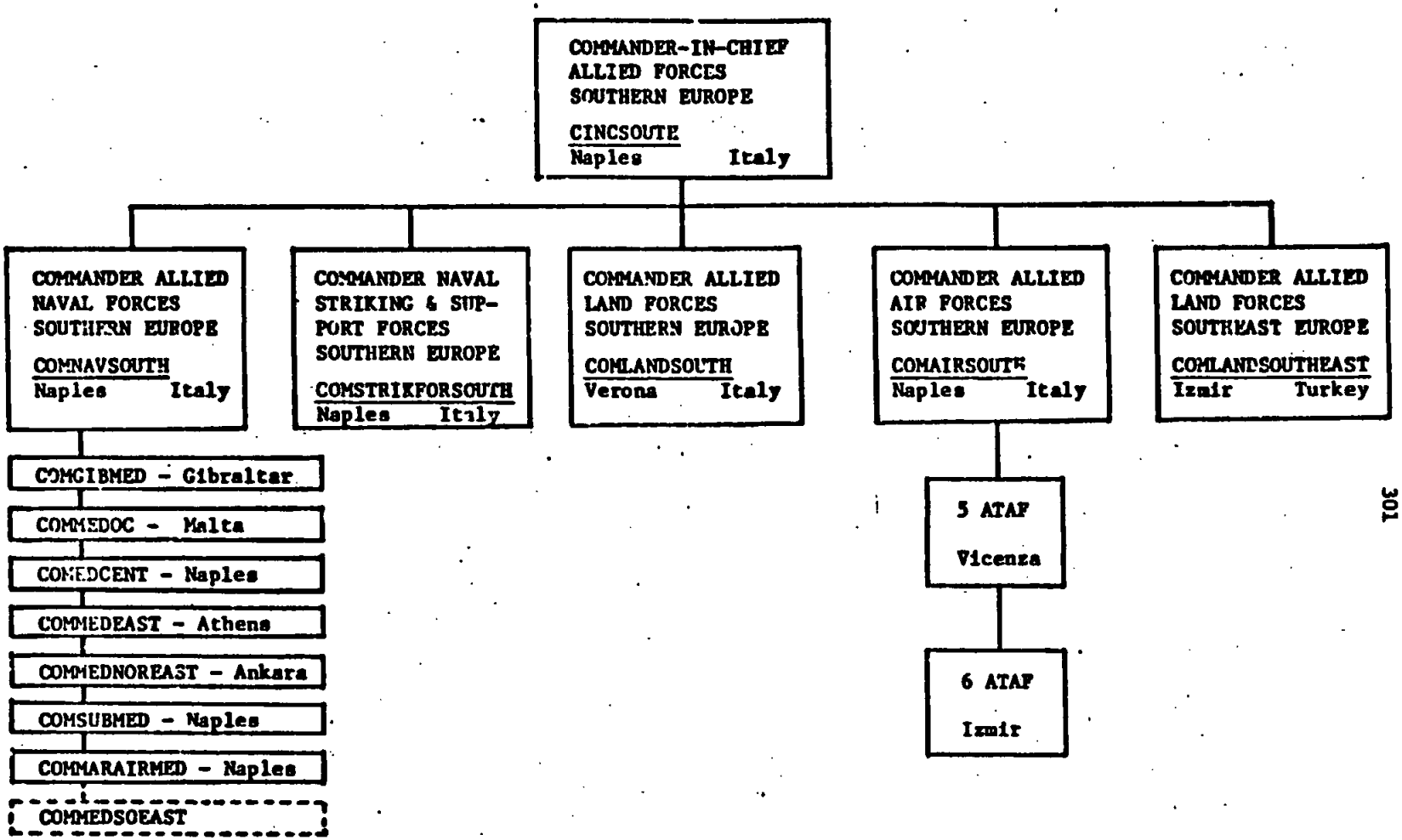

Fig. 4 — Southern Region command organization

2. Should AIRSOUTH Be Abolished?

(C) Headquarters Allied Air Forces Southern Europe (AIRSOUTH) is authorized 309 personnel, with the U.S. share set at 130 spaces, or 42 percent. Its two subordinate commands are 5 ATAF at Vicenza, Italy, and 6 ATAF at Izmir, Turkey. There is as much military justification for centralized control of air resources in the AFSOUTH region as there is in the AFCENT region. The aircraft earmarked for NATO by Italy, Greece, Turkey, Britain, and the U.S. constitute a land-based air capability of over 800 aircraft. While these include F-102s and F-100s and not even all the newer aircraft have an AWX capability, it is a sizable force. However, we see little possibility that centralized control will become a reality in the near term for both practical and political reasons. Communications for centralized command and control are lacking; in fact, we have not yet even solved the interface problems between U.S. land- and sea-based tactical air.* AIRSOUTH does not have the authority to divert air resources from one area to another, and given the political frictions among the allies in the Southern Region, such authority seems unlikely.

(C) SHAPE at one time recommended that Headquarters AIRSOUTH be disestablished (as AIRNORTH was) and that Commander AIRSOUTH become an air deputy to CINCSOUTH, with responsibility for directing air defense operations. This would seem desirable, providing sufficient personnel were shifted from AIRSOUTH to AFSOUTH to provide the necessary air staff personnel. In this case we would further recommend that the air deputy's duties include the air defense of the entire AFSOUTH area and development of an interface between land- and sea-based air. If AIRSOUTH is to be retained, we suggest a rather arbitrary 30 percent reduction of U.S. personnel to reduce the U.S. allocation to 91, or 30 percent of total AIRSOUTH strength. We also question the need for both AIRSOUTH and two ATAFs, but if 6 ATAF at Izmir were abolished (see p. 305) the case for retaining AIRSOUTH would be stronger.

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*(U) The recent decision to dual-hat AIRSOUTH and the Sixteenth Air Force commander is a step in the right direction. At least the command of U.S. air forces in peacetime and wartime is vested in the same man.

3. LANDSOUTH AND 5 ATAF

(U) It is logical for the defense of Italy to be under a NATO ground and parallel air headquarters that are primarily Italian with small allied augmentations. Italy does not have the sea- and airlift necessary to transport significant portions of its land forces to other areas of the Southern Region. The small U.S. Army contingents in Italy are generally in a nuclear support role and organized into units that remain independent of the NATO command arrangements until the U.S. agrees to their release to NATO's operational control. The 22 U.S. personnel assigned to LANDSOUTH should be sufficient for necessary coordination.

(S) The 5 ATAF is authorized 350 personnel, with the U.S. allocation set at 57, or 16 percent. This is more in line with the procedure followed in AFNORTH, where headquarters are basically national with outside augmentation for interface. (The U.S. also furnishes 42 of the 638 spaces allocated to a joint signal support group [JSSG] that furnishes communication support to both LANDSOUTH and 5 ATAF.) However, outside of the U.S. allocation, there are only two other non-Italian spaces — one German, and one Turkish. We'd favor a gradual reduction of U.S. personnel and a gradual increase of Turkish, Greek, and British representation, but the numbers involved are not significant.

4. Revising Command Arrangements for Defense of the Southeast Flank

(S) The command arrangements for the defense of NATO's southeast flank seem less and less practical from today's perspective. By placing U.S. generals in command, there were hopes that an integrated Greek and Turkish defense could be developed against any invader. But despite the theoretical possibility of joint actions in the event of WP attack in Thrace, we seriously doubt that either nation could or would deploy ground forces to defend the other's territory. It is doubtful that either nation would accept the other's forces until the situation had reached a dire emergency. In any case, neither has the wherewithal to transport sizable elements of its forces; both are short of transport even within their own boundaries. Furthermore, without the commitment of substantial U.S. forces to the battle, we doubt that the defense of either Turkey or Greece will

be directed from Izmir. It seems far more likely that direction will flow from their respective General Staffs in Ankara or Athens. The value of LANDSOUTHEAST and 6 ATAF as a planning and coordinating agency for nuclear support is not contested, but we doubt that this requires the number of personnel now assigned. Now the resurgence of Greek-Turkish friction over Cyprus adds such major political questions as to whether they can function effectively in peace or war.

(S) Hence, if NATO must prune headquarters somewhere, we regard the southeast flank as worth a close look. LANDSOUTHEAST now has 726 personnel assigned (204 U.S.). The 6 ATAF is authorized 550 personnel, with the U.S. share 109 spaces, or 20 percent. The U.S. also furnished 243 (48 percent) of the 504 spaces allocated to the LANDSOUTHEAST/6 ATAF JSSG. In 1963, a DOD survey team noted that Headquarters LANDSOUTHEAST was located in a converted hotel in Izmir proper, while Headquarters 6 ATAF was located about ten miles away. Since then, a joint combat operations center has been completed as an underground war headquarters, but peacetime operations are run from the same locations, and all elements get their CE support from the JSSG. The DOD survey team recommended combination and colocation of LSE and 6 ATAF into a joint headquarters under a U.S. lieutenant general. This recommendation was not accepted for a variety of reasons, principal among them the leavening influence the U.S. element had in the Cyprus dispute. But roles and missions also played their role. Instead, the combined strength of LSE and 6 ATAF was increased by 369 spaces, or 26 percent (though the U.S. share went down 23 spaces). The rank of the LSE commander also has been raised to four stars and the 6 ATAF commander to three stars, so that Greek and Turkish commanders would not appear to be working for NATO subordinates.

