AMERICA PROMISES TO COME BACK: A NEW NATIONAL STRATEGY

by

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December 26, 1990

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international security environment which allows us to assume two year warning of a major ground war in Europe. Discussion of major issues resulting from this new proposed strategy and force structure including: defining new goals and objectives in both programming and war planning, the effect of current contingencies operations, new requirements for intelligence, requirements for decision-making, setting technological requirements, a revised investment strategy, impact upon personnel and organizations, and the transition period. Report concludes that there are four major critical factors upon which the new strategy depends; (1) the behavior of the USSR, (2) the behavior of allies and the Congress, (3) the ability of the intelligence community to meet new challenges, and (4), the ability of industry to meet new demands. Report further concludes that even if it can be shown that industry cannot meet new demands, the strategy may still be useful. The new strategy is not simply an adjustment to existing defense doctrine or strategy but rather a fundamental revision to the way the U.S. has approached defense since 1945.
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President George Bush unveiled a new national security strategy for the United States in his August 2, 1990 speech at the Aspen Institute. In the audience was Britain's former Prime Minister Margaret Thatcher. Although Mr. Bush remarked about the United States and United Kingdom "standing shoulder to shoulder," and "when it comes to national security, America can never afford to fail or fall short," the national security strategy concepts he unveiled would be revolutionary and have direct and dramatic impacts on NATO and the rest of the world.

Essentially, the President opened the door to a total reexamination of America's role in the world and its overall military capability. Rather than deploy forces at the levels maintained since World War II, under this new national security strategy the United States would maintain a much smaller active and reserve force mix capable of dealing with world-wide major contingency operations -- not a Europe-centered global war with the USSR. If forces were required to fight a major war against the Soviet Union, the U.S. assumes that there would be sufficient time to reconstitute them. Specifically, the President has apparently accepted the consensus of his intelligence community that the U.S. will have two year's warning for a Europe-centered global war with the USSR.
Generally ignored by media due to Iraq's invasion of Kuwait on the same day, the concepts outlined in the President's Aspen speech were developed by official spokesmen in the following three months. Secretary of Defense Dick Cheney, speaking at the 32nd Annual Conference of the International Institute for Strategic Studies (IISS) on September 6th, explained that the new strategic concepts would form the basis of programming documents to be made public in early 1991. Cheney noted that a series of briefings were to have followed the Aspen speech, but that he and Chairman of the Joint Chiefs of Staff (JCS) Colin Powell met only once, on August 2nd, with the chairman and ranking members of the four major Congressional armed services committees. General Powell provided details on the new strategy and associated force structure in two speeches late in August and the former Joint Staff Director for Strategic Plans and Policy (J-5), Lieutenant General George Lee Butler, explained even more late in September.

The New York Times covered the new strategy on August 2, 1990, based on leaks of a confidential briefing of the plan to the President in late June, and subsequent briefings to the Defense Policy Resources Board. Pravda, reported Cheney's remarks at the IISS meeting, and that President Bush had ordered changes in American security strategy. Secretary Cheney's additional remarks in Moscow this past October about the strategy and future force structure were covered by the Soviet press. Only limited commentary has appeared in the media, engaged in major defense-associated reporting of events in the Middle East.
Sufficient details of the President's new strategic concepts are available to make an initial assessment and formulate the types of ensuing analyses logically required to assess the new strategy's impact.

The President's New Strategic Concepts

The Strategy and Resources Available

The major factor underlying the reexamination of America's role in the world, and basic national security strategy, is the recognition by the Congress and the Administration that the level of resources devoted to defense in the last decade cannot be sustained. If the United States consciously attempted to outspend the Soviet military in a competitive strategy designed to bankrupt the Soviet economy, then the strategy succeeded. Unfortunately, American defense spending contributed to, but is not a principal cause of the U.S. budgetary deficit.

One of the fundamental components of the President's Aspen speech is that, assuming a two years warning of a Europe-centered global war with the USSR, the U.S. can generate wholly new forces - to rebuild or "reconstitute" them if necessary. Specifically, current forces deemed unnecessary, will be disbanded, not put into the reserves, since the risk is deemed acceptable. Secretary Cheney said shortly before his departure from Moscow in October, that "We are changing our strategy and our doctrine as a result of changes in the Soviet Union and changes in Europe. We no
longer believe it is necessary to us to be prepared to fight a major land war in Europe. . ."

The estimated two-year warning is predicated upon the assumptions that all Soviet ground and air forces will withdraw to the homeland, that a Conventional Armed Forces in Europe (CFE)-like parity will exist from the Atlantic to the Urals, that the Soviet Union will remain inwardly focused, and that NATO and its member states intelligence apparatus are functioning. Soviet forces are being withdrawn to the homeland, conventional arms control agreements have been signed drawing forces down drastically, and the USSR is increasingly inner-focused.

The cornerstone of American defense strategy will likely remain deterrence of aggression and coercion against the U.S. and its allies and friends. Deterrence is achieved by convincing a potential adversary that the cost of aggression, at any level, exceeds any possibility of gain. Details of the President's new national security strategy are being debated but remaining active duty forces are likely to show a significant decrease in the standing U.S. Army and Ready Reserve forces. According to the New York Times, the numbers discussed are:

- Army: 12 active, 2 reconstitutable reserve, 6 other reserve divisions (currently 18 active & 10 reserve)
- Air Force: 25 active & reserve tactical air wings (currently 36)
- Navy: 11-12 aircraft carriers (currently 14)
- Marine Corps: 150,000 personnel (currently 196,000)
Originally termed the "base force," a new force structure advocated by General Powell will be organized into four major components: Strategic nuclear offensive and defensive; Atlantic; Pacific; and a Contingency Response Force. This force structure is not contained in the President's speech but is being developed in parallel to the President's new strategy. What constitutes those forces remains debatable, but indications are emerging.

The Strategic Force would include those offensive forces that survive the START-II process, where numbers like 4500 and 3000 warheads have been discussed openly during the past year. Reducing the offensive threat dramatically to such lower numbers suggests revisiting the suitability of strategic defenses. General Powell included the strategic defense initiative (SDI) in his speech of August 30 but no reference to SDI was contained in the talk by Lieutenant General Butler a month later and it is likely that strategic defenses will continue as a research and development (R&D) program.

Although not specified in any speeches and media accounts, an obvious area that demands clarification is the possible increased nuclear role for naval and air forces replacing ground-based weapons eliminated from Europe under current and future arms control agreements. We should watch the 1991 programming negotiations to see if they include retention of a triad of offensive forces as a policy goal, or if one or more legs of the triad may be eliminated.
The Atlantic and Pacific Forces appear to be headed for both reductions and restructuring. The Atlantic force will include residual forces remaining in Europe, those forward-deployed to Europe, and the continental U.S.-based reinforcing force. This force would be responsible for Europe, the Middle East, and Southwest Asia. The New York Times report discussed 100,000 - 125,000 military personnel remaining in Europe as part of the Chairman's revised force structure, although a 50,000 - 100,000 level was openly discussed at the IISS conference. We should remember the Bush Administration's propensity for counting combat forces on ships at sea as part of the total forces assigned to the Middle East contingency operation. Do personnel in Europe under the President's new strategy include only soldiers and airmen in ground or air forces combat units or all personnel, including those at sea?

U.S. forces in Europe cannot be changed without considering commitments made to allies and the planned employment of American resources in combined operations under NATO command. The July 1990 NATO London Declaration stated that the Alliance too was preparing a new "military strategy moving away from 'forward defense'. . .towards a reduced forward presence. . .". The declaration also stated that "NATO will field smaller and restructured active forces" and "will scale back the readiness of active units, reducing training requirements and the number of exercises." Thus it appears that while the United States is considering major changes in strategy and forces, so is NATO.
General John R. Galvin, NATO's Supreme Allied Commander Europe (SACEUR), recently told the Defense Planning Committee (DPC) that he envisions a change in his primary combat mission from flexible response and forward defense to crisis response. The centerpiece of this capability would be a standing Rapid Reaction Corps centered about a multinational corps and the existing Allied Command Europe (ACE) Mobile Forces. Should these standing forces not be able to support political decision making, then additional forces will be mobilized and regenerated or "reconstituted."

Yet rather than attempting to reach an alliance-wide agreement, each nation in NATO is undertaking unilateral force reductions. France is withdrawing all 55,000 officers and men from Germany. There is talk in the U.K. of reducing the British Army on the Rhine by about 50%, demobilizing most of the troops but retaining regimental identification. Planning in Britain should include the possibility of a total withdrawal of American combat units from the continent—among contingencies they should contemplate. Were this to happen, would the British Army remain unilaterally forward-deployed, and if so, where? These unilateral decisions by member nations will have dramatic impacts on the NATO war-fighting commanders-in-chief (C-in-Cs) plans for military operations and campaigns in the event of war.

General Butler stated "...that the U.S. could undertake a prudent, phased series of steps to reduce modestly our force presence in Korea, as well as Japan and elsewhere." If the Cold
War was our justification for the large presence of forces in the Pacific, then if the Cold War is over, it is over in the Pacific as well. If forces are to be permanently retained overseas, it will have to be for other reasons. The Pacific force will include those residual forces remaining in Korea and Japan, those forward-deployed in the theater, and reinforcing forces located in the continental U.S. It is not clear if forces assigned to the Pacific will have a dual commitment to the European theater in a revitalized "swing strategy" but it should be noted that Japan-based U.S. forces have participated in Operation Desert Shield.

Perhaps the most dramatic innovation of the Chairman's recommended force structure is the creation of a Contingency Force based in the continental United States. Although the NATO London Declaration stated that "NATO will rely more heavily on the ability to build up larger forces if and when they might be needed," apparently most Europeans initially assumed that the U.S. Army and Air Force would either remain as a major element in theater or maintain standing active or Ready Reserve forces which could be returned within a reasonable period. This may not be the case, and America's promise to return may indeed be within the two years discussed under the President's new strategy.

The Contingency Force, according to the guidelines in the President's Aspen speech, will apparently be shaped by the need to provide an overseas presence and response to regional contin-
gencies with heavy armored forces if needed - not to return quickly to Europe. The President alluded in his Aspen speech to maintaining a forward presence by exercises. General Butler described planning for regional contingencies as planning for "graduated deterrence response." Any planning for contingency responses by the U.S. should include the ability to react to more than one predicament.

