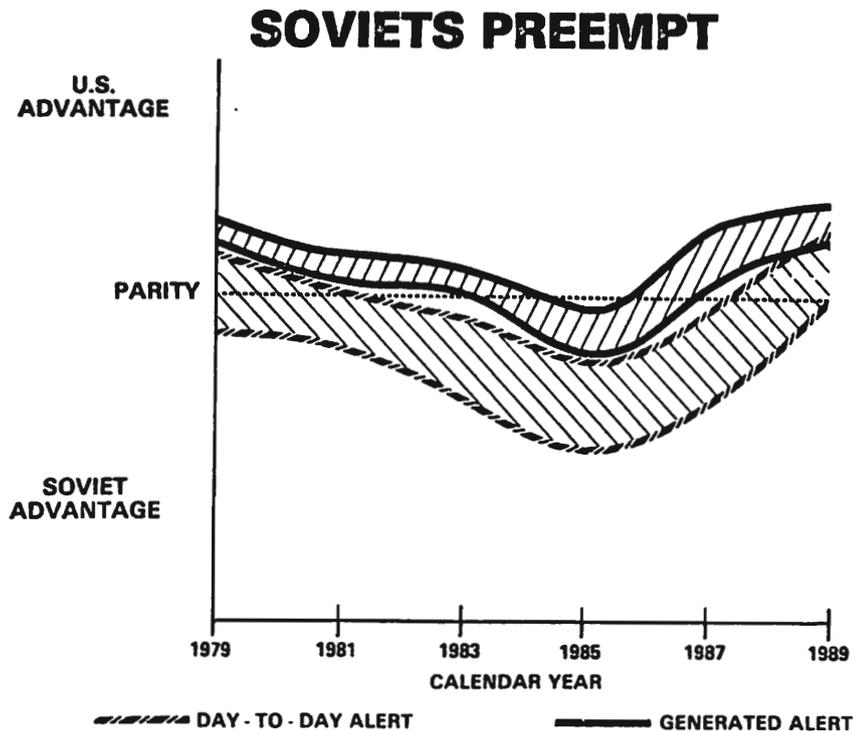


REMARKS TO THE ARMED FORCES COMMUNICATIONS
AND ELECTRONICS ASSOCIATION
4TH ANNUAL VITAL ISSUES SYMPOSIUM
BY LIEUTENANT GENERAL PAUL F. GORMAN, USA

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National Strategies and C3I in the 1980s

American strategists have entered the decade of the 1980s with an unprecedented awareness of the importance of communications, command and control, and intelligence. Time precludes my explaining, except by brief allusion, the new dependencies of strategy upon C3I, but it is simple fact that today we can neither plan against intercontinental nuclear weaponry, nor against theater nuclear forces, nor even against so-called conventional threats without devoting extra-ordinary attention to, and allocating wholly unprecedented resources for, communications for command, control and intelligence.