(S) Since the land or air battle in defense of Greece or Turkey is unlikely to be run from Naples or Izmir, the principal NATO role in a nonnuclear conflict will be confined to planning for and coordinating the introduction of augmentation forces and supplies for Greek and Turkish forces. Virtually all augmentation would be from the United States, but the U.S. contribution is minimal in terms of the Greek and Turkish forces involved (see pp. 315-316). This only reinforces our belief that the

war will be directed from Athens and Ankara rather than Izmir, and suggests that LANDSOUTHEAST and 6 ATAF could be sharply pruned. Therefore, why not revive the 1963 recommendation to establish a Joint Headquarters Allied Forces Southeastern Europe and use the joint resources of LSE and 6 ATAF to man it? At least a *15 percent reduction* should be possible.

In fact, a strong case could be made on purely military grounds for going even further and disestablishing both LANDSOUTHEAST and 6 ATAF, since in all likelihood the Greek and Turkish forces would respond primarily to Athens and Ankara in wartime, and operate independently of each other. Nor are substantial outside-NATO forces likely to be available to the southeast flank in event of a NATO-wide conflict. Thus, the most likely mission of these two headquarters would be reduced to nuclear contingencies. Why should so many personnel be tied up in headquarters that are unlikely to have very much to do in real life? Hence, assigning their command responsibilities directly to AFSOUTH and AIRSOUTH, which could have a small NATO liaison and nuclear command/control element at Greek and Turkish headquarters, would generate substantial savings. However, it is politically a poor time to broach such an alternative while we are trying to keep Greece a full participant in NATO.

5. Reorganizing AFSOUTH Naval Forces

If settling command arrangements in the Southern Region has been a major problem since the beginning of NATO, *its most painful aspect has been command and control arrangements for naval forces.* In the beginning, there was a large U.K. naval presence and major U.K. bases in Cyprus, Malta, and Gibraltar, French interests in North Africa, Greek and Turkish interests in defining national boundaries, and multiple interests concerning commercial traffic through the Suez Canal. These often conflicting interests were solved by dividing the Mediterranean into spheres of influence — Britain got the Gibraltar command, France got the area between its southern shore and its African colonies, Greece, Italy, and Turkey each got the areas around their national boundaries, etc. Most of the political problems remain today. But two other factors which have now come into play make the need for more rational naval command arrangements far more urgent.

(C) *First, making defense of local waters a national responsibility under NATO guidelines is probably outdated.* This was a logical step in the early 1950s; at that time even this task was beyond the capabilities of the Italian, Greek, and Turkish navies, so reliance was placed on U.K., French, and U.S. naval forces. But the real reason coastal defense was not considered a serious factor was that the Soviets did not present much of a naval threat. Today, however, the increased Soviet naval presence practically dictates that NATO make better use of available naval assets. And, although Italian, Greek, and Turkish naval capabilities may have increased somewhat, British capabilities have declined and French naval participation cannot be considered as a firm commitment. Collectively, NATO far outweighs the Soviet naval forces in the area; individually, the forces are inadequate and the NATO-wide resource bind will make it difficult to find enough money to improve them. Moreover, rising costs are driving down the number of active naval vessels available to the point where there may soon be more NATO and national headquarters in the Mediterranean than there are major combatant vessels. Thus there is a strong case for consolidating allied naval commands in the Mediterranean to meet the Soviet threat.

(U) *Second, the NATO concept that logistical support of assigned or earmarked forces is a national responsibility is also outdated.* Given the long-standing orientation toward national defense of coastal waters, our allies have little capability for underway replenishment and are tied to their home ports for logistical supply. This adds yet another complication to efforts to create an integrated defense and to establish workable command arrangements. Obviously, the savings from combined logistic support need to be realized (see p. 206); this need, in turn, suggests a need for better combined command arrangements for this purpose.

(C) a. Naval Strike and Support Forces Southern Europe (STRIKFORSOUTH), with 69 authorized spaces, including 62 American and 7 allied is essentially a shore-based, U.S.-dominated staff that is responsible for planning and coordinating the U.S. Sixth Fleet's activities in its NATO role. Commander Sixth Fleet is dual-hatted as Commander STRIKFORSOUTH; a U.S. admiral ashore is his deputy in control of the NATO staff (with a

European admiral as chief of staff). There is undoubtedly some duplication between the small NATO staff ashore and the similarly organized U.S. staff afloat, but this seems largely inevitable, since the staff afloat must be available for U.S. unilateral actions, while the staff ashore must be available to AFSOUTH for coordination of NATO planning and exercises.

(U) This is a realistic command arrangement; it leaves the Sixth Fleet readily available for contingency operations not involving NATO. At the same time it furnishes NATO a naval combatant force free to move throughout the Mediterranean area without regard to artificial command boundaries. This force is largely self-sufficient, due to its underway replenishment capabilities (although it has consistently sought more ASW assets, more maritime patrol aircraft for surveillance, and an increased number of tankers).

(C) b. Allied Naval Forces Southern Europe (NAVSOUTH) — in strong contrast to STRIKFORSOUTH, which is essentially a U.S. command with a dual NATO role — is a headquarters without forces or much clout. The real power resides in no less than seven subordinate commands, most of which are thinly disguised national commands with a slight NATO flavoring. True, NAVSOUTH is authorized only 267 personnel (18 U.S.) and its seven subordinate commands 82 personnel (19 U.S.). But the numbers are small because many of the subordinate commands have commanders who wear dual national and NATO hats and rely heavily on national support. NAVSOUTH's share of the NATO military budget is modest, approximately $600,000 for 1973. Most of the overhead costs for the dual structure are in fact borne by national budgets.

(C) We seriously question whether this fragmented command situation is consonant with the growing Soviet naval threat. Even excluding the Sixth Fleet, NATO's collective naval strength in the Mediterranean exceeds that of the USSR — yet for three years NATO has been expressing concern about the growing Soviet threat on the one hand, and debating the organization of its own naval assets on the other. If the purpose of NATO's military structure is to do together what no one nation can do alone, it is time to change NAVSOUTH's command arrangements. The political obstacles

are difficult to overcome but perhaps they could be sidestepped. The key issue should be how to get more for the money out of what is at present just a gaggle of different national naval forces, most of which can't even communicate with each other.

(C) One option would be to disestablish NAVSOUTH's subordinate commands except for MARAIRMED and COMSUBMED, which have dual national roles. We would then recommend adoption of the "task force concept," beginning with full activation of the Standing Naval Force Mediterranean with a permanent flagship afloat. Then NAVSOUTH might press for expanding the on-call-force-Mediterranean, paralleling what is already being done in the Atlantic. This would create task forces of various size for a set of agreed contingencies; it should include logistic agreements. Commander NAVSOUTH could be ashore with his deputy afloat; the deputy positions could rotate among nations contributing to the force. Neither the Standing Force nor the on-call-task force would sail into coastal areas without prior national permission, but the current command boundaries would be abolished. We would also press for NATO funding for the fuel expended by the flagship so that it could be furnished by the allied nation holding the Deputy NAVSOUTH position. Since NATO furnishes headquarters budget support, the flagship should be considered as a NATO headquarters afloat. Despite all the problems involved, the time has come to reach a solution to this 20-year-old problem. No real manpower savings are likely unless duplication between national and NATO headquarters can be reduced, but the gains in effectiveness from giving NAVSOUTH real command powers might be notable. The United States would have to take the lead on this proposal and, as short as we may be of destroyer-type ships, to participate on a full-time basis. The U.S. Navy's attention has naturally focused on STRIKFORSOUTH, but to break the present impasse, NAVSOUTH must receive greater U.S. attention and support.

(C) c. Merger of NAVSOUTH and STRIKFORSOUTH headquarters could save considerable personnel. STRIKFORSOUTH's mission is force projection by a wide range of means -- nuclear and conventional, missile, and tactical air, and amphibious landings of Marines -- whereas NAVSOUTH's basic

mission is to maintain and defend the sea and air lines of communication throughout the Mediterranean. However, NAVSOUTH's mission is also an inherent part of the STRIKFORSOUTH/Sixth Fleet mission. For example, two of NAVSOUTH's subordinate commanders, MARAIRMED and COMSUBMED, have dual roles in support of the Sixth Fleet as Commander ASW Forces Mediterranean and Commander Submarines and Fleet Ballistic Missile Force, respectively. Certainly in a NATO naval conflict in the Mediterranean, there will be need for close coordination of NAVSOUTH and STRIKFORSOUTH activities. This probably could best be handled by a single headquarters ashore, particularly since both naval forces will be counting on joint use of ASW and surveillance assets. One problem is to maintain a U.S. unilateral link to the Sixth Fleet for U.S. contingencies, but this can be handled as it is now — through the unified command chain. The second problem is to satisfy a political requirement for a four-star billet for an Italian admiral. One alternative would be to establish a Headquarters Naval Forces Mediterranean from the combined assets of the present headquarters; raise the rank of the Commander Sixth Fleet to four-star level, and dual-hat him as COMNAVFORMED with an Italian four-star as onshore deputy. The chief of staff could be a U.S. officer. COMNAVSOUTH and COMSTRIKFORSOUTH would be commanders afloat and the nationality of the former could rotate.