Today's crises are extremely dangerous due to the proliferation of advanced weaponry and weapons of mass destruction and the apparent willingness of Third World nations to use them. High technology weapons in the hands of Third World nations include: modern tanks, ballistic missiles and artillery, air defenses, tactical air forces, cruise missiles, and diesel submarines. All of this makes conflict in the Third World increasingly destructive and lethal. U.S. crisis response forces will provide presence with the ability to reinforce with sufficient forces to prevent a potentially major crisis from escalating or to resolve favorably less demanding conflicts.

General Butler provided the most detailed breakdown of the Contingency Force. The first stage of a Contingency Force to be used in a "graduated deterrence response," for program planning purposes, would consist of (in the order stated): (1) Army light & airborne divisions, (2) Marine Corps Expeditionary Brigades (MEBs), (3) Special Operations Forces, and (4) selected Air Force units. It would appear from any such force listing that
ground units would fly to a crisis area, much as they did to Saudi Arabia.

This initial component of the Contingency Force would be buttressed as necessary by: (1) carrier forces, and (2) amphibious forces. Normally the Navy prefers to advertise the frequent call on carrier forces for immediate crisis response, and listing these forces in the second component of the Contingency Force probably reflects the land orientation of the plan. It would be wholly illogical to assume that the U.S. will require fewer responses by carrier battle groups in the future - indeed, a case can be made that we will send the fleet more often in the future. The New York Times report listed carriers in the initial crisis response force but implied that they might not be forward deployed.

The listing of amphibious forces in the second tier seems appropriate, reflects recent employment of the Marine Corps, and consistent with the Commandant's recent statement on maneuver warfighting doctrine. Amphibious capabilities must be retained by the United States but in the context of contingency operations rather than a major assault on Europe. If another D-Day type invasion were ever required of American forces, amphibious forces would be among the forces reconstituted and built as was done during World War II.

The third tier of the Contingency Force appears to be heavier forces with the capability for long-term sustainability.
Again, we have seen this application in the Middle East crisis. Sealift capability disclosed during this crisis will be studied and may result in new requirements and possible additional assets tailored for contingency response rather than the traditional North Atlantic and NATO scenarios. The U.S. already has many such assets but may learn from recent experience that modest increments of additional sealift or prepositioned equipment are required.19

U.S. forces for crisis response appear to emphasize versatility, lethality, global deployability, and rapid responsiveness. Readiness and mobility will obviously be among the highest priorities. NATO-related sealift would be put into the category of forces that could be reconstituted, including purchased or otherwise acquired from the civilian market, during the two years that future program planning now assumes is available.

The ability to respond to a major unforeseen threat will, apparently, also be met with the assumption that there will be two years warning in which lift can be reconstituted. In such a climate, it will be hard to justify the retention of older, World War II-era ships, as a part of the National Defense Reserve Fleet. It is likely that shipyards, also justified to repair battle-damaged fleet assets, may also be part of the defense industrial base to be reconstituted instead of maintained.
Although not specifically addressed by the Administration, it seems obvious that the U.S. will also devise a peacetime strategy to deal with low intensity conflict. Such struggles threaten international stability. A dynamic strategy to promote democracy, justice, free enterprise, economic growth, and to counteract terrorism, subversion, insurgencies, and narcotics trafficking can be accomplished primarily by security assistance programs as well as other instruments of U.S. national power.

From this cursory initial look at the Chairman's recommended force based on strategic assumptions apparently approved by the President, it appears that the U.S. Navy will change the least. While in Moscow in October, Secretary Cheney spoke of a 450-ship Navy. The Navy appears to have accepted a twelve-deployable carrier fleet but it is very likely that some programs for new weapons systems are in jeopardy.

In his speeches in August, General Powell supported retention of the strongest possible Navy. This does not mean that the United States will adopt a national maritime strategic outlook, positing heavy reliance on maritime forces to the exclusion of others, since the sea services can contribute to attaining political goals, but they cannot achieve them all. A maritime heavy force structure might reopen old debates between maritime and continental strategies, but the Navy should recall that it forms but one component of triadic forces that ensure U.S. national security strategy. The Maritime Strategy will devolve
into separate programming and war fighting strategies - thus further complicating the debate.

The Soviet Threat

Underlying any reexamination of America's role in the world and its basic national security strategy are the monumental changes in the international security environment in the past few years. Strategies are designed to cope with implied or explicit threats; the profound changes in the threat, therefore, have a direct bearing on the strategies that the U.S. and NATO need and will develop. Rather than enumerate the revolutionary events we have witnessed, it seems appropriate to first analyze the impact of these changes on the Soviet C-in-C of the Western Theater of Strategic Military Actions (TVD).

NATO is aware of the capability of Soviet hardware, military exercises and deployment, and military-technical aspects of military doctrine as indications of a real strategy and capability for offensive warfare by the Western TVD Commander. Employing this offensive capability was termed, by the Soviets, a theater strategic military operation. The theater strategic operation we believed the Soviets capable of today strongly resembled the Manchurian Operation they fought against Japan near the end of World War II. In the Western TVD, initial offensive military operations by a front were assumed to achieve rates of advance of 40-60 kilometers per day to a depth of 600-800 kilometers. The duration of a normal frontal operation was about 15-20 days,
meaning that overall, two fronts should have handled all of Western Europe in about 25-30 days. NATO took this threat seriously and prepared its own forces and counterstrategy accordingly.

It is not clear that the Soviets ever saw themselves as fierce warriors as the West did. They had a much clearer picture of deficiencies in the military-industrial sector that have just now become apparent to the West. They recognized the problems they would have if they attempted a theater-wide military operation with multiple fronts while trying to attain their strategic objectives in a simultaneous surge effort. It is doubtful that they felt capable of managing such a theater offensive using sequential operations.23

With the nagging self-doubt in their ability to manage a theater strategic military operation before the sweeping political changes in Europe, the problems are infinitely more complicated given the reunification of Germany and the imminent withdrawal of Soviet forces from Germany and the Czech and Slovak Federal Republic. Even if Soviet forces remain in Poland for a few years, the Western TVD C-in-C cannot count on Warsaw Pact nations committing their armed forces to Soviet command. Indeed the Western TVD C-in-C probably assumes that Eastern European military forces would oppose a Soviet forced reentry.

The Western TVD C-in-C cannot advise his political leadership that, under current or likely future conditions, it is
possible to launch offensive military operations at the theater strategic level, against non-Soviet Europe with any degree of confidence of successfully completing his assigned mission. The Western TVD C-in-C is probably driving his staff to develop new plans for the forced and opposed reentry into Eastern Europe from the Soviet homeland.

These assumptions dovetail remarkably with the declaratory Soviet military doctrine and strategy evidence that we observed in the past few years. We have seen Soviet deeds belie Soviet words, when they often spoke of a defensive doctrine but clearly maintained forces for an offensive strategy. The Soviet Union is moving towards positioning all its ground forces within its borders, absorbing the first blow from an adversary, then having the capability and military strategy to repel an invasion to the Soviet border but not cross and continue the counteroffensive in enemy territory.\textsuperscript{24}

It appears that the traditional strategic missions of the Soviet Armed Forces and the criteria for successful completion of those missions, have undergone significant revision. Formerly, total defeat of the enemy's armed forces in an armed conflict was demanded as the military's contribution to the overall war effort. Under the new defensive doctrine, the revised military requirement is to defeat the invading force and to prevent vertical and horizontal escalation, or the escalation of the conflict over time.
The political/ideological goal of traditional Soviet war termination strategy was to ensure that the aggressor could not again threaten the USSR, and that progress was made toward eventual peace ("mir") and a world socialist order. The political goals for war termination are now to prevent nuclear holocaust and simultaneously ensure the survival of the homeland (socialist or other).

We are receiving numerous clear signals about "new thinking" in the USSR. Army General Mikhail A. Moiseyev, Chief of the USSR Armed Forces General Staff and USSR First Deputy Defense Minister, announced, in November 1990, a series of significant military reforms that parallel actions being taken by the U.S., NATO, and the general European community of nations. The first stage of this reform will last until 1994 and will consist of the complete redeployment and resettlement of Soviet troops based on foreign soil. The second stage (1994-1995) will consist of the formulation of strategic groupings of armed forces on Soviet territory with a new system for training and mobilization.

The third stage will last from 1996-2000. In this stage, further reductions, reorganizations, and reequipping of forces will take place. By the year 2000, according to Moiseyev, strategic nuclear forces will be cut 50%, ground forces by 10-12%, air defense forces by 18-20%, air forces by 6-8%, and administrative, research, and other combat forces by 30%. The number of generals to be cut is 1,300, officers - 220,000, and warrant officers and
ensigns - 250,000. The overall armed forces will number 3-3.2 million personnel.

Perhaps the most startling signals about "new thinking" is the proposal contained in the Soviet literature in August 1990 that the Armed Forces of the USSR restructure themselves into three basic contingents, which show a remarkable resemblance to President Bush’s and General Powell’s strategy and forces structure. The USSR appears to be discussing its own version of an active, reserve, and reconstitutable force strategy and base force.

The first contingent, in this new Soviet proposal, would comprise forces in a state of permanent high combat readiness. It would consist, in part, of new military services called the Nuclear Forces and Space Forces. The Nuclear Forces would comprehend the existing Strategic Rocket Forces, as well as appropriate units from the Air Force and the Navy. Space Forces would include existing Air Defense and Antisatellite Forces. These new services would remain under the direct control of the Supreme High Command.

The first contingent would also consist of highly mobile Ground Forces, whose strength and composition could change depending upon the international political-military situation and the economic potential of the USSR. This force size would be sufficient to resolve a conflict in an individual region until relieved by forces of the second contingent. It does not appear
capable of offensive military operations at a theater strategic level. Initial estimates are a force of around 1.2-1.3 million servicemen allocated between the Ground Forces, Air Force, Air Defense and Space Defense Forces, and the Navy. Command and control would remain with the High Command of Forces in the TVDs.

The second contingent, according to this proposal, would consist of an additional 630,000-man reserve force. Up to one-third the first contingent would form the nucleus of the second contingent. Hardware and weapons for these reserves would be stored at depots and bases. This contingent would form the large strategic formations necessary for major military operations in a war. It could probably mount an offensive theater strategic military operation -- but before it was organized, strategic warning would be provided.