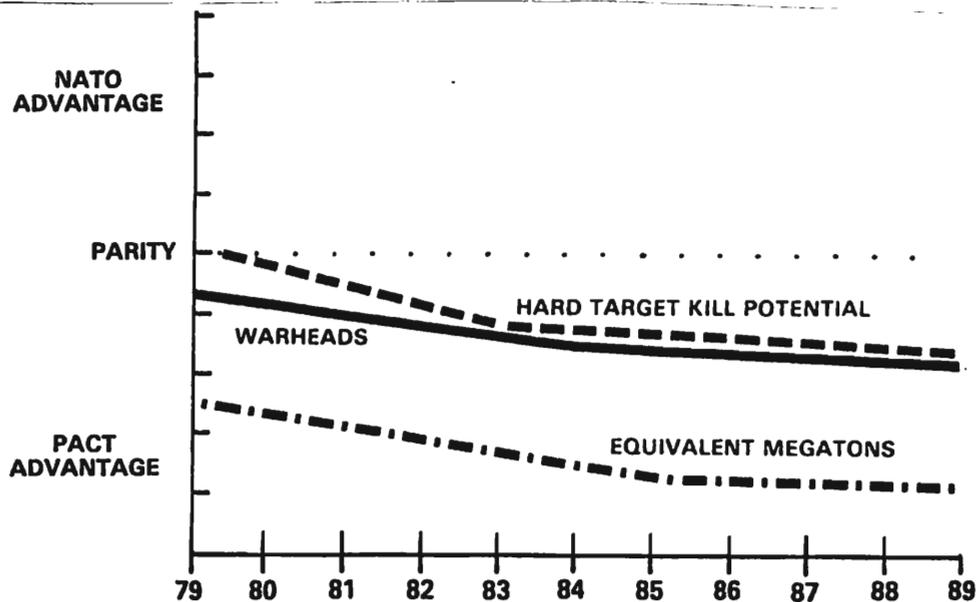
Here is a diagram from the annual Posture Statement of the Chairman of the Joint Chiefs of Staff, showing the results of our war games of a nuclear exchange. Without elaborating, I ask that you accept it, as do we, as a graphic depiction of the altered strategic balance between the United States and the Soviet Union. Toward the end of the last decade, the growth in the Soviet nuclear arsenals, particularly in the fielding of intercontinental ballistic missiles equipped with more numerous and more accurate multiple, independently targetable, re-entry vehicles, and the proliferation of submarine-launched ballistic missiles, swung the overall balance in favor of the Soviet Union. That changed relationship will not be redressed until late in the coming decade, as the new manned bomber is deployed and as our new intercontinental ballistic missile, and submarine-launched ballistic missile programs mature. Ad interim, we face a very dangerous period. Our risk is that the military planners of the Soviet Union, who believe that nuclear war is possible, and who have devised strategies which they calculate will assure Soviet victory in such a war, may seriously be tempted to capitalize upon the advantage portrayed here. Frankly, it is difficult for us to assess how they will regard the balance. But suffice to say, they who now rule in the Kremlin, and they who now serve on the Stavka, are the first Russian leaders since 1917 who can look outward from Mother Russia with a clear sense of strategic superiority over potential enemies. American strategists must ponder whether our existing weaponry will continue to deter the Soviets from seeking to exploit this historic change in the

strategic balance, and must realize that adroit intelligence and swift, reliable communications constitute in and of themselves, prime deterrents because they are our best prospects for dealing with the problem in the more advantageous green area of the curves rather than in the disadvantaged yellow area.

In short, the deterrent value of American intercontinental weapons is today, and will be increasingly in the future, a direct function of our ability to assure connectivity: to provide for the National Command Authorities reliable intelligence concerning potential or developing strategic threats, and to provide for quick, reliable communications from our National Command Authorities to commanders of our strategic weapon-equipped units. Hardening our C³I against electro-magnetic pulse and against nuclear blast will, then, be one of the major strategic undertakings of the 1980s.

In recent years, trends in the long range theater nuclear weapons have also shifted in favor of the Soviet Union. The Soviet SS-20 mobile intermediate range ballistic missile program, which commenced in the mid-1970s, can only be regarded by knowledgeable western analysts with awe. All across the frozen wastes of Siberia, in the wilderness of the Urals, and in the most primitive parts of the Slavic homeland, construction crews have been laboring to deploy these weapon systems of devastating power and accuracy, which are extremely difficult to target. Added to existing SS-4 and

SS-5 missiles, the Soviets can now threaten Western Europe, Southwest Asia, and East Asia as those regions have never been threatened before.