Another, and probably less popular, alternative would be to combine Headquarters NAVSOUTH and IBERLANT (which is under SACLANT). This would mean breaking the traditional command boundary between SACLANT and SACEUR. But IBERLANT is a command without resources assigned or earmarked, and no one can identify specifically where ships or aircraft will come from; second, NAVSOUTH's efforts to secure a LOC throughout the Mediterranean will be to little avail if shipping is lost in the IBERLANT approaches to Gibraltar; third, the naval battle for superiority in the Mediterranean should climax in the early days, if Soviet naval reserves are bottled up in the Black Sea. If NATO is successful, then oil from the Arab nations would need protection through the Mediteranean and through the IBERLANT area and the approaches to Europe. If we are serious about the total-force concept and rationalization, we need such

flexibility as was demonstrated by the Standing Naval Force Atlantic sailing through Gibraltar and exercising in the Mediterranean. The present energy crisis spells out the dependence of Western Europe on oil in peacetime and, without POL resupply, NATO's conventional capabilities could rapidly wither under wartime conditions. STRIKFORSOUTH/ Sixth Fleet now ranges the full length of the Mediterranean and steps must be taken to develop a similar capability for the allied naval forces in the AFSOUTH region.

F. RATIONALIZING NATO'S OVERALL NAVAL COMMAND STRUCTURE

(U) Indeed, the need for rationalization of NATO's maritime capabilities to get the most for the money out of its substantial but fragmented naval capabilities is so compelling as to warrant another look at overall command arrangements. Logically, NATO should be driven by the defense resource bind to make more efficient collective use of its still substantial naval assets in the face of a growing Soviet capability. Admittedly, changing command arrangements is not a solution to this problem, but it would help toward a solution while in the meantime providing for more flexible use of existing assets. As noted earlier, the more clout combined NATO commands are given over national forces and programs, the more weight is likely to be given to NATO over national considerations.

(U) NATO's present naval command arrangements resemble such a patchwork quilt overlaid on existing national commands as to make one wonder if it could ever operate effectively in wartime. This command structure evolved more from political and prestige considerations than from military. The C^3 problems alone in a fast-moving conflict situation would be enormous, since for the most part ships from one nation can't even talk with those of others (see p. 247). The traditional naval benefits of mobility and rapid force concentration are hard to achieve. Coordinated overall planning and programming for naval forces is equally difficult.

(C) To help overcome the continued predominance of parochial national interests over the needs of collective defense, it might be desirable to reexamine the old proposal for putting all NATO maritime

forces under a single Supreme Allied Commander Maritime (SACMAR), instead of under three as at present (SACLANT, CINCCHAN, and SACEUR). The pros and cons of this are very complex, and we cannot do them justice here. Presumably making one headquarters responsible for planning and disposition of NATO's maritime assets would facilitate maximum flexibility, rational programming, and standardization. However, it would leave SACEUR's principal subordinate commanders without any direct control over naval assets in the relatively confined Baltic and Mediterranean, when close land/sea/air coordination is essential. Moreover, the proposal envisaged locating SACMAR in Europe, despite the fact that the U.S. provides the bulk of NATO blue water assets and the resultant advantages from dual-hatting SACLANT and CINCLANT. The costs of setting up a new headquarters in Europe would also be sizable. Both SACEUR and SACLANT have considered these disadvantages overriding.

(U) A less disruptive alternative would be to make SACLANT the SACMAR, keeping his CINCLANT hat and present headquarters. Under him might be four major regional NATO commands (Atlantic, Channel, Mediterranean, and Baltic). But the overriding disadvantage of depriving AFNORTH and AFSOUTH of maritime assets would remain. Hence, would it be possible to have these commands under SACMAR in peacetime for purposes of planning and programming an optimum collective force posture, but then have SACMAR chop operational control of such forces as he designated — and the Baltic and Mediterranean commands — to AFNORTH and AFSOUTH in wartime? In theory at least, this could give the best of both worlds. But we are not competent to evaluate it in depth.

VIII. OTHER KEY ASPECTS OF RATIONALIZATION

(U) In this final chapter we discuss briefly several other areas in which a more rational collective approach could materially strengthen NATO's deterrent defense posture despite the growing defense resource bind. Regrettably time did not permit developing them in greater depth. Yet any study that seeks to show comprehensively the full potentialities of rationalization as the answer to NATO's most serious deficiencies would be incomplete without at least briefly mentioning the following fields.

(U) While our focus has been primarily on conventional forces, we also see a major need for rationalizing NATO's *theater nuclear posture* as well. Similarly, while we have dealt primarily with what we regard as the crucial Center Region, rationalized postures are obviously needed — in fact may be even more urgently needed — to *defend NATO's flanks*. Another most productive area for rationalization — beside consumer and producer logistics — lies in the broad field of *communications*, on which NATO spends literally billions, and where notable duplication and overlap occur. We also think that NATO's *mobilization and alert* systems — crucial to how NATO goes to war — desperately need rationalizing for purposes of more effective deterrence and defense. Last but not least, if NATO must do more with less, it must find new ways of tying in the potentially major *French contribution*.

(U) We are convinced that substantial progress in these five areas would cumulatively contribute as much to credible NATO deterrence and defense at acceptable cost as in any other area discussed in previous chapters. Given the defense resource bind that essentially dictates a major rationalization effort, we believe that all five should be urgently explored.

A. THEATER NUCLEAR RATIONALIZATION

(U) This study focuses mostly on NATO's conventional posture, because this absorbs the most manpower and money. An equally strong case

can be made, however, for rationalizing NATO's nuclear posture. We do not discuss the modalities in detail here because a substantial DOD-sponsored study effort has long been under way in this field. But we wish to underline our general view that some reduction and reworking of NATO's present theater nuclear posture is desirable. In fact, the two go hand in hand — the more effective NATO's theater nuclear posture can be made, the more feasible it will be to prune away obsolescent elements of the present stockpile without reducing the credibility of nuclear deterrence or raising undue allied concerns.

(U) On the other hand we remain firm believers in the NATO *triad* of conventional forces, theater nuclear capabilities, and the U.S. strategic umbrella. Despite the changes in the nuclear balance that have occurred since the U.S. loss of strategic nuclear superiority, both nuclear elements of the NATO triad still contribute significantly to deterrence. In European, and no doubt Soviet eyes, the theater nuclear component provides a clearly perceived link to the U.S. strategic capability. Hence some of the more radical cuts recently proposed would be premature before NATO achieves a much-higher-confidence conventional capability. Such radical cuts could have a highly divisive effect on the Alliance.* Among other things, they would certainly invite strong European suspicions that the U.S. was decoupling its nuclear posture. Instead, nuclear and conventional rationalizing must go hand in hand and be carefully linked. The former should not be allowed to get out of phase with the latter. Such linkage is also essential if nuclear elements are included in MBFR.

(U) Moreover, the rationalized conventional posture that we favor would also prove better for any nuclear contingency that NATO may face. Any use of theater nuclear weapons would certainly impose the need for greater flexibility of deployment, enhanced capability for tactical movement, an improved and integrated logistics system, and more complete and reliable C^3 than currently exist within NATO forces. If U.S. tactical

*(U) See for example, Jeffrey Record, *U.S. Nuclear Weapons in Europe: Issues and Alternatives*, The Brookings Institution, 1974, which suggests reduction of warheads deployed in Europe from a presumed 7000 to 2000. Also A. C. Enthoven, "U.S. Forces in Europe," *Foreign Affairs*, Spring 1975.

nuclear studies to date have taught us anything, it is that the nuclear battlefield will be faster moving, more chaotic, and more susceptible to the "fog of war" than conventional conflict. Dealing effectively with such a situation suggests the need for quick reaction, firm control, and the ability to reconstitute forces rapidly. These studies also make clear that theater nuclear weapons, while adding an immensely significant dimension to the battlefield, cannot supplant conventional capabilities. So a rationalized conventional posture along the lines of our proposals remains essential.

(U) What needs to be done to rationalize NATO's theater nuclear posture could hardly be stated more cogently than in Defense Secretary Schlesinger's latest posture statement. He sees five major changes needed to increase its deterrent effectiveness:

> First, we must reduce their vulnerability to sabotage, seizure, and conventional assault. Measures are already underway to ensure this condition in cooperation with our allies.
>
> Second, the vulnerability of these forces to surprise nuclear attack should be reduced, and the more exposed dual-capable systems should have the capability to disperse quickly so as to match a surprise dispersal by the Warsaw Pact. And even after dispersal, all forces should remain under central command and control, which may imply the organization of new units with more specialized nuclear missions. The introduction of the Lance missile with its improved munitions should also increase the survivability, controllability, and effectiveness of the force.
>
> Third, we need to improve our centralized command and control and campaign assessment capabilities to the point where reliable and comprehensive information about both non-nuclear and nuclear attacks, and the status of defending forces, can be more rapidly and reliably communicated to those political leaders who hold the responsibility for nuclear decisions and the release of nuclear weapons.
>
> Fourth, target acquisition systems that can survive at least the first phase of any nuclear use still remain essential if we are to be able to implement a range of selective and controlled options, and at the same time limit the collateral damage from their implementation.
>
> Fifth, we should continue to develop selective, carefully controlled options that will permit us: (a) to enhance our ability to deal with major penetrations of an allied sector and achieve a quick, decisive reversal of the tactical situation; and (b) to engage, if necessary, in a highly discriminating

interdiction campaign against enemy lines of communication. Both basic options are designed so as to minimize the incentives for the enemy to reply at all or to respond with uncontrolled attacks. As I indicated earlier, changes in the size and composition of our deployed nuclear stockpiles and systems will improve our ability to accomplish these ends.*

B. RATIONALIZING DEFENSE OF THE FLANKS

(U) One of NATO's perennial worries has been how to defend its highly vulnerable flanks, since the smaller and generally poorer flank allies have great difficulty in generating sufficient modern forces for the purpose. This problem will now be exacerbated, especially for our allies, Greece and Turkey, in the Southern Region, because they are particularly hard hit by inflation and recession. The flank countries in general are going to have to do more with less. This study will not go into the political and domestic instability that affect the NATO role of several flank allies, although these problems too will affect their defense postures. The foregoing suggests, however, that rationalized defense postures may be even more essential on the flanks than in the center.