The third contingent would embrace, in part, some 300,000 - 350,000 additional men undergoing between five and six months training for national service. The men would then serve for an additional five-six months with either first and second contingent forces, or a longer period in newly organized republican units, probably similar to the U.S National Guard. Call-up will take place twice a year. These forces would augment troops in the field should war erupt. A second part of the third contingent would consist of these new republican units. The total strength of the third contingent would be some 600,000 - 700,000 servicemen.
This proposal for the reorganization of the Soviet military is but a proposal in a continuing internal debate over the programming for new forces. The debate is not over and may be immaterial to a discussion of the problems of current war planning guidance. Except to the extent that debates over future forces give us insights on current thinking, many military leaders today retain their "old thinking" from the days that they were first socialized into the Army and it is this type of thinking that we also would have to face if there was a war today.27

The message for the West, however, is that if reorganization plans like this are implemented, and reductions in military capability include strategic nuclear and naval forces in the future, then Gorbachev's promise to take away the threat has come true. We must now deal with the questions stemming from "what if peace?"

**Issues For Discussion**

The issues raised in the President's Aspen speech are numerous, complex, and require discussion. Some of the more important include: how likely is the new strategy to take hold; how do we define our new goals and objectives for both program and war planning; what is the lasting impact of our current contingency operations in the Middle East; what are the new requirements for the intelligence community, for decision-making, investment strategy, personnel and organizations, for technology, and the transition period? This section will respond to these obvious questions and perhaps suggest what else might be included.
Is the New Strategy Real?

It may be instructive to review another Presidential unveiling of a major programming strategy to see if there are parallels. When President Ronald Reagan announced, in March 1983, his concept for a strategic defense initiative (SDI), he explained how the U.S. and its allies planned to defend themselves from an attack by Soviet intercontinental ballistic missiles (ICBMs). That strategy would be possible only if the Congress would purchase the weapons systems associated with SDI. It would have been wrong to assume that current U.S. or NATO strategy was immediately changed to defend the U.S. against ICBMs, since neither the U.S. nor its allies had defensive forces in being which could engage such missiles.

Just as in 1990, there transpired a series of briefings and speeches in 1983 by supporting officials following the President's vision of a new defense doctrine. Then-Secretary of Defense Caspar Weinberger delivered a major speech explaining the basic concept. A Blue-Ribbon panel of experts was commissioned to study the possible applications of technology to the strategy and initial results of their deliberations began leaking to the public in late 1983. Not until the programming documents were delivered to Congress in February 1984 did the strategy for defense of homeland and allies under SDI begin to be fleshed out in official documents. Indeed, strategic defenses in the previous set of programming documents provided no hint that a new initiative was being contemplated.
Unlike the 1990 case, in 1983 the civilian academic community appeared to mobilize almost instantaneously and publish both supporting and critical assessments of the new doctrine, mostly Op-Ed pieces. It was months later that the public saw more comprehensive treatments of the strategy and associated technologies. There was widespread interest in the technologies associated with SDI, primarily because of the opportunities for procurement business with the government and opportunities to work at the vanguard of knowledge. What is less well recognized, however, was the great deal of "study money" used to flesh out the strategic concepts.

We should assume that President Bush's Aspen speech will likewise lead to substantial "study money" being used to flesh out the concepts he discussed. What remains to be seen is whether the studies will be completed before 1991 budget actions or faster than significant international events unfold. Recent events in Saudi Arabia sidetracked a great deal of internal examination of the new strategy and the expected critical evaluation from those outside government.

Under the American form of government, the announcement of a policy by the Administration is not an announcement of government policy. Indeed, SDI, although feared and attacked by the Soviet Union, and probably the cause for major decisions in the Soviet budget, never developed beyond the stage of an initiative, and full-scale evolution or deployment may not yet be feasible.

In short, before any new initiative becomes a funded government policy, vested domestic interests and America's allies will have opportunities to make their desires known. Parliamentary governments, common among our NATO allies, may have some advantage in completing a comprehensive review of strategy and redirection of defense programs. Hence, it may be easier for NATO nations to respond to this U.S. initiative and international events than it will for the U.S. to take action.

Defining Goals & Objectives in Programming & War Planning

A good example of the verities of parliamentary forms of government, compared to the American government, in making major defense policy changes is the review of the master strategy for Australian defense forces conducted from 1985-1987. In February 1985, the Australian Minister of Defense, Kim Beazley, employed
noted strategist Paul Dibb to examine the current capabilities of the Australian Defense Force, describe the current strategic environment, set defense priorities and strategy, and define the appropriate future force structure.

Dibb issued his report in March 1986 and, after a sufficient period for analysis and criticism, the government issued its own version in March 1987. Concepts first outlined by Dibb were adopted by the Australian government, after a serious but brief (by American standards) debate and adjustment. They were then carried out by the Ministry of Defense and the Australian Defense Forces. Such a relatively orderly process seldom occurs in the United States, and we should not expect debate over the President's new strategy to remain either bloodless or limited to American domestic political actors.

Political-military strategic planning generally commences with: (1), a tabulation of the resources likely to be available, or (2), an assessment of the threat, or (3), an examination of the goals and objectives to be attained. The planning process can start with any of these three factors but it generally does start with different ones depending upon the type of planning underway.

For example, in wartime, planning often starts with a tabulation of the resources available - probably how we started the process on December 8, 1941. Yet, nations may turn first to an examination of the threat in wartime, when faced with the need to
create major strategic plans insufficiently researched before the war. The USSR likely did this after Jun: 22, 1941. In each case, the possible goals and objectives were limited by the resources available and the threat.

War planning may also start with an examination, analysis, and reconsideration of goals and objectives. The U.S. and the Soviet Union each had initial goals and objectives they attempted to achieve in the initial stages of World War II. Later, however, the allies amassed sufficient forces to operate on the strategic offensive in all theaters and recognized that "unconditional surrender" was a possible goal. Hence goals and objectives can and often do change during wars.

Much of the literature devoted to defense planning, however, does not concern actual war planning, but rather program planning, used to explain to legislators and the public why certain types of weapons systems and forces should be purchased and maintained. Programming strategy under the Planning, Programming, and Budgeting System (PPBS), in the United States, officially starts with an examination and identification of the threat. There have always been implicit unofficial discussions of the range of resources available that may have preceded this threat examination. In general, a fundamental reexamination of goals and objectives has not been necessary in the recent program planning for defense.
There is often some similarity between war planning and program planning, but there may be fundamental differences. For example, the USS MIDWAY was justified in 1940s programming plans to help defeat Japan. War plans in the 1980s included the USS MIDWAY defending Japan. President Bush's remarks in Aspen are programming remarks and do not reflect changes in the current defense plans for the U.S. or U.S. forces which would fight today under NATO.

It was reported in the NATO London Declaration and in General Galvin's DPC remarks that a new NATO strategy (probably identified as MC-14/4) is being drafted - paralleling unilateral programming actions being undertaken by individual NATO nations. Both actions are necessary, national programming planning to deal with the force requirements for the future, and NATO war planning to deal with actual forces and today's threats. Initially, there will be significant differences between the strategies articulated for each case.

The new NATO strategy will be based upon paragraph 20 of the London Declaration. NATO strategy will likely have peacetime, crisis, and wartime responses. Peacetime elements will likely include: enumeration of national prerogatives, maintenance of alliance cohesion by integration and multinational forces, intelligence and verification of arms control agreements, forward presence, active and reserve forces training, force generation preparation, and interaction with non-NATO forces.
The crisis response strategy will likely address: readiness for the Rapid Reaction Corps, the quick reaction of the alliance to emerging crises, communication with adversaries, planned sharing of risks and burdens, escalation and deescalation, and the preparation for controlled mobilization and demobilization. New political realities require an enhanced political component to crises that erupt in the NATO area. For example, the initial reaction to a crisis in the former German Democratic Republic would deploy NATO troops into the area formerly protected by the Warsaw Pact, yet avoid contact with remaining Soviet troops. The political goal of a future crisis appears to be - control and deescalate.

The U.S. and NATO never had the opportunity to develop war plans for an environment that included forces envisaged under President Reagan's SDI. For President Bush's new strategy, there is no need to delay immediate revisions of war plans for existing forces. There are significant changes to the international environment, especially the threat, and an immediate need to reduce defense expenditures - hence plans can be changed now. This specifically includes our desire and ability to change now the planned employment of strategic nuclear and conventional forces.

Do we need to target facilities and forces in nations that clearly are no longer enemies? It is a fair assumption that we formerly targeted Soviet nuclear forces deployed in Eastern Europe. Presumably, we have technical ways to preclude nuclear
warheads from exploding in the former German Democratic Republic now that this territory is part of a NATO member nation. But have we applied common sense to the nuclear targeting of other national areas? What political benefit would be gained from targeting areas where restless nationalities are already struggling against the national government in the USSR? Can we change our targeting fast enough to respond to rapidly changing political events? Do we have to render inoperative warheads in missiles with multiple warheads to both meet our objectives of destroying military targets yet avoiding collateral damage?

Similarly, in the conventional realm, there is an obvious need to immediately revise existing war plans since NATO now controls both sides of the Fulda Gap. Indeed, General Galvin told the DPC that "it is clear that the old General Defense Plan is useless, and I have already rescinded it." NATO has now been asked to respond to a request for assistance in the defense of a member nation, Turkey, from a non-Warsaw Pact threat. Did plans for such a contingency exist? There are obvious components to conventional war planning that should be revisited and need not await programming decisions.

Conventional war planning in the United States, unlike nuclear war planning, has generally been done by professional military forces, without significant direct civilian involvement. The Chairman of the JCS should reconsider this situation and seek active interaction with the civilian community.
to make meaningful contributions and immediate changes to conventional war planning.

Specifically, strategists, political scientists, area studies specialists, economists, etc., probably can all provide immediate assistance and advice to the military to adjust current war plans. The military has traditionally been able to perform this task in-house, but with the phenomenal changes in the international security environment and the preoccupation of the bureaucracy with Operation Desert Shield, assistance from the "outside" may be required.

If left to their own devices, it is possible that the bureaucracy will be tempted to ensure that current war plans support planned future programs and the existing organizational structure. Many civilian "outsiders" that could help are the numerous government employee faculty members at the war colleges, service academies, research laboratories, and similar institutions. These individuals are not from "outside" the government and many have security clearances and a great deal of expertise.