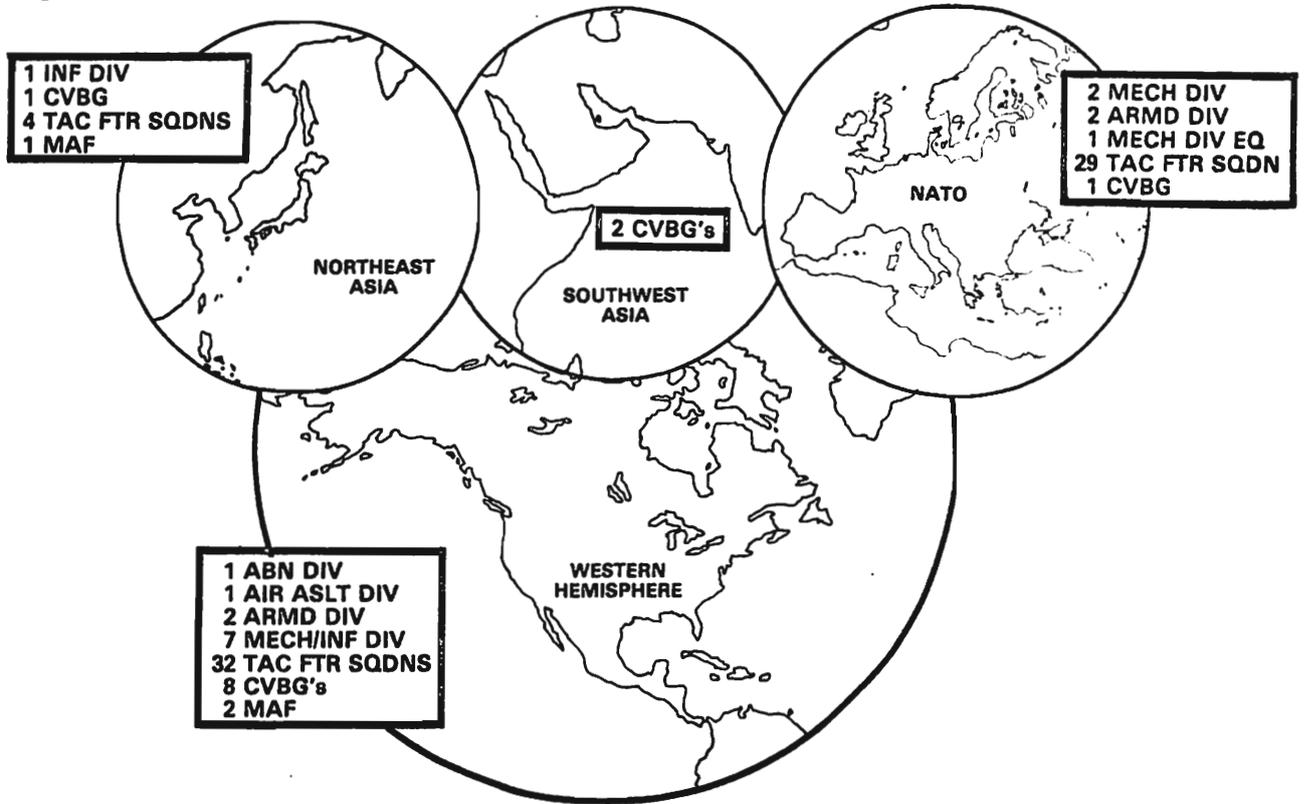
Whether measured in terms of sheer explosive power (the orange line), numbers of warheads (the green line), or highly accurate weapons for hitting hard targets like C³I facilities (the yellow line), we are moving into a period of substantial LRTNF disadvantage. NATO's long range theater nuclear force modernization program will, to some degree, offset or counterbalance the Soviet weaponry. But since the NATO weapons will not be in place until the mid or late 80s, they do no more than arrest the plunge into further disadvantage. It is clear that the lands and peoples geographically proximate to the Soviet Union will have to live under a new terror throughout the coming

decade. Once again, we will face new challenges for C³I as a result. NATO's deployment of the ground-launched cruise missile--the GLCM--and the longer range Pershing II IRBM, creates new urgencies for accurate and timely targeting, as well as reliable, swift communications.

But it is fair to say that the problems we face with respect to control of either intercontinental or theater nuclear weapon systems, while certainly more demanding than those we have had to face in the decades past, are not different in kind. By and large, they entail technologies and techniques with which we have been grappling for some time, and we have a fairly well developed infrastructure of people, materiel, and facilities for addressing such problems in the future. But that infrastructure may be less capable of coping with the problems we face in implementing strategies for the employment of our general purpose military forces to counter conventional threats.

Over the past twenty years, the United States' general purpose force structure was once said to be sized for two and a half wars, and more recently for one and a half wars. I have never found those mathematical aphorisms very satisfactory, but it is clear that with the collapse of Iranian military power in 1979, a very different formulation is required.