(U) The NATO authorities also keep pointing out that defense of the flanks is critically dependent on timely external assistance. NATO has postured for this and frequently exercised it, thereby contributing notably to deterrence. But it has always been difficult to predict how much prompt external help could actually be provided, given the higher priority that the major allies attach to defense of the Center Region.** Now, in a period of severe defense budget constraints and possible force cuts, it is even harder to see how significant external assistance could be made quickly available in the event of a general NATO/WP clash. These factors will also reduce the amount of peacetime military aid that richer allies like the U.S. and FRG can provide to poorer allies like Greece and Turkey.

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*(U) *Annual Defense Department Report, FY 1976*, pp. III-2 and -3.

**(U) We point out in Chapter I how this also helps deter attack on the flanks (see p.).

(U) This rationalization of flank defense must entail in essence cutting the coat to fit the cloth. Without going into detail, this means that (a) flank countries, rather than relying so heavily on outside aid, must shift internal defense resources to meet their own highest priority needs; (b) there must be a similar shift in the pattern of military aid to Greece and Turkey; and (c) last but not least, that flank missions must be adjusted to the limited resources available to the flank allies. This is all the more reason why NATO should not, by setting impossible force goals, press the flank allies to do more than they feel they can afford. Moreover, NATO has too often found itself in a straitjacket when measures proposed had to be fitted to special flank circumstances or were held up because of objections by flank countries. *In effect, NATO must stop prescribing the same medicine for all allies (e.g., pushing a forward defense strategy on all of them) and start treating the flanks differently because such different conditions apply.* This applies to nuclear as well as conventional matters.

1. Small Flank Countries Cannot Afford Fully Balanced National Forces

(U) Even a cursory look at the force structures of the flank allies suggests that they try to do too much with too little. As a result, they have weak ground, air, and naval forces across the board, instead of stronger forces in at least one or two key categories. This just isn't rational. For example, we point out in Chapter IV that Denmark, Norway, Greece, Turkey, and even Italy maintain obsolescent naval units of quite limited value, which sop up personnel and O&M costs that could otherwise be diverted to meet more pressing needs. Moreover, they often have the wrong type of naval forces. What they need is to be able to concentrate more on choke-point defense (see pp. 155-156).

(U) But the most pressing defense needs of Turkey, Greece, and Norway are ground/air defense against a WP attack. They are particularly weak in antiarmor capabilities. We think this should be their highest priority, and that trade-offs must be found largely within their own defense budgets for the purpose. Italy, on the other hand, could probably

make its best contribution to the common defense via stronger and more modern naval forces in the Mediterranean. Thus, it is discouraging to see so much of Italy's meager military budget going into buying 600 Leopard tanks, whose contribution to the defense of Italy's mountainous land frontier is hard to discern at a distance.

2. Rationalizing Flank Defense Concepts

(S) Under NATO's forward defense concept, Greece, Turkey, and Norway are trying to defend more of their national territory than they effectively can. "Forward Defense" was conceived as a necessity to bring the FRG into NATO, but somehow it was allowed to justify (a) Norway's extending its main defense up into Northern Norway; (b) Greece's extending its defense line out into Northeast Thrace, instead of planning to sacrafice it if necessary; and (c) Turkey's planning to move its key First Army up into Turkish Thrace for a mobile defense, instead of defending well back, with its main defense line on the Asiatic side of the Dardanelles. In each case, this has entailed sharply higher force and equipment requirements to enable defending much more terrain. We believe that these shifts, endorsed by the NATO military authorities in the fifties, were more than the traffic could bear. In the Turkish and Greek cases, they were based on assumptions as to massive MAP aid — assumptions that were never realized. At one point, the gap between the MAP needed to meet Turkey's NATO force goals and the actual program was over $1 billion. There was a comparable gap in MAP for Greece.

(S) Given the severe defense resource deficits confronting NATO, we see little alternative to reassessing forward defense in these three cases. By trading space for time, the Greeks, Turks, and Norwegians could buy insurance against overwhelming surprise attack and make their main defense in prepared rearward positions that, in most cases, have greater terrain advantages than their present EDP positions. The former could be further strengthened by preemplaced barriers constructed with NATO infrastructure funds. Such revamping would reduce equipment requirements, while enhancing the likelihood that NATO could retain control of two key choke points — the Turkish straits and the Baltic exits.

(U) The argument is often made that such options would be politically unacceptable because they would expose national territory to occupation. This betrays a misunderstanding of what actually deters WP action in the first place. The USSR is unlikely to launch offensives against Greece, Turkey, and Norway unless it has high confidence of achieving its strategic objectives, which in these cases are control of the straits and the Baltic exits. Thus, any defense posture that reduces the likelihood of quick achievement of these objectives contributes more to deterring any attack than does a forward defense posture that is in fact so weak as to be militarily inviting to an aggressor.

C. RATIONALIZING NATO COMMUNICATIONS

(U) Though we have not been able to get as deeply into NATO communications as the subject deserves, what we have seen ourselves and learned from other investigations suggests that the NATO allies pay an unnecessarily high price for communications. Unfortunately, even with this investment, there are glaring gaps and unnecessary duplication in NATO's overall communications capabilities. The unnecessary expenditure of funds is regrettable. But an adequate communications capability is a crucial weakness in any credible deterrent posture, as well as in a real war-fighting ability. As the Secretary General stressed in a recent personal message to the defense ministers of the member nations: "An adequate effective, integrated communications system is one of the most urgent needs of this Alliance."* SACEUR's latest *Combat Effectiveness Report* notes that

> much still needs to be done to improve our communications capability....If operational commanders are to optimize the flexibility of their assigned forces, continued emphasis is needed in such areas as early warning capabilities, an ACE tactical air control system (ACE TACS) and extensions of secure voice capability.**

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*(U) Headquarters NATO message, Secretary General to Defense Ministers, *NATO Integrated Communications System (NICS)*, DTG 271815Z74, December 1974.

**(U) *SACEUR Combat Effectiveness Report*, 6 July 1974 (Secret).

(U) The scale of the problem in relation to the resources expended is suggested by a few statistics. Approximately 60,000 people are required to perform nondivisional communications functions just in the Central Region of NATO.* In the U.S. Army in Europe alone, 24,100 manpower spaces — a little over one-eighth — are dedicated to communications functions. This does not include another 6700 in Army Security Agency (ASA) units.** In terms of dollars, $3.7 billion of our DOD budget for FY 76 is devoted to nontactical communications, and perhaps as much as $1.5 to $2 billion more to tactical communications. As for NATO, the total projected costs just for the NATO Integrated Communications System (NICS) and U.S. national communications requirements for Europe are almost $4 billion over the next five years.*** But no one really knows what the total communications bill for NATO would be if NATO-dedicated systems and individual national systems were added together. Nonetheless it is arguable that NATO collectively is not getting its money's worth in terms of militarily adequate communications capability for this vast expenditure of resources.

(U) Complicating the whole problem of communications looked at in the NATO context is the perceived need on the part of each nation to have its own dedicated self-controlled communications to its own military units at all levels. This issue was highlighted in a recent U.S. study of the European C^3 situation aimed at determining what steps the U.S. could take unilaterally to improve C^3, or alternatively, what steps the U.S. should recommend be taken by NATO. With regard to communications, the study group was primarily concerned with achieving interoperability between the NATO and U.S. systems and otherwise improving those systems in order to improve NATO's communications effectiveness. Cost saving was not a paramount consideration. Perhaps the single most important conclusion of the report is that the go-it-alone syndrome among the allies,

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*(U) *NATO Rationalization Potential*, op. cit., p. B-1-1 (Secret).

**(U) Rand R-1231, op. cit., p. 81

***(U) *NATO Rationalization Potential*, op. cit., p. B-1-2 (Secret).

with the U.S. leading the pack, is the most destructive single factor. With respect to the U.S. the study asks:

> Is the U.S. going to prepare for a NATO or a U.S. unilateral war in Europe, or both? The C^3 requirements of each are different and it does not appear feasible for the U.S. to expend the resources to go both roads simultaneously.*

The study group's conclusion is that if satisfactory progress is to be made in developing an adequate C^3 posture for NATO, for which communications is the essential glue, we must all start to "think NATO." We heartily endorse this view, which also applies to a greater or lesser degree to many other allies.