The Chairman of the JCS already recognizes that a revolution has occurred in the international security environment. This requires the immediate transfusion of expertise from the civilian community to the military. We cannot afford the luxury of waiting for new officers who have recently studied these affairs, to cycle through the graduate education and War College processes; nor is the contracting and consulting community the government's
best source for new ideas. This involvement by civilians in military affairs already occurs with nuclear program and war planning, and general forces program planning. Although previous proposals for such involvement from individuals within the Pentagon have been made before, they have always been defeated.

NATO nations also should involve their civilian academic communities with military planners, and it is my experience that other armed forces are more comfortable with this model than is the American (or Soviet) military. This is not the time to draw distinctions between who should be involved in the debate over fundamental goals and objectives. In World War II, the U.S. and allied armed services drafted, or otherwise secured, the services of academics who had years of area experience that the military lacked. What is going on in the world has not been seen by the existing bureaucracy. The time to repeat the involvement of outsiders is now.

An alternative model would be for the military services to allow or invite the political leaders of their nations to dictate the revised goals and objectives. While there are some political leaders and a great many advisors available to intelligently discuss and decide nuclear strategy issues, most civilian leaders lack the requisite background in conventional warfare to know what is possible and what is not. The military services perspective is that the services must participate in the debate. The
services should also involve civilian specialists in areas from which they have traditionally been left out.

Current Contingency Operations

A decade ago, when the U.S. initially prepared contingency plans for its Rapid Deployment Force, many observers feared that the deployment of significant military forces to the Middle East would move forces simultaneously committed to the defense of Europe. War planners feared an outbreak of hostilities in the Western TVD at the same time U.S. forces were arriving in Southwest Asia. That nightmare would tax America's capability to redeploy forces, or deploy forces remaining in North America, to Europe in time to influence the war. Despite 250,000 personnel currently in Southwest Asia, and another 100,000+ en route, there has been a dearth of commentary from Europeans worried about this issue.

If we can afford to place more combat troops in the Middle East by early 1991 than we had in Europe at the height of the Cold War, should we not assume that European NATO nations have accepted the diminution of those forces in Europe to deter a war today? Unknown is whether U.S. forces being moved from Europe to the Middle East will ever return to Europe, or upon completion of Operation Desert Shield, go home to the United States.

If the equipment being sent to the Middle East is brought back to the U.S., is it stored in sealift ships quickly deployable to a future crisis or is it given to the reserves? If the
size of the reserves really goes down as a result of the new strategy, what do we do with the excess equipment? If the personnel in the Middle East return to the U.S. to be demobilized, do we leave their equipment prepositioned in Saudi Arabia or offshore in ships or do we bring all of it back as well?

The current Middle East crisis demonstrates that the U.S. can muster sufficient assets from the continental U.S. to meet a major contingency where there were no forces in being. It also seems to demonstrate that such a force does not require basing overseas, such as in Europe. It will take the resolution of this crisis to make a definitive statement on the issue -- but we should review the President's new strategy and the associated force structure after Operation Desert Shield has run its course.

Once Desert Shield after action reports are written, analysts will try to answer the question what systems appeared to make a difference in the political and military outcome. Systems that did not make a major contribution to this contingency operation will need to be reevaluated for upgrading or cancellation and replacement. Under the new strategy to reconstitute capabilities useful in a Europe-centered global war with the USSR, there will be no need to retain systems that do not have a dual use in the Contingency Force.
New Requirements for Intelligence

The changes suggested by the Bush Administration, if accepted by the U.S. Congress, will place an enormous burden on the intelligence community. Although one might argue that logically, concomitant with such fundamental changes intelligence appropriations should increase, it is probable that they will decrease like defense spending.

The bulk of the U.S. and NATO national intelligence communities are oriented toward understanding and countering the Soviet threat. Although it took many years, the West eventually grew sophisticated at understanding the Soviet perspective on doctrine, strategy, arms control, and the like. Our intelligence agencies and associated policy offices are substantially less competent at analyzing, predicting behavior, and conducting net assessments for the rest of the world. In order to reconstitute forces for a major war, we will need two-years warning of a major unforeseen threat as well. Deficiencies in this area should be corrected, and quickly. Flexibility in shifting intelligence assets from one set of collection targets to rapidly emerging priority targets is essential to support the contingency response element of the President's strategy.

The U.S. possesses an excellent intelligence community which will need fine tuning and some redirection but is capable of providing the government with all of the necessary assessments. To involve the intelligence community with additional tasking in
economic analysis will challenge that community, and it should be done with the full cooperation of existing organizations outside of government. Formerly, when intelligence analysts differed, the debate could be settled by an assessment of the data. With political and economic intelligence, it is often the methodology rather than the data that settles disputes.\textsuperscript{38}

We have to build capabilities to match our stated need for new types of information. Economic and other forms of strategic intelligence, for example, may become relatively more important than extremely costly technical intelligence systems designed to provide tactical warning. It is important to recognize that, in addition to the obvious burden of providing two years strategic warning of a Europe-centered global war with the USSR, and much faster warning of crises outside of Europe, the intelligence community should undergo a fundamental reexamination of its missions and priorities.

**Requirements for Decision-Making**

NATO talked in terms of a few days warning (the time to detect an invasion) and another few days for decision. Mobilization and return of initial American troops and air forces from the continental U.S. to Europe would take around 10 days. Hence the canonical 14-day scenario arose, with enormous effort devoted to the assessment of theater-strategic operations and campaigns that would be fought by forces that could be brought to bear. We became very adept at calculating theater-wide force ratios for the first thirty or forty-five days of a war in Europe. The
question arises: how long would it take the Soviets to again be in such a position to cause the U.S. to worry about a European crisis that could escalate to warfare and perhaps be over within a month and a half?

From the New York Times report, it appears that the U.S. has accepted the answer, "as long as two years." What we need to more fully establish is exactly what this two years means? Should we assume that we will have two years to reconstitute forces from the time that strategic warning is provided and accepted by the intelligence community? Which intelligence community? Is it two years following government's accepting that something is wrong that needs to be redressed? Which government or governments and does NATO collectively have to agree to react? Is it two years assuming that we can find something significant and recognize it at the time?

Two years does not mean that the USSR cannot launch an intercontinental nuclear strike against the continental U.S., or an attack at the operational level on Europe or at the tactical level in Europe in less time than that. But, for programming purposes (procuring weapons in Fiscal Years 1992-1997), U.S. and other NATO national planners should assume that the old theater strategic operation, or a surge attack across the old inter-German border with the Pyrenees as goal, could not be mounted without the U.S. intelligence community obtaining and understanding indicators two years in advance.
Since the threat of Soviet invasion of central Europe today is remote, U.S. programming planners may assume that they will have sufficient warning to re-build much of the forces and material instead of maintaining them on active duty, in the Ready Reserves, or prepositioned. Succinctly, the need for the old, massive, short-term (14-day) mobilization has diminished. The threat planning assumption that once drove NATO toward a two-week mobilization requirement has been replaced with a threat that gives the alliance two years to respond.

War planners, unlike program planners, are not required to use "best case" assumptions and are therefore authorized to formulate their plans on less optimistic suppositions. Hence, redirection of programming planners to the "best case" (two years warning) does not deny governmental decision-makers access to alternative intelligence assessments nor does it necessarily influence war planning for current forces.

Even accepting the ability of the intelligence community to provide a two years strategic warning, there is controversy over what governments will do when faced with the inconclusive evidence provided initially. If Western history of non-reactions to rearmament by totalitarian nations and violations of arms control agreements is a guide, we should assume that democracies will: (1), delay decisions to rearm for many good reasons - such as different interpretations of ambiguous intelligence data, the desire to deescalate a crisis, etc., (2), deny that a change in the behavior of a former opponent has taken place or, if it has,
is not strategically significant or not precisely a violation of an agreement, and (3), even suppress the intelligence and findings of facts that do not support government policy.

A major lesson from previous arms control agreements is that they not only limit necessary preparation for deterrence, but also deter democracies from exposing totalitarian nations openly violating such agreements. During the inter-war period, Germany, Italy and Japan built many warships exceeding limits set forth in arms control and other treaties, clear violations actively hidden by at least one major democracy. For example, Britain had an Italian cruiser in its Gibraltar drydock, weighed it, found it in excess of the 10,000 ton treaty limit, and hid its findings. In yet another case, the Admiralty continued to record the incorrect but treaty-compliant tonnage for the German battleship BISMARK, even after it was sunk and the Royal Navy's Intelligence Division had examined the ship's logs and surviving crew.

Linking the behavior of a nation to a formal agreement, such as arms control, takes the reporting and interpretation of data away from the intelligence community and makes it the province of lawyers and politicians. For years, these individuals debated whether or not a Soviet radar was in compliance with the ABM Treaty, despite no apparent change in the data provided by the intelligence community. In the end, the Soviets themselves admitted that the radar was a violation. Had this radar not been linked to an arms control treaty, it is very likely that the
assessment of its intended purpose would have been the routine province of professionals.

Governments should have an integrated defense and arms control agenda. We are currently engaged, or will likely soon engage, in arms control negotiations or unilateral steps in lieu of arms control in virtually every warfare area. Decision-makers should not allow the desire of advocates or negotiators, or one branch of the bureaucracy, or the recommendations of one nation in an alliance, to dominate the debate over the value of a potential arms control agreement. Arms control should only be engaged in if it can be demonstrated that the agreement will contribute to the defense of the United States, the decreased likelihood of war, the reduced consequences of war if one were to nevertheless break out, or a concurrent reduction in costs. Decision-makers will need to ensure that a comprehensive review of the value of individual agreements is performed.

We will need to make a study of the decision-making patterns of nations when faced with decisions similar to one that NATO governments will face when presented with ambiguous evidence which, some might argue, constitutes "proof" that the USSR, or the Russian Republic in a new USSR confederation, is violating the "understandings" or treaties that codify the new security environment. The military should include in their family of war plans, plans based upon the track record of their governments acting courageously in response to provocation.
Decision-making studies should span the gamut of possible scenarios. At one end of the spectrum is the "worst case," of NATO reconstituting its forces within the two years predicted, but withholding the authority to mobilize forces out of garrison and respond to tactical warning until an attack by the USSR takes place, is verified, reported to the national and allied command authorities, and an authorization to respond is communicated to the field. In this scenario, we assume that the Soviet military machine was able to come back strong. A "best case" at this end of the spectrum would be if all forces were allowed to report to their NATO-assigned positions, ready for a stillborn Soviet threat generated during two years of economic and political chaos. Perhaps NATO might have an option for offensive tactical and even operational-level warfare against the USSR.