PROSPECTIVE THEATERS OF WAR



The United States must be today prepared to employ its general purpose forces in at least three prospective theaters of war. The first is Western Europe, where since 1947, the United States has been pledged to defend those lands and peoples so closely identified with our own culture and economy. The second is Northeast Asia, where since 1950, American forces have safeguarded the Republic of Korea and Japan. Now, of course, we have to anticipate operations in a third theater.

thrusting around NATO's Southern Flank to seize the oil fields of the Middle East, could dictate to NATO as surely as it could were its armies astride the Rhine, and in possession of the Ruhr, and to Japan and Korea without ever invading them, or violating their air space or territorial waters. As we gird ourselves for this third prospective theater of war, we face formidable challenges. Allow me to comment briefly on three aspects of the C³I dimensions of our problem.

C³I FOR SOUTHWEST ASIA

- **DISTANCE**
- **LACK OF THEATER INFRASTRUCTURE**
- **WARNING AND TARGETING**

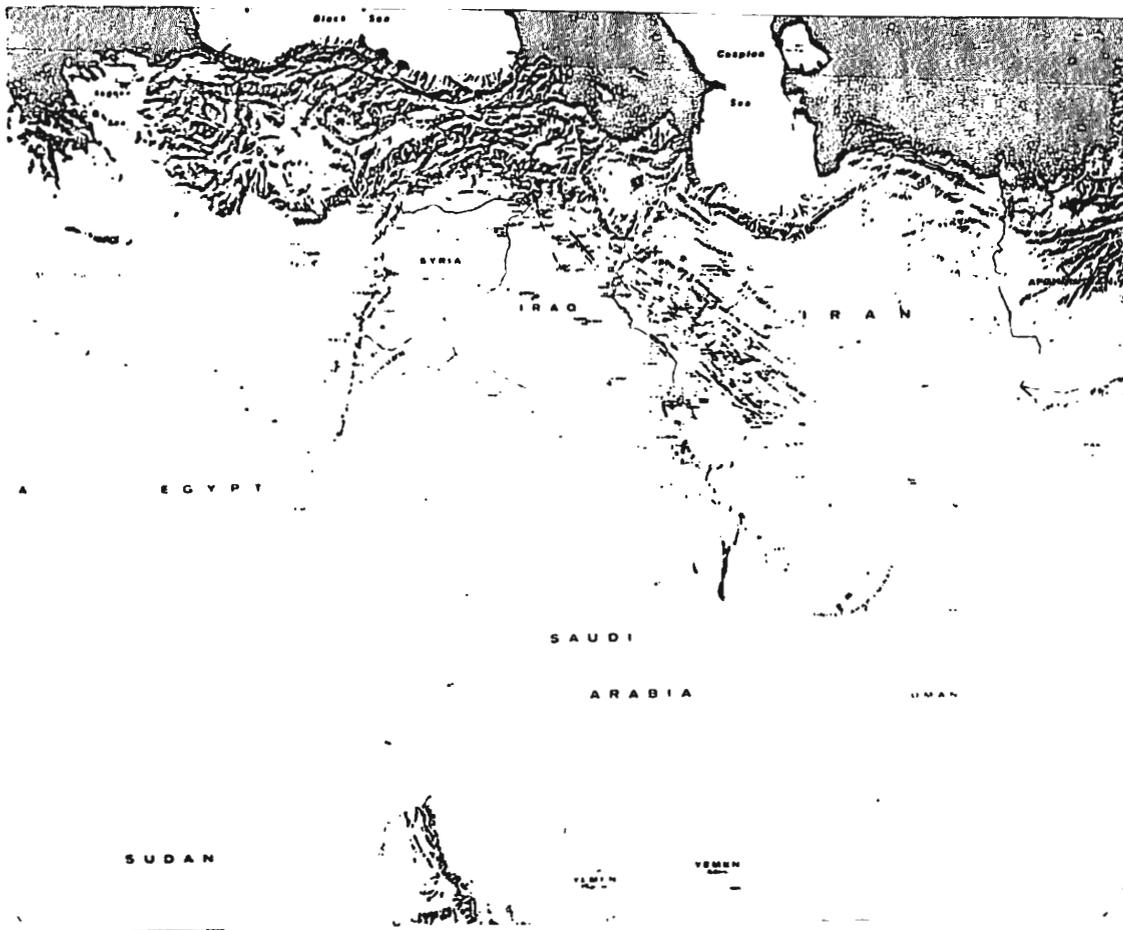
In the first place, contemplating operations in a theater seven to eight thousand air-miles distant from the continental United States, and up to 12,000 sea-miles distant, is in and of itself, unique in our history. While it is true that in World War II the United States projected power into North Africa and across the Pacific with trans-oceanic operations, a careful re-examination of World War II campaigns will disclose that only a very few operations involved force-projection beyond 300 nautical