(U) NATO has funded over the years a number of static systems, notably: (1) a tropospheric scatter transmission system (ACE-High), which currently carries most voice and teletype traffic between ACE commands; (2) the NATO-wide Communications System (NWCS), a special teletype net connecting NATO Headquarters with the MNCs and allied capitals; and (3) a satellite communications net known as NATO SATCOM, which links the same points. Now, as a result of 1970 NATO agreement, most of these will be absorbed or replaced by NICS, a highly survivable circuit-switched common-user system, which is currently estimated to cost about $507 million for a viable system and $750 million for a fully survivable one, now projected for completion by the mid-1980s. A management organization has been set up to procure, install, and run NICS under a complex cost-sharing formula.

(U) But NICS is only a partial solution — and an expensive one — to NATO communications weaknesses. In our view the growing defense resource bind dictates substantial further rationalization efforts if NATO's weaknesses are to be overcome at acceptable cost. What this means in effect is that sizable cost savings must be found, largely through eliminating unnecessary duplication, to permit resource trade-offs to meet higher-priority resource needs. We suggest some options below.

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*(U) *Interim Report of the European Command, Control and Communications Study Group*, 30 September 1974; hereafter referred to as the *Corcoran Report*.

1. Rationalizing Tactical Communications

(U) For ease of consideration, we have divided the overall field into two broad categories — tactical and nontactical communications. The division between the two is somewhat arbitrary. We considered the TO&E communications at army-corps, and comparable air-force level, and below — those that move with and support the combat echelons — as comprising the tactical communications category. For naval forces, the task-force level would appear to be a logical place to divide. The others — those that are usually large, complex, and essentially fixed — we treated as nontactical. At this higher-echelon environment, the requirements for mobility are much reduced or even nonexistent, and much traffic is logistic and administrative.

(S) The key problem with NATO tactical communications is relatively straightforward: It is that, by and large, the national tactical entities within NATO cannot easily communicate with one another. There appears to be adequate tactical communications capability within each national entity. However, the fundamental hang-up is lack of interoperability. Without the ability to communicate rapidly and effectively between the national entities, NATO will be unable to achieve a flexible conventional response, and for that matter a flexible nuclear response.* Units in one national corps sector will be severely hampered in assisting their allies in another national corps area. Even specifically designated reserve units will find it difficult, if not impossible, to move to reinforce the sector of another nation unless extensive and detailed prior arrangements have been worked out and exercised over and over again. The same situation, by and large, pertains to NATO naval forces. In a situation in which our policy, as well as circumstances, dictate the defensive, at least initially, thus insuring the enemy the initiative as to time and place, such a condition invites disaster.

(U) These problems are similar but even more complicated than those of NATO logistics discussed in Chapter V. In addition to their inability to agree on standardization of materiel items, the NATO countries have

*(U) Ibid., p. 18.

differing tactical frequency spectrums, technologies, communications doctrines and procedures that further complicate an already difficult problem.

A full solution to the NATO tactical communications problem will be long-range and expensive. It will require the NATO countries to develop a common communications doctrine, ensure compatibility of equipment, and agree on communications procedures. If a true combined tactical capability is to be achieved, all communications materiel and training must then be altered to meet these standards. Since finding the money and just reaching agreement on what to do is difficult, the goal of complete interoperability is some way off. The important thing is to recognize now that we cannot intercommunicate at the tactical level satisfactorily. Once this problem is faced, it should be easier to gain agreement and cooperation in moving toward the goal. But until we do so, the situation will progressively worsen as more money is spent by the member countries to procure materiel and design methods that simply cannot operate together. Since the solution to the NATO tactical communication problem, while immensely difficult, is fairly apparent, let us turn to the nontactical category, where a more immediate impact seems possible.

2. Rationalizing Nontactical Communications

The principal characteristics of nontactical systems seem to be large size, long range, complexity, generally fixed sites, and high costs. Thus we could have large-scale intelligence or command and control nets that by our categorization would be considered nontactical. The characteristics of the system, rather than its use, determined its category. The principal problem in the nontactical communications area is unnecessary duplication. This multiplies the cost per unit of effectiveness. There are some noninteroperability and incompatibility problems as well, which feed the unnecessary monster of duplication.

Of course, a certain amount of redundancy is desirable in any military communications system (i.e., the capability to reroute over alternate means during emergency periods to ensure that critical message traffic gets through). However, in NATO there are many examples of duplicative systems that do not provide military redundancy, since they

are not interconnected and in some cases are not even compatible. What brings this about? First, a political fact. Communications is the means through which a nation exercises control over its own forces. Any action that diminishes this control, or places it in jeopardy, will be resisted. In addition to positive control, we much consider the desire of nations for confidentiality — the ability on occasion to obtain information and pass instructions strictly within a national system. We even find many cases of duplication within nations. For example, the different armed services of a nation may and do maintain separate, parallel communications systems, when a single system would be more effective and certainly less expensive. At the individual service level we run again into the perceived need for positive control and confidentiality that seems to dictate that individual services operate their own systems. This is not necessarily true with today's technology.

(S) There are also cases of unnecessary duplication between civilian and military systems within a nation. The cause for much of this can be traced to bureaucratic competition. Also, we think that the military have a built-in bias against arrangements that provide for them to rely on civilian systems in time of war, even though these systems may be as responsive, as well as more secure and less vulnerable to enemy action. Leasing civilian communications lines where they are adequate, instead of installing and operating a parallel military system, can result in substantial resource economies. The Bundeswehr seems to have gone farthest in satelliting on civil nets. The U.S. military also makes considerable use of civilian capabilities within the continental U.S. and even overseas, including Europe. For example, 66 percent of the Defense Communications System (DCS) within the U.S. has been commercialized. This is by far the largest segment of the DCS. The cost is $300 million a year, which seems high.* However, when you compare the total (DCS) lease costs worldwide of approximately $500 million to the 33,000

*(U) Robert D. Terry, MG/USA (Vice Dir, DCA), "U.S. Defense Requirements Can Benefit from Leasing Foreign Systems," *Defense Management Journal*, April 1974, p. 58.

military manpower spaces worldwide which it is estimated the U.S. saves by using leased commercial capabilities — at their annual cost of approximately $495 million — it begins to make sense to go commercial whenever possible.* Moreover, the $495 million only pays for the military spaces and their immediate operation and maintenance costs. It does not include any of the costs associated with procuring necessary equipment, constructing facilities, and obtaining utility support. Thus, commercialization where feasible would appear to be rational.

(S) As mentioned earlier, unnecessary duplication also results from incompatibility or lack of interoperability. Let's look at how a typical case might come about. A system is started, using a given technology. Subsequently a competing technology, which is incompatible with the first system, gives promise of being more efficient, smaller, more capable, cheaper, or perhaps all of these. Converting the existing system would be expensive, so the system is retained and expanded using the old technology. Meanwhile, other subscribers prefer to establish a new (and noninteroperable) system using the new technology, which in the long run will be cheaper and more efficient for them. An excellent example of this is the possible flaw in the interface between the NICS network for the 1980s, which is oriented to analog transmission, and the U.S. plan to convert the DCS worldwide network to digital transmission. The digital approach has such advantages as size, security, speed, and less vulnerability to jamming. Nevertheless, as a minimum to obtain interoperability, an analog/digital converter system would be needed, which if it works, would probably degrade the network. Besides the NICS network, most or all of the national communications systems in Europe are and will continue through the 1980s to be analog.

(S) Also, as with other types of NATO systems, duplication in communications results from problems of cost sharing, production quotas,

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*Ibid., p. 69. The 33,000 military manpower spaces saved is MG Terry's estimate. The $495 million per year was calculated by the authors by multiplying the spaces saved by the average annual cost of a typical military communications space ($15,000).

and national proprietary interests. The bickering over the NATO Telegraph Automatic Relay Equipment (TARE) is a good example of this.*

(S) Viewed individually, all the reasons for the duplication and other problems that we find within the nontactical NATO communications systems have some validity. However, viewed as a whole, the NATO communications situation is clearly unsatisfactory. What can be done about it? Some remedial actions are already underway, particularly in connection with the creation of the new AAFCE (see p. 83), e.g., interconnection of selected transmission systems, planning for offering the use of automatic switched systems to NATO and arranging combined use of U.S./FRG/NATO/civil communications resources in response to AAFCE's requirements.** But these efforts are limited in relation to the size of the problem, and much more could profitably be done. The Corcoran Report agrees that more action is necessary and suggests a number of useful ideas that move toward rationalization, such as:

- That the U.S. offer NATO use of the U.S. Automatic Digital Network (AUTODIN) until the comparable NATO system (TARE) becomes operational in 1979. (If satisfactory, this could be made permanent in lieu of NATO's going to TARE. This, however, is a politically charged issue.)
- That the U.S. offer certain critical NICS subscribers use of U.S. Automatic Voice Network (AUTOVON) until the like NATO system (Initial Voice Switched Network) goes into operation in 1976-1979.
- That the U.S. develop plans for overbuilding the NATO Communications Improvement Program 1967 (CIP-67) transmission network (a long-lines system for the NATO Center Region comparable to the DCS) to permit U.S. use of this system in lieu of upgrading the European segment of the DCS.

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*(U) Hq NATO message, DTG 271815Z74, op. cit. The main thrust of this message was to urge the NATO countries to stop bickering over problems such as this with respect to TARE and get on with its development.