At the other end of the spectrum is the other "worst case," of a USSR that takes a full two years to rearm in such a manner that it obtains a significant advantage in its estimation of the correlation of forces and means. The scenario would assume that NATO nations failed to make bold decisions when faced with ambiguous evidence by the intelligence community. We should also look at the case when both sides had fully reconstituted and assumed a wartime command and control footing and deployment.

There are numerous other scenarios that need investigation. Despite the lack of credibility accorded a "bolt-from-the-blue" ground attack by the USSR during the new international security environment, we should analyze this scenario to develop intelli-
gence indicators we should monitor to ensure against such a possibility.

We also have records of planning and studies over the old scenarios of war that are not totally irrelevant. For example, it is conceivable that Eastern European nations might ask Soviet, or Russian, troops back into their nations to counteract what they perceive to be a threat from Germany. That scenario can build upon existing studies. Differences with today's scenarios might include reconstitution at national locations but failure to deploy forces from home garrisons and allow their transfer to NATO. Other possibilities include using the Contingency Force to respond to a European crisis.

War planners will also wrestle with how much time and what type of decisions are necessary during the initial combat actions in a crisis, before forces are either called up from the reserves or reconstituted in full. During this period, presumably both superpowers would act defensively.

In a November 1989 interview, Marshal of the Soviet Union Sergei F. Akhromeyev, military advisor to the current Chairman of the Supreme Soviet, stated some very specific views on how long this defensive period would last. He implied that the role of the defensive, during the initial period of a future war, was to allow the political leadership the opportunity to terminate the crisis before it erupted into a major armed conflict and war. If
the political leadership failed, Akhromeyev implied that the military would be then be unleashed to perform their normal function of crushing and decisively routing the enemy.⁴³

A previous debate within the framework of Soviet military science covering the initial period of a war that may prove instructive to the possibility of the threat today. During 1922-1941, questions arose regarding how long border skirmishes and diplomatic exchanges would last prior to total mobilization. Marshal of the Soviet Union Grigori Zhukov gives the interval in his memoirs as "several days" while Marshal of the Soviet Union Vasiley D. Sokolovskiy writes in his Military Strategy that the initial period might have lasted 15-20 days.⁴⁴

NATO exercise and simulated military decision-making has traditionally assumed that the alliance political structure would make decisions, which would then be carried out by near-simultaneous actions taken by all member nations. In a restructured NATO alliance that is more political than military, and exists in a new international security environment, NATO and national military commanders might have to make future plans based upon a likely decision-making process that has member nations making unilateral actions prior to those of the alliance as a whole. This, in turn, would require the planning for more sequential military operations, rather than simultaneous. Similarly, planning for allied, or combined forces, military operations may take second place to national planning. Future military planning by NATO may stress combined or joint operations but with forces
under national command. All of these topics are currently being discussed by the appropriate military commands.

These and other scenarios should be augmented with the most sophisticated techniques available to learn lessons of wars and campaigns yet to be fought. An artificial history could be written of alternative futures so that the military can better advise their political leadership on the most suitable courses of action for decisions they should make today.

Technological Requirements

In the new political-military environment, the American public is predictably less likely to sustain a major overseas military presence or combat in foreign lands. Hence, requirements should be demanded for high technology weapons systems using robotics and artificial intelligence so that if engaged in combat, American casualties are minimized. America's smaller armed forces should be provided with the most technologically advanced equipment.

Perhaps this is the time to revisit President Reagan's dream of a defense-dominant world, but now, deployment of the Treaty-compliant antiballistic missile system should be the first step. Once there is a national consensus on the value of defenses, the U.S. can move in the direction of more costly programs - but incrementally.

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With the demise of the old NATO-Warsaw Pact scenario and the prospect of numerous arms control agreements, the requirement for some technologies may diminish. For example, if the Soviet Union actually accepts mutual assured destruction, demonstrated by their giving up strategic air and missile defenses, we may not need to invest in countermeasures to penetrate those defenses and attack strategic offensive forces. Similarly, if warhead numbers are driven low enough, perhaps we can abandon the search for increased accuracy. With NATO armies on both sides of the old inter-German border, some of those systems necessary for AIRLAND Battle should have lower priorities.

On the other hand, some of the technologies that were identified with NATO follow-on forces attack (FOFA) may be useful in future out-of-area contingency operations. An integrated task force made up of all the services might benefit from technologies that were designed to conduct simultaneous operations over the full breadth and depth of the battlefield. An unbiased review of both technologies and systems associated with the AIRLAND Battle and FOFA will need to ascertain which are appropriate under the new strategy.

Technologies that were considered not as useful under the former political and international security environment may be more interesting in the new world. For example, with numerous overseas bases, offshore basing technologies received just modest interest. With the possibility that many American forces may
return to North America, the U.S. may want to more fully investigate the capabilities of offshore basing concepts.

The U.S. government has previously identified key technologies that should be protected, and routinely tracks our relative standing in these areas vis-a-vis the Soviet Union. We have recently expanded our comparison of our technological standing to include allied nations, developing countries, and Eastern Europe. We could all benefit from a Presidential Blue-Ribbon Panel synthesizing these key technologies to explicate and validate their importance in the new political-military environment. Perhaps many we thought critical can be downgraded. Still, if we are to reconstitute a significant combat capability against a world-class adversary, then perhaps we need to identify those technologies that we should protect.

**Investment Strategy**

The major implication of the two-year big war warning of a Europe-centered global war with the USSR is that American programming strategy will shift its focus to the threats presented in other areas of the world. Until now, the unstated relationship of the threat to programmed forces was, generally, that U.S. forces would meet the challenge of the most demanding threat, the USSR, and assume that they could also cope with lesser contingencies. That basic assumption was generally not entirely true and now will be essentially reversed: forces will be acquired to meet the challenges of the more likely, less demanding, threats assuming that they are useful against the more unlikely but greater

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threat posed by a Soviet Union that decides to rearm. This will be a new planning assumption for America, new for its allies, and somewhat impractical for the near term - or until we see substantial changes in Soviet maritime and nuclear force structure to match what we know are reductions in the ground and air forces.

Some of the military capability that America and her allies need to retain should be contained in existing active duty and ready reserve forces. On-hand equipment and supplies for those ready forces is needed. Some of the equipment and supplies will need to be stockpiled and prepositioned. Maritime prepositioning offers flexibility that has recently been demonstrated in the Middle East. However, not all of the materials for war need to be readily available.

Implicit in the President's new strategy is the need for a successful investment strategy capable of tooling-up for wartime production within the assumed two years of warning. This capability will consist primarily of the knowledge, skills, and tools to respond within the timelines now specified. This concept is not new and we should review the history of planning assumptions and industry's ability to respond in the 1930s.48

Considering the record of all nations in producing major weapons systems, it seems obvious that a fundamental restructuring of the procurement processes is also required. Industry often sought or took the leading role in exploring technological
opportunities and charged such research to overhead for major programs. With the numbers of major programs likely to be severely reduced, a new mechanism is required for basic research and initial development. To change the leading role in military R&D, governments will have to reverse a major downward spiral in this category of spending.  

Another possibility is to have government set up major design bureaus and internalize R&D responsibility itself — perhaps specializing in areas devoid of normal civilian spin-offs. An alternative strategy is to continue those operations in the private sector and provide hefty government funding. Perhaps state and local governments can be persuaded to invest in R&D as well. The objective is to retain technology capability in numerous areas and the production capability in a few.

In any case, the output ought not be a family of senescent designs aging on the shelf, but rather fully operational prototypes which will normally never enter full scale development. In some cases, limited production runs may be necessary to ensure that production experience is maintained. In most cases, product improvement programs should be included in the prototype program.

Such a prototypes development program should ensure that both the capability of assembly is maintained and a dynamic R&D program continues. This should satisfy policy planners requirements to regenerate forces within two years, if needed.
multiple possible products on the shelf is also a good competitive strategy that will force an enemy to match all possible threats instead of just a few.

That programming environment will require a new understanding of the partnership between government and industry. It will require major changes in the charters of many R&D and programming agencies to allow easier adaptation of commercial technologies into the defense sector and the continued flow of defense technologies into the civilian world. It will also likely require changing defense regulations to allow profits on R&D and prototypes.

Making the two year response time a reality may also require abandoning military design specifications (MILSPEC) in many areas. We may have to acknowledge that, to meet the deadlines, readily available commercial products may be substituted. For areas that clearly require specifications, the old system should be retained.

Fred Ikle, former Undersecretary of Defense (Policy), was a proponent of preprogrammed crisis budgets and industrial responses to bridge the gap between peacetime and wartime. Industrial mobilization, instead of military mobilization or the deployment of troops, might form the basis of an adequate governmental response to ambiguous warning indicators. Ikle proposed a series of industrial alert conditions, similar to those found in
the military, which would trigger specific actions. There is no reason contracts cannot be let ahead of time and contingency orders specified. It seems that a "graduated deterrence response," the term used by General Butler, could well involve a "graduated industrial response."

Although we can speak abstractly about having plans and passing budgets ahead of the need to do so, economists must help government ascertain how much money would be required to reconstitute the defense industry. If that money is earmarked for other purposes, then financial planning should include tracking sufficient governmental short-term money that can be quickly diverted to defense -- if the reconstitution part of the new strategy is to have teeth.

Industry and government should decide on a basic strategy consonant with our ability to support a defense industrial base and our investment in new technologies; and both must be comfortable with their new nonconfrontational roles. Government should ensure that industry remains capable of retooling and delivering military products within two years or less. The government record of abandoning major production programs is a travesty, and it is likely that unless consciously addressed, we will permit the destruction of most capability. Notable examples include the Apollo and Saturn 5 programs, where facilities, equipment, hardware, stores, instrumentation, data files, test stands, etc. were destroyed and all technical teams were dispersed.
Many military contractors have been provided government-owned equipment or have charged the development of facilities and equipment to military contracts. If the federal government wishes to have these facilities retained, mothballed, or perhaps even improved, then it should provide incentives. Ownership of government equipment can be transferred to industry, or management of facilities can be turned over to government. If retained by industry, federal, state, and local tax laws will need to be revised to reduce or eliminate taxes on idle property and land.

Industry should continue operations, meanwhile, on projects that have no direct defense application and maintain the expertise necessary to produce military associated equipment within specified time limits. Keeping this expertise will require innovative measures -- perhaps even joint government and private repositories of knowledge at taxpayers expense. This requires new and innovative approaches to intellectual property rights. The Department of Defense has allowed defense contractors to retain title rights for inventions while reserving the right of license-free use. If we mix federal and private sector research, we may have to allow federal employees to benefit from royalties for work that is produced while on government time.