miles or so. Typically, we operated from one stepping stone within a given theater to another, and advanced our armies, navies, and air forces step-by-step toward the enemy homeland, tethered by the range of our aircraft and our overland logistics--MacArthur's island-hopping campaign from Australia, the North Africa-Sicily-Italy sequence, the England-Normandy-West Wall campaign. American strategists are now called upon to devise a strategy without knowing which stepping stones will be available to us. We must plan strategically so that we can build our stepping stone virtually instantaneously, even as we deploy forces in the face of the enemy.

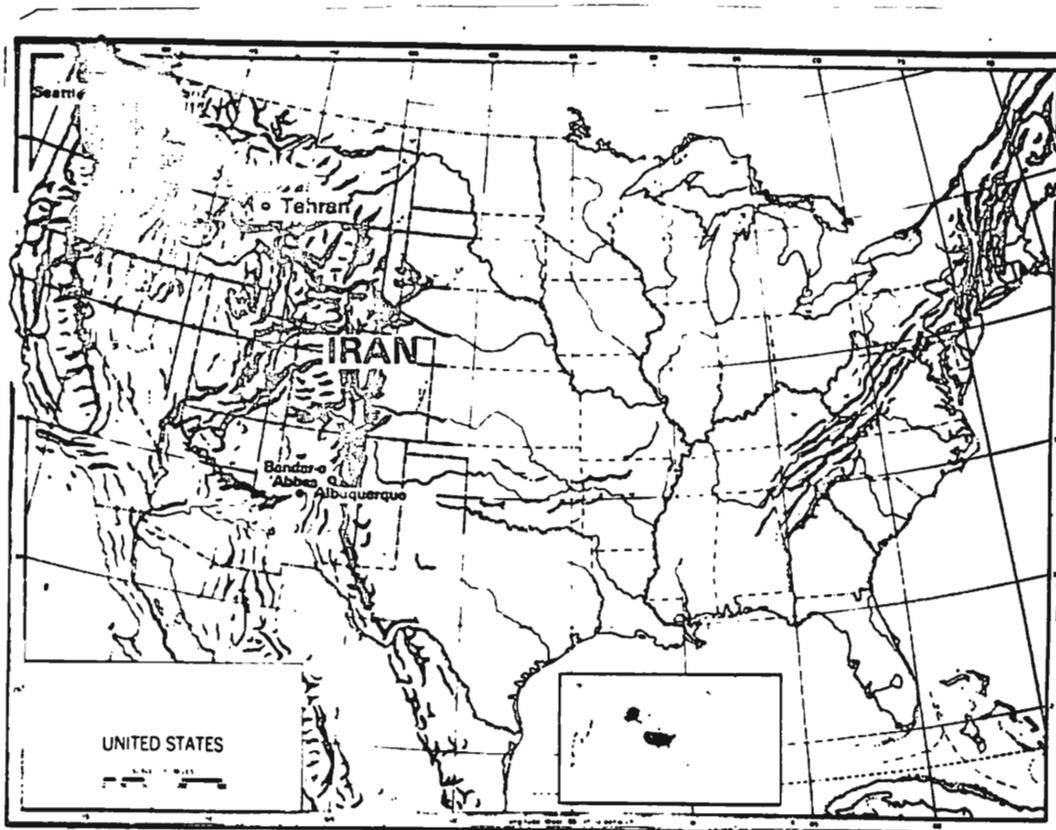
The distances and the lack of a theater infrastructure for C³I create new imperatives for strategic and tactical warning, and for targeting of threat forces. Only if we are prepared to react sensitively and sensibly to strategic warning can we arrive in-theater in time to deter an attack, or to dissuade the attacker from advancing into the vital oil-producing areas. And only if we have the credible capability to target and hit his forces will either deterrence or dissuasion work at all.