**(U) AAFCE staff comments on a draft of this Report attached to a letter from Deputy CINCEUR, January 14, 1975.

(S) The Corcoran Report's thrust roughly consists of three time-phased stages. First, how can we best approach getting existing systems interconnected, with the highest chance of short-term improvement in effectiveness? An example would be to interconnect the current DCS Europe with the NATO ACE-High system to achieve somewhat greater flexibility, capacity, and survivability than currently exists with the two systems operating separately. Second, how can the designs for scheduled midterm improvements be meshed to ensure interconnection and move toward the goal of integration? Overbuilding the CIP-67 system as a substitute for upgrading the DCS Europe is an example of trying to revamp upcoming improvements for midterm gain. Third, the Corcoran Report suggests that we "adopt now as a U.S. goal the complete integration of the DCS Europe with the NICS,"* to get NATO aimed in the right direction for the longer-run future.

(S) Following up the thrust of the Corcoran Report, we think that an "ideal" solution to rationalization of NATO communications would appear to be along the following lines:

a. All allies would agree to interconnect their nontactical (fixed plant) national defense communications with those of NATO and eventually to integrate these into a single NATO network that would be used for unilateral national requirements as well as NATO requirements.

b. In developing this combined system, NICS and national communications planners would identify and eliminate all links and facilities that are duplicative but do not provide military redundancy. In satisfying NATO and national requirements, priority should be given to utilizing existing or planned civil communications systems where they are available and would provide a satisfactory solution.

c. Other links and facilities that are duplicative but *do* provide military redundancy should be subject to case-by-case review to determine whether the additional redundancy achieved is worth the resources required to maintain that particular link or facility.

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*(U) Ibid., p. 17.

d. To enable nations to use this integrated network for sensitive national requirements (e.g., transmission of U.S. NOFORN intelligence data) without eavesdropping by other users or by the operators of the network, secure voice or cryptographic devices that permit end-to-end encryption will have to be provided. Such devices are under development or have been developed. However, there are still interoperability and cost problems to be resolved.

e. Until d. above is perfected, the U.S. may have to retain a small unilateral communications capability completely under U.S. control for communication with SAS sites and for certain other contingencies. This may best be handled by a system based on the use of satellites.

(S) We believe that the order of actions in the "ideal" solution has got to start with fundamental agreement within the Alliance at the highest levels. If the goal is ever to be reached, the leaders must embrace the theme of the U.S. Secretary of Defense in his June 1974 remarks to the NATO Defense Planning Committee, and ensure that history does not repeat itself:

> Communications require as much of our attention as organization and doctrine if we are to modernize the command and control of our forces. Since the concept of the NATO Integrated Communications Systems was approved by the DPC in 1970, progress has been slow and difficult, and implementation schedules have progressively slipped.*

D. RATIONALIZING MOBILIZATION AND ALERT PROCEDURES

(S) In our opinion, no aspect of NATO command machinery needs rationalizing more than its complicated and cumbersome mobilization and alert system. *It is so complex that not more than a few individuals in any NATO or national staff understand it fully.* Since NATO, as a

*(U) *USNATO 3355* (Section 4 of 6), June 13, 1975, p. 2 (Secret).

defensive alliance, grants the attacker the initiative, NATO's problem is not just strategic warning, but timely responsive steps. In fact, it is less the likelihood of delayed warning than of political pitfalls that will impede timely responses by the 15 separate nations composing NATO. Here is yet another area in which some experts doubt that NATO could effectively go to war.

(U) For years the NATO military have complained about this. In June 1950, Field Marshal Montgomery said: "As things stand today and in the foreseeable future, there would be scenes of appalling and indescribable confusion in Western Europe if we were ever attacked by the Russians."* Ever since, NATO's military and political authorities have expressed concern over the dangers in its alert and mobilization procedures. In June 1974, another four-star NATO general deplored to us the present lack of knowledge of even the interrelationships in the current alert system and the exact implications and ramifications of specific measures. Does the implementation of one measure, for example, compromise the subsequent implementation of another because of competition for resources upon which both depend? What effect will the present extensive national withholds have on the system? Even a cursory review of the way NATO is supposed to get ready for war suggests that the whole incredible mess needs extensive overhaul. This is especially important for graduated deterrence and meeting surprise attack. But NATO planning has not yet taken sufficiently into account the fact that the flexible response strategy it adopted in response to emerging nuclear parity implies a more flexible mobilization pattern as well. NATO could learn many lessons from the failings of the highly regarded Israeli mobilization and deployment system in the October 1973 war. Although the Israelis relied heavily on their carefully conceived and frequently exercised mobilization system, numerous breakdowns occurred. Reserve equipment was difficult to get out of storage and to the front, and substantial losses were experienced. We suspect that some NATO allies would fare far worse than the Israelis, if they had to mobilize.

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*(U) *NATO, The First Five Years*, op. cit., p. 30.

(U) Now a new factor is making the problem more serious. If reduction in active forces and greater reliance on reserves is the most likely way for the NATO allies to cope with current budget constraints (see pp. 26-27), this has obvious implications for the way in which NATO must mobilize. It places a fairly higher premium on quick response to warning.* This trend toward greater reliance on quickly mobilizable reserve forces is already gathering momentum — note the cases of Norway, Denmark, the Netherlands, and now the FRG, for example.

(S) If the name of the NATO game is deterrence, more attention also needs to be paid to how graduated deployments and reserve call-ups short of extensive mobilization could increase deterrence in a crisis. What are needed are numerous, preferably preplanned options and levels of response for crisis situations entailing less than attack out of the blue. For example, built into the NSC and DOD-approved planning scenario, which assumes a 30-day WP buildup and 23 days for NATO is an implicit assumption that much could be done in the more than three weeks after warning is received to deter actual WP attack. The optimum is, of course, a series of graduated prewar responses during periods of crisis, designed both to signal a potential foe to desist from threats and to place NATO in a better position to face such threats if necessary. NATO has sought this over the years, but much more could be done.

(U) What does all this have to do with rationalization? In our view, more sensible prewar NATO response patterns would be a rational low-cost or no-cost way of enhancing NATO's deterrent and defense posture — one doubly useful in a period of sharp budget constraints. Hence, rationalization of NATO's own complex alert system, which suffers from a proliferation of measures and unwieldy and unresponsive procedures for approval and implementation, is long overdue. What is needed first is a fresh objective study in depth aimed at designing a simplified, understandable, and politically acceptable alert system, utilizing ADP methods. This would require an in-depth study by a group with ADP

*(U) See Hunt, op. cit., p. 41.

background to determine to what extent ADP methods could assist in simplifying and sequencing the declaration and implementation of alert measures.

(C) Also needed are more preplanned readiness exercises to reveal flaws and make sure the system works. Low-cost CPXs that do not require actual call-ups of forces are very useful; those held to date, like the HILEX series, have revealed much of real concern. We are not qualified to address the details of these problems, but it is clear that they will not be addressed without strong political impetus at the ministerial level.

(S) But in the last analysis, no matter how good the alert systems and procedures NATO can design, the crucial factor will remain the degree of national responsiveness. At present the number of national withholds on NATO alert measures is so extensive as to make the system itself almost a farce. Thus, the whole question of how national withholds undermine the alert system's ability to work in actual practice needs to be reexamined at the ministerial level too. Moreover, the NATO measures apply only to committed forces. While the extensive national forces not committed to NATO are urged to act similarly, NATO commands have no influence over them at all.

(U) The political facts of life must be taken into account here too. No ally is going to give up easily its ultimate right to decide for itself when to mobilize fully or to declare war (if this decision is not preempted by WP attack). However, individual allies might be more willing to commit themselves to such lesser steps as: (a) streamlining mobilization procedures; (b) more exercising of such procedures; (c) partial mobilization steps; and (d) partial chopping of forces to NATO command. Hence, an incremental approach is necessary in this field too.

(S) For example, to overcome the problems of slow parliamentary procedures and natural hesitations, while continuing to reserve to parliaments the decision on full mobilization, the NATO authorities might press the allies to move toward two-tier or even three-tier mobilization systems. Under these, certain relatively small contingents urgently

needed for emergency readiness could be called up and deployed by a defense ministry or by executive decision without prior parliamentary action (a requirement for prompt subsequent legislative approval might be desirable). The model we have in mind is the proposed new 30,000-man FRG Standby Reserve, subject to call by the defense minister. The Dutch RIM system has similar features. Our Defense Department also will reportedly seek authority to call up around 50,000 reservists without having to go to Congress. By such partial measures, NATO readiness in an emergency could be quickly enhanced.

E. STRENGTHEN NATO'S FRENCH CONNECTION

(U) No comprehensive effort to enable NATO to preserve a credible deterrent/defense posture within severe resource constraints can afford to neglect France's contribution. After all, France's potential peacetime Center Region contribution is second only to that of the FRG. The problems inhibiting more rational use of French resources are primarily political, not military. But over time, the existence of political differences is making France's force posture, too, less useful to collective defense.

(U) Since France withdrew from the NATO structure in 1966, though remaining a member of the Alliance, the other allies have been faced with a dilemma. On the one hand, it has been general policy not to let France have the benefits of NATO membership without participation, lest this encourage France not to rejoin, and worse yet, encourage others to take a similar course. So while a chair is kept for France's return to the NATO table, an effort is made to ensure that her present position does not provide her benefits greater than those of fully participating partners. On the other hand, in areas where defense cooperation with France makes overriding sense, various formulas have been worked out. For example, France has maintained its connection with NADGE (see p. 334). The U.S. and FRG have also separately maintained bilateral military-level relationships with the French First Army to facilitate French participation in Center Region defense.