Technological competition with other nations will continue despite the new international security environment. While there has been a clear effort to limit the spread of technologies to the Eastern-bloc, we will likely see wholesale changes in the management of militarily significant commercial products through
the Coordinating Committee for Multilateral Export Controls (COCOM). Existing national legislation will require amendment, and new legislation is clearly going to be required to deal with the myriad of questions that will arise when former socialist states apply for access to technologies once forbidden to them for outdated ideological and military reasons. Governments will have to fundamentally revise policies to transfer key technologies to certain nations for economic advantage, not military balance of forces.

On the other hand, technologies available for what remains of military competition could improve so dramatically in the next few years that the fundamental nature of warfare may change. Competition in military hardware may shift from the nuclear arena to the non-nuclear. As non-nuclear weapons become more capable, they may substitute for nuclear weapons at the tactical, operational, and even the strategic level. Hence nations will have to retain their technological lead in certain key areas, including some which did not require protection.

Technologies are not the only economic assets whose protection has been justified in terms of the military. Our National Defense Stockpile is supposed to provide the U.S. with guaranteed access to critical strategic minerals for three years. We feared both disruption during a long war with the USSR and lack of access during the so-called "resources war" that never occurred. Interestingly, although we can claim that critical compo-
ponents should also have been stockpiled, so such program ever existed.

Our National Defense Stockpile of strategic minerals had its genesis well prior to the Cold War, but can it be justified for sound economic reasons? Other nations, like Japan, Sweden, and Switzerland, maintain similar reserves for economic reasons but, some years ago, a major study of the goals and objectives of our stockpile concluded that a less costly option to ensure access to materials included international development agencies, diplomatic efforts to ensure stability of major minerals producers, without significant budgetary costs.\textsuperscript{52}

Perhaps why we maintained such reserves had more to do with domestic politics than true defense needs. In any case, the entire program should be revisited and one of the options should be a carefully controlled sale of major portions of the stockpile to reduce the federal deficit.

The U.S. strategic petroleum reserves have been justified for economic rather than military reasons. On the other hand, the Rapid Deployment Force and numerous military programs have also been justified to ensure America's access to oil. Given competing needs for tax dollars, it seems a prudent planning assumption that the Congress may not fund both a refill of the petroleum reserve and General Powell's Contingency Force to ensure we have access to oil.
It seems equally appropriate to review the goals and objectives of our means that provide sufficient quantities of oil -- but to only fund one. If we had a reserve capable of supplying all economic and military needs for one or two years, instead of the current unmet goal of 90 days, would we also have time to reconstitute a Contingency Force? If our oil reserves were this high, would we have intervened in Kuwait?

**Personnel and Organizations**

If changes of this magnitude persist, it would seem obvious that the Department of Defense is going to undergo another soul-wrenching roles-and-missions reappraisal. It will be appropriate to revisit the existing wartime command and control structure for C-in-Cs, and equally appropriate to review service roles and missions. With reductions in force structure should come a loss of organizational influence.\(^5\)

No matter how painful, the review of roles and missions will occur, implicitly with budget decisions or explicitly if we dare. Do we need warfighting C-in-Cs for the entire world if the U.S. stops playing world policeman? Does the U.S. need a service called the Marine Corps or do we need a contingency response force? Should new services be created -- such as space or special operations forces? Should SACEUR automatically be an American? These questions should all be answered.

The wholesale demobilization of military personnel into the civilian job market has been accomplished in the United States,
with mixed results. Appropriate temporary programs will be needed to ensure that we manage the transition smoothly to support new national industrial and business goals.

We should not lose sight of the military goals and requirements to respond to crises with an active duty and reserve force mix, as well as reconstitute additional forces within two years. The draft will obviously be a low cost methods of managing the necessary manpower pool but much more attention should be paid to ensuring that the reserves can respond to crises, then return to their disrupted civilian occupations without loss of families, homes, and jobs. Existing legislation should be reviewed following the completion of Operation Desert Shield.

More difficult will be the maintenance of a cadre of leaders, and how they will obtain the necessary military leadership training at appropriate levels of command, when there are fewer forces to command? Schools are an obvious solution for the officer corps and senior non-commissioned officers, but will the services keep schools funded when faced with giving airmen flight time or sailors actual time at sea? Service schools may have to be consolidated for efficiency but perhaps there are even more novel solutions.

If the officer corps is to be significantly reduced below current levels, eventually a level is reached at which it is no longer efficient to maintain military-run graduate schools, war
colleges, and individual services flight training. A similar problem exists with non-commissioned and warrant officers technical schools and government laboratories. Obvious suggestions to consolidate Department of Defense facilities are already under consideration but perhaps other government agencies might consolidate with defense. The Department of Energy maintains laboratories, the Federal Aviation Agency has aviation facilities, inter alia. Expanding the student body may even take the form of training and education of military students from former socialist nations -- attempting to provide them with both the technical details and the framework for a military operating within a democracy.54

One possible solution, rather than consolidation or expanding the student base, is an affiliation of defense schools and laboratories with select civilian institutions, and the innovation of mixed civilian-military educational and research institutions that can be "reconstituted" to pure military or government facilities within two years. We may not need large numbers of officers and technical specialists trained during peace, but the model for the reconstitution of industry might well be applied to military training and education.

Another solution is to raise the level of basic research being conducted at these institutions so that a substantive faculty remains onboard and can shift to teaching duties when required. Keeping technical warrant and non-commissioned officers active in research at industry, or mixed government-industry
design bureaus, can maintain the nucleus of a capability that may be required on short notice. Similar arrangements can be made with government graduate schools to increase their research and still return quickly to teaching. These possible solutions beg for a Presidential Blue-Ribbon panel to study the options and make non-partisan recommendations.

In addition to these obvious personnel questions, what type of individual should be involved in this major overhaul of the defense planning assumptions. The military should provide individuals who can both represent service interests and capabilities and have an appreciation for the task at hand. This exercise cannot be just another interagency meeting, with compromise likely and one service holding the entire process hostage to their threats or objections.

This review will have serious repercussions in existing force structures and established plans for future forces. It is going to hurt and will require officer participants willing to put their allegiance to country ahead of combat arms or service parochialism. These individuals exist in the peacetime services and they generally are already networking outside of official channels. Perhaps we need to review our entire system for training and educating weapons systems acquisition managers and more fully integrate basic political science type issues that were assumed constant in the past.
Problems with the quality of existing DoD strategic planning or politico-military personnel have been discussed frequently and should have been solved by Goldwater-Nichols Act and two administrations committed to implement this legislation. The fundamental review of national military strategy will test this assumption. The low level of public inter-service infighting over Desert Shield indicates that there has been some success in this area. Past problems occurred at all levels, with political appointees, within the services, or both.

Some political appointees have caused problems because of their relative inexperience, high turnover rates, and lengthy vacancies. The position of Under Secretary of Defense (Policy) during the Reagan Administration remained unfilled for an extended period following the resignation of Dr. Fred Ikle. Friction between the experienced military and the relatively inexperienced political appointee in the past will be exacerbated when those political appointees preside over the wholesale dismantling of a military machine that senior officers have spent their entire careers building and defending.

Within service staffs, strategic planning billets have been filled by individuals who lack the requisite education and designation as strategic planner. Some top-performing officers saw their best interests served by a tour in procurement rather than policy planning. Other top-performing officers, when assigned to policy planning staffs, were often shuttled into key offices.
where they serve a brief first-experience generating tour before returning to operational commands.

American social scientists can quickly provide rough answers to approximations of how much can be devoted to defense, given other needs. Political scientists inside and outside government should work together on defining the new American international goals and objectives required of programmed forces. The intelligence community and civilian academics outside government should rapidly provide assessments of threats to U.S. interests in areas of the world traditionally relegated to official inattention.

The operations analysis and political science communities will need to cooperate like they never have before.¹ Military operations analysis has previously concentrated on investigating the possibilities afforded by the allocation of theater-wide strategic conventional forces of around 1.5 enemy forces to 1 friendly forces within the old scenario of two weeks warning and mobilization. This level of forces allowed the subsequent commitment of around 3:1 at the operational (Soviet army) level and the engagement of divisions and regiments at the 5:1 level.

The military operations analysis community needs to reorient itself to measurements of reconstitution where the timelines are measures in months and years and not days or weeks. Strategic warning, decision making, non-NATO battlefields (ashore and at sea), manpower and personnel planning, resource allocation, test and evaluation, combat models, and gaming and simulation are all

¹
areas that will need fundamental readjustment due to the new international security environment.\textsuperscript{57}

### The Transition Period

When President Reagan outlined his visions of a world without nuclear ballistic missiles, or a defense dominated security environment, it was necessary to look not only at those individual scenarios but also to think through the painful transition from the current state of affairs to the new one. For example, what would the transition period have been like while we moved from an offense-dominant world to one influenced primarily by defenses? One scenario that should have been considered was a then-potent USSR attempting to "prevent" deployment of strategic defenses because of fear of the new security environment. After looking at this scenario, the analysis should have yielded conditions necessary to make the USSR secure during this transition stage.

A new security environment, based upon two years of strategic warning, which includes the U.S., France, and perhaps the U.K., no longer forward-deployed in Germany, may be so drastically different that we should assess the near-term or transition risks from a less-than-controllable USSR under a spectrum of potential "worst-case" scenarios. An obvious one is that the Marshals and Generals seize power and the former Soviet military threat returns within a few short months. Another variant is that the unprecedented changes taking place in the USSR is merely
"maskirovka," and what we see is a "breathing space" before the Soviet military machine gears up when the economic crisis is solved. This transition-era scenario may best be met with nuclear weapons deployments and the Contingency Force.

As American and British ground troops withdraw from the continent and French troops from Germany, naval and air force nuclear weapons are substituted on a temporary basis. As Soviet force levels are reduced to those agreed in the recently signed CFE agreement, these nuclear forces can be easily withdrawn and, of course, substituted as a "quick-fix" to offset unexpected increases in the threat caused by a failure to properly interpret warning indicators, or for other reasons.

Governments should become more refined at using means, other than military forces, to influence the behavior of other nations. New profound research on economic sanctions, for example, may be necessary to evaluate how successful sanctions have been in the past and as a supplement to Operation Desert Shield. Economic tools will become even more difficult to use than in the past as multi-national corporations become less responsive to national governments.