I am asked frequently about the scenario we use for such strategic planning. As you might expect, such questions are difficult to answer, precisely because never before has American military planning had to proceed against requirements to project force over so great distances, amid so extensive

political uncertainties, to meet such stringent time lines. If the Soviet Union decided to launch a full scale invasion with the objective of seizing control over the Persian Gulf littoral, at some point in the massing of such a vast force, American intelligence should be able to warn the National Command Authorities that an invasion was imminent. It would be this strategic warning time which would allow United State Forces to be deployed to Southwest Asia in time to make a difference. The more warning time and quality data intelligence can provide, the more forces can be deployed, and the more difference can be made - and we believe decisive difference.



Much has been made of the disparities of distance between the United States and Southwest Asia as compared to the Soviet Union and potential objectives on the Persian Gulf littoral. Southwest Asia is 7,000 to 12,000 air or sea miles from US ports of embarkation. The range of distances is due - as I mentioned - to the uncertainty of landing, operating and overflight rights enroute. The distance problem the US faces is obvious. Less obvious is the distance problem which confronts the Soviet planner. For a moment, let's attempt to examine the Southwest Asia planning problem from a Russian point of view.



The Soviets also have a distance problem. It is 900 to 1,300 miles from the Soviet Union to the Persian Gulf.

Distances are road miles - variable with the route selected - and there are a limited number of routes available. The road systems are of limited capacity. More than sixty percent of Iran is rugged terrain in which off-road movement, even for tracked vehicles, is impossible. To drive from ~~Tabriz~~ in the northwestern corner of Iran to Bandar Abbas at the ^{Tabriz}aits of Hormuz is to drive the distance from Seattle to Albuquerque, over mountains as forbidding as the Rockies, on a far less extensive road network. A Russian attack would not simply spring up and the Soviets cannot leap tall mountains at a single bound..

ZAGROS MOUNTAINS



Columns moving through Iran would be confronted with a second problem akin to distance - some rather spectacular terrain. Numerous bridges and defiles create natural chokepoints which could be put to great advantage by a small number of determined defenders - as at Thermopylae.

Soviet air forces could exert limited influence over the region until the seizure of forward airbases. Problems in aircraft range and payload would be aggravated by limited target acquisition capability over rough terrain as the Soviets have learned in Afghanistan.

SOVIET LONG MARCH PROBLEM AREAS

- WATER
- POL
- RESUPPLY
- MAINTENANCE/SPARE PARTS
- ENGINEERING DEMANDS
- REAR AREA SECURITY

Soviet planners would have to consider all of the logistics and security problems such a 900 to 1,200 mile march entails. How would they supply and distribute water for their forces? How would they avoid out-distancing their POL supplies on a road net with little margin for passing vehicles through or by-passing cripples? How would they resupply expendable and consumable items such as rations and munitions? How would they perform maintenance and bring up needed spare parts to keep a mechanized force moving? What engineering demands would be levied by road or bridge failure, battle damage and sabotage? In view of age-old enmities and modern day nationalism, how much rear area security would be required along the 900 to 1,200 mile route?

Like his American counter part, the Soviet planner would be required to project force over great distances, amid extensive political uncertainties, and likewise meet a stringent set of time lines. Stringency in the Soviet schedule is induced by the Russian planner's appreciation that the more time the west has, the more forces can be brought to bear and the greater difference they can make to the execution of his plan.

I have not subjected you to these graphics to convince you that regional strategy requires cogent planning. Rather I wished to underscore my assertion that our strategy for Southwest Asia, whatever the scenario one may wish to plan against, must be predicated upon capabilities to deploy rapidly over very great distances, to establish quickly an entire theater's worth of C³ with virtually no infrastructure upon to which to build, and to assure that US intelligence can perform prodigies of warning and targeting, such as our intelligence community has never before been called upon to perform.