(U) It is time to acknowledge that NATO's standoff policy has failed. We are not arguing that France's position is right; on the contrary, we think it seriously weakens NATO's collective security posture, and is against France's own security interests as well. It is also leading to considerable waste of resources on both sides. As France's force posture gets more and more out of gear with those of its allies, it becomes less useful to collective defense. Meanwhile, the other allies are forced to devote resources that they might otherwise not have to expend to compensate for their inability to plan firmly on use of French soil and resources.

(U) Over time post-Gaullist France may move back into NATO, if European integration proceeds in other spheres. Indeed, the more that French forces could be informally tied to NATO's, the faster this process might evolve. But in the short term, formal reentry of France is quite unlikely. Hence, it seems rational to accept this political fact of life and to design around it. We suggest below several ways in which this might be done. Moreover, the more ways in which the French and their allies work together in practice, the more likely that Pact planners will assume that France will stand with NATO from the outset -- an assumption that will add measurably to deterrence.

(S) It is the issue of whether NATO could rely sufficiently on prompt French participation to base plans on this assumption that worries military men. Our feeling is that NATO'S force deficit is so great that it really has no alternative but to do so. This also seems to be the view of all the NATO commanders with whom we discussed the problem recently in Europe; they are eager for closer military rapport with the French. Given French sensitivities, any further assurances regarded as necessary must be obtained discreetly. This is probably best left to the FRG, U.K., and Belgium. Since SACEUR is an American, the preferred military negotiator might be CINCCENT.

(U) *Given the Center Region need for more ready and quickly mobilizable ground forces* (see pp. 37-39), *France's five action divisions (two of them already deployed forward in Germany) could make a substantial difference.* There are two ways in which French forces

might be initially employed: (1) as part of the AFCENT reserve for deployment to the most threatened sector of the CENTAG front; or (2) to take over a defined corps sector in the GDP.

We understand that the French prefer the former role, given their tactical nuclear capability, and because reinforcing against a WP attack aimed at, say, the Frankfurt area would not require them to have an initial D-Day mission. The present CINCUSAREUR also would prefer to use the French in the northern CENTAG area, to help defend against any WP thrust through the Hessian corridor, since extensive plans have already been worked out. However, logistic constraints might make it difficult to employ French forces in this manner. Moreover, if the French were committed on the Frankfurt axis, no reserves would be available to meet a thrust up the Danube Valley. Hence, it might be better if after D-Day the French were to assume a corps sector in Bavaria to help guard against such a Soviet thrust up the Danube. The necessary logistic arrangements could be worked out well in advance bilaterally between the French and the Germans. If USAREUR should shift to using a Benelux LOC -- and would thus be better prepared to reinforce NORTHAG -- a more southern deployment for the French also would make sense.

As for follow-on forces, a high proportion of French manpower is structured for antisubversive or antiairborne defense of French soil. It is hard to regard this as optimum. A French Army of some 322,000 generates only six division equivalents, as opposed to 12 for a Bundeswehr only slightly larger. There are *no* reserve divisions, and the French Army's ambitious reequipment program has been seriously delayed by rising costs and diversion of resources to the nuclear *force de frappe*. Rationalization could produce a much more useful French contribution to the collective defense.

1. Connecting the NATO and French Communication Systems

France declined an invitation to participate in NICS, rather than to pay her fair share of previous communication projects that would be included in NICS and from which she would benefit. It is probably

unrealistic to believe she would participate in any joint communication program in peacetime. On the other hand, France has continued to participate in NADGE and to pay her share of the infrastructure budget for the system, with the understanding that her cooperation would extend only to the point where reporting ends and the control of retaliatory devices begins. But the NADGE connection is there and can be expanded when and if France decides to participate. We need a similar standby connection that can link French military headquarters with AFCENT and AAFCE in their wartime headquarters at Boerfink. The distance between Boerfink and the French border is short and could be linked by microwave stations and land lines established on both sides of the Rhine in peacetime and activated in time of tension or war by the French. Facilities within Germany could be provided by the FRG with Bundespost land lines and an add-on to their CIP-67 program now under way. We are convinced this is feasible, because the French have communication links with their two-army divisions in the FRG that could serve as part of the network and have kept their liaison with USAFE air defense centers open by land lines.

(S) The French Air Force has over 1000 aircraft in its inventory. A peactime standby communication link would be a small price to pay to prepare for the contingency of their use in NATO's forward defense. Moreover, its establishment might foster French military cooperation in other areas.

2. We Need Contingency Plans to Use French Facilities

(S) USAFE has not been able to develop replacement airfields for those lost on our withdrawal from France, a situation that has greatly increased our peacetime base loading and complicated our wartime dispersal plans. We agree that war plans cannot be based on the uncertain availability of French facilities, but we need contingency plans in case they are available. For example, the USAF's COB package of WRM requires only a score of people for maintenance. They need not be U.S. military, and if they are U.S., they do not need to be in uniform. We recommend discreet U.S./French discussions to see if the French are willing to enter into some form of contingent COB arrangements with the U.S.

There is a precedent to indicate that French authorities could be persuaded to bend their position, namely, the French agreement to reinstate limited USAFE and Canadian use of their air-to-ground weapons range at Suippes.

(U) Once hostilities are under way, the U.S. also needs APODs in the rear area for follow-on forces and for the resupply of forces already engaged in combat. Numerous airfields with runways capable of withstanding the weight of heavy airlift aircraft and of sufficient length for safe landings are on French territory. Their use as emergency APODs could be included in the U.S./French COB discussions recommended above.

(S) So long as France stands aside from the NATO command structure, the U.S. will doubtless feel compelled to rely primarily on an LOC through the Benelux countries (see pp. 213-216). But it might be wise quietly to probe French willingness to envisage a backup LOC through France as a hedge. If the U.S. ever did deploy as many as 15 to 20 divisions to Europe again in wartime, such an LOC might come in very handy. But such peacetime arrangements would, of course, have to be handled discreetly, and on a contingency basis.

3. We Must Be Prepared to Give Some Quid pro Quo

(C) Despite the fact that the actions outlined above would enhance French as well as NATO security, we should expect some hard bargaining — if not from the military, then from the political level. One of the most promising quids we can offer is increased cooperation in military technology. For example, we offered the French the opportunity to participate in the NATO EWP on a parallel track and afforded them the same briefings on U.S. technology as given NATO. They have also been kept read in on U.S. progress in the development of PGMs, and the availability of U.S. weapons. In Chapter III (p. 123) we suggested that a NATO RPV program be initiated and would recommend a parallel track be offered to the French, if an offer is made to NATO.

4. France's Modernizing Her Naval Forces Could Contribute Greatly to Southern Flank Defense

(S) It is interesting that France is already deploying more of her

naval strength from the Atlantic into the Mediterranean. French naval capabilities could be measurably increased by moving in the directions we suggest for other allied navies in Chapter IV. Naval personnel number some 69,000 (only about 25 percent conscript). Two small carriers, one helicopter carrier, two cruisers, 19 submarines, 17 destroyers, 25 DEs, 53 minesweepers, and 14 patrol craft add up to a sizable force, though largely obsolescent. But eight destroyers/DEs have good ASW capabilities. The naval air force of 150 combat aircraft could be useful too. But the French Navy is a classic example of a futile attempt at a balanced national force despite insufficient resources.

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AAA	Antiaircraft Artillery
AAFCE	Allied Air Forces Central Europe
AACHAN	Allied Command Channel
ACCB	Air Cavalry Combat Brigade
ACE	Allied Command Europe
ACLANT	Allied Command Atlantic
ACR	Armored Cavalry Regiment
ACSFOR	Assistant Chief of Staff, Force Development
ACTICE	Authority for Coordination of Inland Transport in Central Europe
AD	Air Defense
ADM	Atomic Demolition
ADP	Automatic Data Processing
AEW	Airborne Early Warning
AFCENT	Headquarters Allied Forces Center Region
AFE	Allied Forces Europe
AFM	Air Force Manual
AFNORTH	Allied Forces Northern Europe
AFSOUTH	Allied Forces Southern Europe
AG	Adjutant General
AIRCENT	Headquarters Air Forces Center Region
ALO	Alert Level
AMF	ACE Mobile Force
AMS	Army Map Service
ANG	Air National Guard
APC	Armored Personnel Carrier
APOD	Aerial Port of Debarkation
ASA	Army Security Agency
ASM	Air-to-Surface Missile
ASW	Antisubmarine Warfare