If these scenarios are not credible, there clearly are some that can be devised. One technique for viewing alternative futures toward a desired goal is that of path gaming. These are political-military games that identify interesting alternative paths and examines them simultaneously with different groups of
players. Gaming, naturally, is no substitute for solid analysis. Gaming, however, can provide new insight and supplements more traditional methods of dealing with alternative futures. Perhaps the time has come to jointly game with the USSR the deescalation of crises.\textsuperscript{59}

There will obviously be a fundamental restructuring of the near-term programming already contracted, and there may be extraordinarily high penalties paid as industries move from the defense area to others. Programs such as the B-2 and A-12 advanced technology aircraft, the SSN-21 SEAWOLF submarine, and others tied to the AIRLAND Battle would appear related to an international security environment that no longer exists.\textsuperscript{60} There will be last-ditch attempts to salvage certain programs,\textsuperscript{61} to keep people employed, and legislative districts satisfied, and this will be a great challenge to the new Congress -- which should play its larger role instead of narrow constituent interests.

An obvious next step for the Department of Defense is to provide incentives for the services to cease attempting to rejustify old programs under the new strategy but to actually do a zero-based needs assessment. An obvious second step is to plan for the divestiture of unnecessary forces, equipment and industrial capability.
Some industrial and military facilities inevitably will be idled and made obsolete. We can anticipate massive environmental cleanups at particularly dirty facilities, such as industrial sites used for the manufacture of weapons grade plutonium. The staggering costs of these efforts will make them economically unattractive for private peaceful use. Clearly, the government will have to assume the burden of these costs.

Implicit in the reconstitution portion of the new strategy is the retention of capability to produce equipment and supplies that have not been maintained. Not all firms will have to convert, nor should they be allowed to convert to the civilian sector. Government could regulate the decline but it appears prepared to allow the market to determine survivors.

Some firms will manage to convert to the civilian sector. The assisted conversion of defense businesses to the civilian sector is a highly charged process. If a firm can produce tanks and another knows how to produce automobiles, why subsidize the uninitiated to do what there are competent firms already doing? Conversion assistance schemes abound, with proposals to use independent R&D funds for everything from non-military ventures to fully-funded programs.

For those firms that manage to convert, with or without assistance, there will be significant cultural adjustments. Government contractors often have the customer providing capital for specialized facilities and equipment. This is not normal
procedure in the commercial market. In the defense industrial world, requirements often advance the state of the art whereas in the commercial market, state of the art is limited by costs and competition. The two environments have drastically different financial structures and supporting infrastructures capable of preparing proposals.

Defense contractors are often organized along narrow compartmentalized, functional lines with little awareness of the overall program. Many firms do business in both worlds but there is little interconnection of personnel. Government and civilian contractors both agree that there is a significant problem converting personnel from one culture into being successful in the other. It is also likely that management cannot make the transition.

A downsizing of the defense industry after Vietnam War production ended was followed by massive displacements of professional and technical specialists. Conversion efforts then consisted largely of acquiring non-defense firms and attempting to expand into new markets. Most conversions failed, but primarily at the plant level. The cultural shock was either too great or the technologies offered by the defense firms simply were not needed.

The conversion of defense plants, and other government capabilities, should be studied by a Blue-Ribbon Panel assisted by
industries and professional associations. This effort goes beyond similar panels that have suggested acquisition reform since, in this case, the government must ensure that defense-critical industries are identified and it should make certain the capability to produce is retained.

**Critical Success Factors**

There appears to be four main problem areas in which solutions portend success for the President's dream. The first is that everything depends upon the responsible and good behavior of the Soviet Union. It may not be desirable to have your fundamental national security strategy so dependent upon the behavior of the once "evil empire" but, for any of this to work, the Soviets must return to their homeland, remain inwardly focused, and continue the serious reductions in military capability they have started. Additional drawdowns in naval and strategic nuclear systems must follow soon. It would appear that Soviet behavior can be modified to allow the transition but recent (December 1990) events portend other possibilities. Without continued reputable and excellent behavior by the USSR, the President's new strategy is simply not appropriate.

The second critical area demands that the intelligence community must be able to surmount the new challenges. If funding for intelligence follows defense downward, then the reconstitution portion of the new strategy is bankrupt. The intelligence community should move into spheres they have traditionally underemphasized, such as the Third World and economics. They will also
have significantly increased burdens demanded by the monitoring and verification of compliance of arms control agreements. All of this is possible if decision-makers recognize this crucial underpinning of the new strategy.

The third area that can undermine a successful transition to this new world will be the international behavior of allies and the U.S. Congress. Clearly, none of this is going to happen without Congress onboard. Secretary Cheney's efforts to articulate the new strategy are designed to ensure that the Department of Defense is ahead of Congress and that the new policies are adopted.

If our European and Asian allies attempt to keep our forward presence there, and their contribution to their own defense lower than it should be, they will likely attempt to exploit our separation of governmental powers. The debate over retaining a forward overseas presence for U.S. forces has generally assumed the nature of presumptions made by each side; i.e. unquestionably we need to maintain a permanent presence, or, clearly we can now return all the troops home. In the debate over retaining an overseas presence, all sides should explain the rationale, the benefits, and costs of their points of view.

The final critical success factor is the ability of private industry to deliver. What is envisaged is not the same as industrial mobilization. We need to both save our defense industrial
base under very new conditions, and simultaneously reduce defense spending. How can we do this when the Administration is not willing to address the need for a national industrial policy?

Major changes in the way we do business are required to retain both our technological position in the world and the personnel necessary to meet newly defined defense needs. By withdrawing forces from overseas and promising to reconstitute forces within two years and return, the United States will have fundamentally changed its international political-military posture. If upon internal investigation, it appears that we cannot fulfill this promise, then the U.S. government should keep this conclusion under wraps, endure the open-source critical debate and criticism that it will face, and keep this declaratory strategy operational.

Defense Business as Usual?62

Major changes to the international environment have led planners to a significant shift in the manner of addressing problems and issues. The first order questions, such as "what is America's role in the world, or the business and purpose of the Department of Defense," now demand answers prior to consideration of second order programming or efficiency issues, that have dominated the traditional defense debate.

America's new role in the world will widen strategic planner's horizons to considering issues more befitting planners of a
major international superpower, such as the long-term competition between nations, the economic, political, legal, scientific-technical, and cultural aspects of competition, and uses of the military for other than a Europe-centered global war with the USSR. The U.S. cannot afford to indulge itself with "gold-plated" strategies capable of successfully dealing with all possible contingencies on its own.

The world may move to a more integrated political structure, or at least parts of the world will move in this direction. The U.N. Charter still contains the framework for national armed forces acting on behalf of the Security Council. Perhaps this is the time to consider regional and global cooperation as alternative models to the nation-state. The nations of the world rejected this direction when they failed to adopt the U.N.-sponsored Law of the Sea Treaty and its "Common Heritage of Mankind" approach to certain types of "common" ocean resources. True, that approach was flawed, given the political realities of its day, but perhaps this is the time to amend international organizations, and see if they can do better than in the past.

Changes in the international environment will likely be more significant in the next twenty years than in the last twenty. Planning for the long-term requires a 10-20 year planning horizon. We cannot afford to lock up our strategic options with political and military assumptions or force structures that were developed out of a political world which no longer exists.
The fundamental shift in the way programming planners look at the world will lead to less emphasis on the USSR and Europe, a redirection toward other areas of the world, and managing day-to-day competition with other powers. All this will occur while the U.S. has significantly less capable tools in its kit. Rather than acting as a "Chairman of the Board" with our allies, America's appropriate future role may be that of "first among equals" if it does not withdraw to the North American continent in splendid isolationism. If we elect to stay engaged in the world, is it likely that we will engage in "winning" the peace as we once prepared to "win" war? If so, it implies the creation of a truly integrated and nonconfrontational governmental and commercial planning process.

Problems in American defense planning have, for some time, provoked calls for more and better planning. Evidence of planning problems is found in four major areas of Department of Defense planning: strategic goals and objectives that lacked clarity; a functional organizational design which impedes mission integration; overemphasis on budgets and programming needs to the detriment of overall policies and strategies; and ignoring other agencies, competitors and the external environment. We have the opportunity to and should improve the quality of our national strategic or long-range planning while we answer the call made by the President at Aspen.

A major planning problem was a lack of a coordinated effort to integrate the government's primary goals, policies and action
sequences into a cohesive whole. Analysis and review of America's fundamental role in the world should force the DoD to solve this basic problem, at least temporarily. Sound strategic management, of which strategic planning is but one component, integrates an organization's principal goals, policies and action sequences into a cohesive whole. It marshals, allocates, and shapes an organization's resources into a unique and viable posture based on its relative internal competencies and shortcomings, anticipated changes in the environment, and contingent moves by intelligent opponents. Strategic management is concerned with the management of the whole enterprise, not just its functional components or sub-parts.

The U.S. government has not developed truly successful and coherent defense, industrial, scientific, engineering, oceans, etc. policies since the end of the Second World War. Yet, we do have an extremely successful agricultural policy and supporting programs. The federal government has also successfully managed complicated programs for space exploration, rural electrification, and transportation. This is the time to once again exercise leadership and provide guidance and support for success.

It becomes a challenge for the organizational leader to combine and direct the efforts and activities of the other members of an organization toward the successful completion of a stated mission or purpose. It is this type of effort that we will see the Bush Administration attempt to perform while it
undergoes a fundamental restructuring of America's role in the world, and missions for its military forces. It will be this effort, not the old roles and missions, that NATO political leadership will have to understand to deal effectively with the United States as it undergoes internal self-examination.

In contrast to most other types of planning, strategic management also analyzes an organization's external environment and internal climate, searches for new trends, discontinuities, surprises, and competitive advantages. Since its scope is broader than other types of planning, it typically embodies more qualitative shifts in direction than anticipated from the long-range planning process. Also guided by an idealized vision of the future, strategic management is much more action oriented. The organization attempts to keep its options open, considering a variety of possible alternatives to respond promptly to unforeseen contingencies as it seeks its ideal.