Some American strategists, if I could extend the term to encompass civilian analysts and Congressional staffers, hold that given the C³I complexities we face in Southwest Asia, we should simplify our problem by turning over the planning and execution of our strategy to a single department or to a single service. In effect, these advisors would turn the clock back to before 1958. You will recall that the National Security Act of 1947 established the Air Force and the Office of the Secretary of Defense. In 1949, the Department of Defense was created, the separate roles and missions of the several Armed Services clarified, and the position of Chairman, Joint Chiefs of Staff, was established. Nonetheless, for most of the next decade, the Services still planned and operated largely independent of one another. In 1958, Congress legislated further significant reorganization of the Department of Defense, and established the present

chain of command for US military forces linking the President as Commander in Chief, through the Secretary of Defense, directly to the Commanders in Chief of the Unified Commands, and thence to their assigned forces. In implementing the 1958 reorganization, President Eisenhower underscored the fact that thereafter all military plans and operations would be joint undertakings, as opposed to those of a single Service or department.

"Strategic and tactical planning must be completely unified, combat forces organized into unified commands, each equipped with the most efficient weapon systems that science can develop, singly led and prepared to fight as one, regardless of Service. . . "

President D. D. Eisenhower, 1958

Those of you in industry who deal with more than one Service may have been struck with the differences which obtain among them, even a bit dismayed and frustrated by same. If so, you might be led to agree that we would be prudent to rationalize our strategy by using a single Service within a given theater. The difficulty is simply that the Services are functionally different. Each is structurally optimized for the execution of a specific set of missions. To opt for a single-Service theater would be to forego significant timeliness of response, and flexibility of tactics, which a joint--all Service--approach provides. To put it bluntly, only by synchronizing the full capabilities of the Marines, the Air Force, the Navy and the Army

could we even contemplate a "best case" solution to our strategic problem, such as I have just described. Let me illustrate my point about service uniqueness with this graphic.

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	<u>NAVY</u>	<u>AIR FORCE</u>	<u>MARINE</u>	<u>ARMY</u>
MOVEABLE SUBORDINATE ENTITIES	$10^1 - 10^2$	$10^2 - 10^3$	$10^3 - 10^4$	$10^4 - 10^5$
RANK OF SUBORDINATE LEADERS	HIGHEST	—————→		LOWEST
COMMUNICATIONS WITH SUBORDINATES	BEST	—————→		WORST
INFORMATION RE SUBORDINATES	PRECISE	—————→		VAGUE
TACTICAL FLEXIBILITY	GREATEST	—————→		LEAST
COMMAND PRINCIPLE	CENTRALIZE	—————→		DECENTRALIZE
PLANNING:				
— DEPLOYMENT	d	D	D ²	D
— EMPLOYMENT	e	e	E	E ²

Let us suppose that we have operating in a theater, such as the one we were just discussing, four three-star commanders--one from each of the Services. These commanders would have moveable subordinate entities in numbers approximating those shown on the top rank--referring to ships and flights of aircraft for the Navy; to flights or single sorties for the Air Force; to flights of aircraft, rifle platoons, artillery batteries, etc., for the Marines; and to

platoons, companies, battalions, batteries, or logistic detachments for the Army. The chart suggests that from the C³I point of view, the Navy is in the best posture, and the Army in the least advantageous. I will not argue that these representations are always and everywhere true, but I offer them as a reasonable approximation of what would obtain. Service by Service, by and large, the Navy and Air Force commanders would opt for significant amounts of centralization, while the Marine and Army commander performance would have to operate in much more decentralized fashion. Moreover, as the bottom lines on the chart suggest, there would probably be significant differences in how the several Services might approach planning for any given scenario. Because of their inherent tactical flexibility, the Navy and Air Force would be inclined to be disinterested in the specifics. In effect, for them, one piece of aerospace or the hydrosphere is like another, and a column of armor on a road in Central Europe, is like a column of armor on a road anywhere else in the world. But for the Marines and the Army, the terrain and weather where they will operate, and the enemy whom they will fight, dictate profound differences in how they will fight, and how they must be supplied. These lead in turn to much greater anxiety over the details of the scenario--for example, how much water will be required, and how it will be distributed, or more to the point of this gathering, how to

provide for C³I over unprecedented distances under tactical circumstances more stressful than any American force has ever faced.

The challenges before US strategists in the 1980s seem enormous. I suppose that has been true for every generation of American strategists. But it appears that we need more than ever in our past to draw upon the technical ingenuity of our people, and the prowess of American industry, if we are to surmount those challenges. And of all of the challenges of which I speak, those of communications, command, control and intelligence are the most pressing. We need all the help you can give us.