ASYG	Assistant Secretary General
AT	Antitank
ATAF	Allied Tactical Air Force
ATC	Air Transport Command
ATGM	Antitank Guided Missile
AVLB	Armored Vehicle-Launched Bridge
AWACS	Airborne Warning and Control System
AWX	All-Weather
BAOR	British Army of the Rhine
BCT	Battalion Combat Team
BOP	Balance of Payments
BOS	Base Operating Support
BUIC	Back-Up Interceptor Control
CAP	Combat Air Patrol
CAS	Close Air Support
CBR	Chemical/Biological/Radiological Warfare
CBU	Cluster-Bomb Units
CDC	Combat Development Command
CENTAG	Central Army Group
CEP	Circular Error Probable
CG	Cruiser
CGEE	Combat Equipment Group Europe
CHG	Guided Missile Helicopter Ship
CINCCENT	Commander-in-Chief, Center Region
CINCCHAN	Commander-in-Chief, Channel Command
CL	Light Cruiser
CLG	Guided Missile Light Cruiser
CLGP	Cannon-Launched Guided Projectile
CLSS	Combined Logistic Support Systems
CNAD	Conference of National Armaments Directors
COB	Colocated Operating Base
COMM Z	Communication Zone
C^2	Command/Control
C^3	Command/Control/Communications

COMSO	Communications
CONUS	Continental United States
COSCOM	Corps Support Command
CPX	Command Post Exercise
CRAF	Civil Reserve Air Fleet
CSUSA	Chief of Staff, U.S. Army
CV	Aircraft Carrier
CV	Combat Vehicle
CVS	Aircraft Carrier Antisubmarine Warfare
DAD	Decentralized Area Defense
DD	Destroyer
DDG or DG	Guided Missile Destroyer
DDH	ASW Helicopter Destroyer
DE	Destroyer Escort
DEH	ASW Helicopter Destroyer Escort
DFE	Division Force Equivalent
DISCOM	Division Support Command
DL	Frigate
DLG	Guided Missile Frigate
DOT	Défense Opérationnelle des Territoires (France)
DPC	Defense Planning Committee
DPPG	Defense Planning and Program Guidance
DPQ	Defense Planning Questionnaire
DRC	Defense Review Committee
DS	Direct Support
DSA	Defense Supply Agency
DSRS	Division Support Rocket System
ECCM	Electronic Counter-Countermeasures
ECM	Electronic Countermeasures
EDC	European Defense Community
EDIP	European Defense Improvement Program
EDP	Emergency Defense Plan
EDP	Electronic Data Processing
EM	Enlisted Men

EMP	Electromagnetic Pulse
EOB	Electronic Order of Battle
EUCOM	European Command
EW	Electronic Warfare
EWG	Executive Working Group (of the DRC)
EWS	Electronic-Warfare Support
FAC	Forward Air Controller
FASCOM	Field Army Support Command
FEBA	Forward Edge of the Battle Area
FLIR	Forward Looking Infrared
FN	Foreign National
FNIH	Foreign National Independent Hire
FPB	Fast Patrol Boat
FPBG	Guided Missile Fast Patrol Boat
FRG	Federal Republic of Germany
FSTS	Forward Storage Sites
FTX	Field Training Exercise
GAF	German Air Force
GDP	General Defense Plan
GDR	German Democratic Republic
GEEIA	Ground Electronics Engineering Installation Agency
GIUK	Greenland, Iceland, United Kingdom
GNP	Gross National Product
GON	Government of the Netherlands
GPF	General Purpose Forces
GS	General Support
GSFG	Group of Soviet Forces Germany
GTA	German Territorial Army
HE	High Explosive
HQM	Headquarters, Miscellaneous
HS	Helicopter, Shore-based
IAF	Israeli Air Force
ICB	International Competitive Bidding
IFF	Identification Friend or Foe

IOC	Initial Operational Capability
IR	Infrared
IRR	Individual Ready Reserve
IS	International Staff
ISI	Initial Support Increment
JCS	Joint Chiefs of Staff
JP	Jet Propulsion Fuel
JSSG	Joint Signal Support Group
KP	Kitchen Police
LARS	Light Artillery Rocket System
LAW	Light Antitank Weapon
LGB	Laser-Guided Bomb
LHA	Helicopter Amphibious-Assault Ship
LN	Local National
LOC	Line of Communication
LOCPORT	Line of Communications/Port Package
LOGSTARS	Logistic Status Reporting System
LOH	Light Observation Helicopter
LRRP	Long-Range Reconnaissance Patrol
LS	Labor Service
LS/CLG	Labor Service/Civilian Labor Group
MAAG	Military Assistance Advisory Group
MAB	Mobile Assault Bridge
MAC	Military Airlift Command
MAF	Marine Amphibious Force
MAP	Military Assistance Program
MARS	Medium Artillery Rocket System
MBFR	Mutual Balanced Force Reductions
MCS	Coastal Minesweeper
MGGB	Modular Guided Glide Bomb
MHC	Coastal Minehunter
MI	Military Intelligence
MICV	Mechanized Infantry Combat Vehicle
MMC	Coastal Minelayer

MMI	Inshore Minelayer
MNC	Major NATO Commander
MOB	Main Operating Base
MOD	[illegible]stry of Defense
MOS	Mi[illegible]ry Occupational Specialty
MP	Military Police
MPA	Maritime Patrol Aircraft
MRCA	Multirole-Capable Aircraft
MSC	Major Subordinate Commander
MSO	Ocean Minesweeper
MTOE	Modified Table of Organization and Equipment
NAC	North Atlantic Council
NADGE	NATO Air Defense Ground Environment
NAMSA	NATO Maintenance and Supply Agency
NG	National Guard
NGA	NATO Guidelines Area
NIAG	NATO Industrial Advisory Group
NICS	NATO Integrated Communications System
NORTHAG	Northern Army Group
NSC	National Security Council
NSDM	National Security Decision Memorandum
NWCS	NATO-Wide Communications System
O&M	Operations & Maintenance
OJT	On-the-Job Training
OSD	Office of the Secretary of Defense
PB	Patrol Boat
PBEIST	Planning Board for European Inland Surface Transport
PC	Large Subchaser
PCE	Coastal Escort
PCS	Small Subchaser
PEC	Program Element Code
PEMA	Procurement Equipment and Munitions/Army
PESR	Program Element System Report
PF	Patrol Escort

PGM	Precision-Guided Missile or Munitions
POL	Petroleum, Oil, and Lubricants
POM	Process for Overseas Movement
POMCUS	Prepositioned Materiel Configured to Unit Stocks
PPGM	Planning and Programming Guidance Memorandum
PRF	Pulse Recurrence Frequency
PT	Torpedo Boat
PTF	Fast Patrol Boat
PTFG	Large Guided Missile Patrol Boat
PTT	Post, Telephone and Telegraph
QM	Quartermaster
QRA	Quick Reaction Alert
R&D	Research and Development
RAF	Royal Air Force (U.K.)
RAM	Remote Area Mine
RAP	Rocket Assisted Projectiles
RD&P	Research, Development, and Procurement
RDT&E	Research, Development, Testing, and Evaluation
RNA	Royal Netherlands Army
RPMA	Real Property Maintenance Activities
RPV	Remotely Piloted Vehicle
R/S	Rationalization and Specialization
SACEUR	Supreme Allied Commander Europe
SACLANT	Supreme Allied Command Atlantic
SALT	Strategic Arms Limitation Talks
SAM	Surface-to-Air Missile
SACC	Senior Civil Emergency Planning Committee
SCS	Sea Control Ship
SEA	Southeast Asia
SETAF	Southern European Task Force
SF	Special Forces
SHAPE	Supreme Headquarters Allied Powers Europe
SHORADS	Short-Range Air-Defense System
SLAR	Side-Looking Radar

SLOC	Sea Lines of Communication
SP	Self-Propelled
SS	Submarine (Diesel)
SSBN	Ballistic Missile Submarine (Nuclear Propelled)
SSE	Coastal Submarine
SSK	Antisubmarine Submarine
SSI	Sustaining Support Increment
SSM	Surface-to-Surface Missile
SSN	Submarine (Nuclear)
STAMP	Standard Air Munitions Package
STANAG	Standardization Agreement
STC	SHAPE Technical Center
STRATCOM	Strategic Communications Command
STRICOM	Strike Command
SYG	Secretary General
TA	Territorial Army
TAC	Tactical Air Command
TACS	Tactical Air Control System
TAC SAT	Tactical Communications Satellite System
TAC NUC	Tactical Nuclear
TC	Tank Corps
TD	Table of Distribution
TD	Tank Destroyer
T/O	Table of Organization
TOA/DME	Time of Arrival/Distance Microwave Equipment
TO&E	Table of Organization and Equipment
TOT	Time on Target
TOW	Tube-Launched, Optically-Tracked, Wire-Guided (missile)
TRAP	Tanks, Racks, and Pylons
TRICAP	Triple Capability
UCMS	Unit Capability Measurement System
UE	Unit Equipment
UH	Utility Helicopter
UPT	Undergraduate Pilot Training

USACDC	U.S. Army Combat Development Command
USACGSC	U.S. Army Command and General Staff College
USAFE	U.S. Air Forces Europe
USAREUR	U.S. Army Europe
USASTRATCOMEUR	U.S. Army Strategic Communications Command/Europe
USEUCOM	U.S. European Command
USMC	U.S. Marine Corps
USNATO	U.S. Mission to NATO
VAP	Small Maritime Patrol Aircraft
VP	Maritime Patrol Aircraft
VPWG	Verification Panel Working Group
VS	Small Maritime Patrol Aircraft
VSTOL	Vertical/Short Take-Off and Landing Aircraft
WEI	Weapons Effectiveness Indicator
WP	Warsaw Pact
WRM	War Reserve Materiel
WRM	War-Readiness Materiel
W.S.	Weapons System

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