Long-range planning which has typified NATO planning in past decades, on the other hand, focuses more on specifying goals and objectives, translating them into current budgets and work programs. The objective of long-range planners (and short-range planners for that matter) is to work backward from goals to programs and budgets to document the sequence of decisions and actions necessary to achieve the desired future, embodied in the goals. Long-range planning, as a consequence, assumes that current trends will continue into the future and plans tend to be
linear extrapolations of the present. Clearly, this is no longer feasible.

To be effective, strategic management assumes certain necessary conditions. Among the conditions are: an agreement, or at least consensus, on goals and objectives; a process by which the organization can scan its environment, monitor trends, and assess its competitors; a management information system based on an integrated communication and control system; and a review and monitoring process to determine whether the current strategies are viable or should be revamped.

The top-down vision of the future, outlined by the President in Aspen, will usher in governmental political-military goals and objectives. The major players will be both domestic and international, and it is likely that a consensus will be reached. It is uncertain which group or groups will dominate the debate but the American public's willingness to sustain heavy defense burdens concurrently with large domestic programs (including the Savings & Loan bailout) should not be assumed in the absence of a clear and present danger.

Effective strategic management is not possible without responsive and timely feedback. The debate over the President's new strategy should include an analysis of the political goals sought by the forward deployment of U.S. forces, and the political environment that compelled the formulation of America's alliance structure. If those goals have been attained, if the
international environment has drastically changed, then it should not shock anyone that the fundamental strategy and resulting force structure are subject to wholesale renegotiation. That it is being done in a thoughtful and comprehensive manner, with the full participation of domestic interests and allies, should be comforting.

Much legislation will be required as a result of the changes in the international system - so this exercise is not going to occur only in the Executive Branch of government. The two government branches can cooperate or they can assume an adversarial relationship. Congress will cut forces and programs - with or without a carefully thought out plan. The Executive Branch must present all possible options for cuts to the legislature - even those that wrench the very souls of the leaders of a particular combat arms or military service. The Administration appears to be prepared to meet this challenge.

Should the services refuse to present realistic plans to the DoD, or play end-around games with Congress, the cuts will be made anyway. The services could find themselves playing catch-up, and redrafting strategies from whatever forces the resulting legislation permits. The looming debate should be about goals and objectives, realizing that they do not have to be what they were in the past. If we are realistic about these goals and objectives, there is every likelihood that we can reach a consensus on force requirements. If we engage in debate over force
structure, we will perhaps stumble into a strategy that will not serve the national interests in the 21st Century.
Notes

(1) The views expressed by the author are his alone and do not necessarily represent the position of the U.S. government, Department of Defense, or the U.S. Navy.

(2) "Remarks by the President to the Aspen Institute Symposium" (as delivered), Office of the Press Secretary (Aspen, Colorado), The White House, August 2, 1990, 6 pp.


(4) "Remarks by General Colin L. Powell, Chairman of the Joint Chiefs of Staff, at the National Convention of the Veterans of Foreign Wars, Baltimore, Maryland, August 23, 1990," as delivered, 13 pp., and "Remarks by General Colin L. Powell, Chairman of the Joint Chiefs of Staff, at the 72nd Annual National Convention of the American Legion, Indianapolis, Indiana, August 30, 1990," as delivered, 21 pp.

(5) "Speech to the Center for Defense Journalism, The National Press Club, September 27, 1990, by Lieutenant General George L. Butler," 17 pp. General Butler was recently selected for his fourth star, and as the Commander-in-Chief of the Strategic Air Command.


(10) Defense spending will actually go up due to Operation Desert Shield, but this should be viewed as an aberration much the same as the war in Vietnam was viewed.

(11) Confirmed during discussion with high DoD officials at the IISS conference.
(12) Ibid.

(13) Not so openly discussed at the IISS conference was the option of no U.S. organized combat forces in Europe.


(15) General John R. Galvin, NATO Supreme Allied Commander Europe, "SACEUR DPC Remarks, Brussels, BE, 6 Dec 90" transcript, 4 pp.


(18) "Warfighting," FMFM 1, March 6, 1989, 88 pp.


(20) On the other hand, one might conclude that the maritime school has become clearly preeminent.

(21) One can argue that the Maritime Strategy of the 1980s missed being adopted at the national level because it failed to emphasize the primary role of land forces in attaining political goals that required military forces.


(30) These were the group that produced the Future Security Strategy Study headed by Fred S. Hoffman, director of Pan Heuristics, and Defense Technologies Study Team, also known as the Fletcher Panel for its chairman, James C. Fletcher, former head of the National Aeronautics and Space Administration.


(32) Caspar W. Weinberger, Secretary of Defense, Annual Report
to the Congress, Fiscal Year 1984, February 1, 1983, pp. 34, 225-228.


(37) Most Europeans at the IISS conference, and those that the author has met with over the past few months, have attempted to make the argument that the Contingency Force could and should be based in Europe.


(39) Confirmed during subsequent discussion of the issues by DoD officials at the IISS conference.

(40) Soviet Military Power - 1990, 9th Ed., September 1990, p. 54 states that "...a short-warning or pre-emptive strategic nuclear attack against the continental United States for the foreseeable future...is judged to be unlikely."


(42) Berkowitz and Goodman, pp. 99-100 and Barton Whaley, Covert German Rearmament, 1919-1939: Deception and Misperception, Frederick, Maryland: University Press of America, 1984, pp. 91-93.


(45) The next two sections draw heavily upon discussions, pre-
presentations, and draft position papers from the "What if Peace?" National Science and Technology Policy Conference sponsored by the California Engineering Foundation and Aviation Week and Space Technology, November 28-29, 1990, Costa Mesa, California. Attendees at this conference explicitly addressed the issues related to industrial capability to respond to the new strategy.


(50) The Soviets have also been worried about the same thing as they convert former military industries to civilian production. See, for example, the comments of Rear Admiral Yu M. Khaliulin, Crimea Oblast Soviet deputy and Deputy Commander of the Black Sea Fleet, contained in excerpts of a TASS Report of a November 13, 1990 meeting between military people's deputies and Mikhail S. Gorbachev, "The Army Will Not Be Separated From the People; USSR President's Meeting With Deputies Who Are Also Servicemen," Moscow Krasnaya Zvezda in Russian, November 16, 1990, p. 4 (FBIS-SOV-90-225, November 21, 1990, p. 70). Khaliulin suggested that a naval ship be built every year or two, just to retain the capability to do so.


(54) The DoD has already started moving in this direction with the expansion of International Military Education and Training (IMET) resource allocation courses at the Defense Education
Resources Management Center (DR4EC). This school may see its first contingent of Eastern Europeans within the next year.


(56) The encouragement for operations research practitioners to delve into the world of strategy, and the perception that they often do not, was addressed in Craig W. Kirkwood's, "Does Operations Research Address Strategy?" Operations Research, Vol. 38, No. 5, September-October 1990, pp. 747-751.

(57) The Military Operations Research Society (MORS) will be addressing all of these areas at their 59th MORS Symposium at West Point in June.

(58) "Do Operations Succeed?" Wall Street Journal.


(60) Programming planning still appears to have been going along, during 1990, without any recognition that the world has changed. See for example, James L. George, "The USNs Revolution at Sea," Navy International, Vol. 95, No. 10, October 1990, pp. 378-383. There are signs that at least some parts of the Navy have recognized the changes and are worried about the implications for programming. See, for example, Scott C. Truver, "Whither US Anti-Submarine Warfare, Now That the Threat Has Gone Away?" Naval Forces, Vol. XI, No. V/1990, pp. 8-21.


18. It can also be argued that this state also defines our future leadership in technology.
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<td>72</td>
<td>COL Thomas A. Keaney, USAF</td>
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<td>Frederick Kiley</td>
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<td>Dr. Steven Kime</td>
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<td>Dr. Jake Kipp</td>
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<td>Constance Lynch Koehler</td>
<td>Director, Business Development, Plans &amp; Analysis</td>
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<td>Raymond E. Kozen</td>
<td>Staff Vice President - Special Projects</td>
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<td>79</td>
<td>LCDR Walter Kreitler, USN</td>
<td>Navy Federal Executive Fellow</td>
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<td>Robert J. Kuntz, Sc.D.</td>
<td>President, California Engineering Foundation</td>
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<td>913 K Street, Suite A</td>
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<td>Sacramento, CA 95814</td>
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<th>Name</th>
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<td>90.</td>
<td>William A. Miner</td>
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<td>91.</td>
<td>Ambler H. Moss, Jr.</td>
<td>Dean, Graduate School of International Studies</td>
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</tr>
<tr>
<td>92.</td>
<td>LTG C.E. Mundy, USMC</td>
<td>Deputy Chief of Staff for Plans, Policies &amp; Operations (Code P)</td>
<td>HQ USMC, AA Room 2016, Washington, D.C. 20380</td>
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<td>93.</td>
<td>Stephen A. Murtaugh</td>
<td>Calspan Corp.</td>
<td>P.O. Box 400, Buffalo, N.Y. 14225</td>
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<td>94.</td>
<td>Ivan Oelrich</td>
<td>Office of Technology Assessment</td>
<td>Congress of the United States, Washington, D.C. 20510-8025</td>
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<td>95.</td>
<td>Mary Pace</td>
<td>President, MORS</td>
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<td>96.</td>
<td>Dr. James Patton</td>
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<td>97.</td>
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<td>98.</td>
<td>LCDR Michael N. Pocalyko, USN</td>
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<td>108</td>
<td>J. W Russel</td>
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<tr>
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<td>CDR Joseph Sestack, USN</td>
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<td>112</td>
<td>CDR Paul Shemella, USN</td>
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<td>113</td>
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<td>114</td>
<td>Dr. William F. Scott</td>
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<td>115</td>
<td>CAPT Larry Seaquist, USN</td>
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<tr>
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<td>117</td>
<td>RADM Phillip D. Smith, USN</td>
<td>Executive Director</td>
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<td>118</td>
<td>Dr. Perry Smith</td>
<td>Major General, U.S. Air Force (Ret.)</td>
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<td>119</td>
<td>Don Snider</td>
<td>Colonel, U.S. Army (Ret.)</td>
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<td>CAPT James Stark, USN</td>
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<td>121</td>
<td>RADM Joseph C. Strasser, USN</td>
<td>President</td>
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<td>122</td>
<td>LTG Gordon R. Sullivan, USA</td>
<td>Deputy Chief of Staff for Operations &amp; Plans</td>
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<td>CAPT Peter M. Swartz, USN</td>
<td>Special Assistant to the Chairman</td>
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| 126 | Frank Uhlig         | 1. Naval War College Review  
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