JUSTIFYING THE ARMY

AD-A228 015

Colonel David E. Shaver

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FOREWORD

This paper was prepared in draft by the author for presentation at the 31st Annual Convention of the International Studies Association on April 13, 1990. The author also presented the draft paper to the 58th Symposium of the Military Operations Research Society at the United States Naval Academy, Annapolis, Maryland, on June 13, 1990. Because of the creative nature of this "think piece," the Strategic Studies Institute is issuing this final version to stimulate ideas and concepts concerning the future of the U.S. Army.

The author, Colonel David E. Shaver, presents four simple models as his framework for discussing the size, missions, resources, integration, and utilization of the future force. His second model, the Aversion Policy Model, will become part of a new U.S. Army War College course entitled "Strategic Visioning." In addition to the framework, Colonel Shaver directly addresses the major military issues facing DOD Total Force Policy in the next decade. The military reader may not agree with all the author presents, but our purpose is to stimulate ideas and seek new paradigms of thought.

KARL W. ROBINSON
Colonel, U.S. Army
Director, Strategic Studies Institute
BIOGRAPHICAL SKETCH
OF THE AUTHOR

COLONEL DAVID E. SHAVER is a Strategic Research Analyst with the Strategic Studies Institute, U.S. Army War College. His previous assignments have included command of combat engineer battalions in the 1st and 8th Infantry Divisions; Chief, Military Engineering and Topography Division, U.S. Army Europe; and S-3, 937th Engineer Group. In Vietnam he served as a unit commander and staff officer in the 62nd Engineer Battalion (Land Clearing). He received a Bachelor's Degree from the University of Nebraska-Omaha and an M.S. from Florida Institute of Technology. Colonel Shaver is a graduate of the U.S. Army Command and General Staff College and the U.S. Army War College. He is coauthor of Conventional Arms Control in Europe: Army Perspectives; How to Think About Conventional Arms Control: A Framework; Burdensharing and Mission Specialization in NATO; On Disarmament: The Role of Conventional Arms Control in National Security Strategy; and, author of Force Structures: The United States and Europe in the Coming Decade and Flex-Lease: An Acquisition Strategy for the 1990s. He currently holds the General Douglas MacArthur Chair of Research at the U.S. Army War College and recently served on the DOD Total Force Policy Study Group Staff, Washington, D.C.
JUSTIFYING THE ARMY

Introduction.

A rather auspicious title, don’t you think? Justifying the Army. How can one justify the existence of an army without a potential enemy? When the Soviet threat started to diminish in deeds rather than words, in capabilities rather than in intentions, the U.S. Government was surprised, to say the least. We, in the U.S. Army War College Strategic Studies Institute, were not.

Since the United States and its major NATO Alliance partners rely heavily on a threat-driven strategy to construct military budgets, the diminishing threat (perception) may logically lead to diminishing military budgets, which in turn lead to diminishing force structure, and the ever smaller budget spiral continues unabated as the threat continues to diminish.

That quotation was written in the spring of 1988 and published in the fall, prior to Mr. Gorbachev’s United Nations speech of December 7, 1988. We followed this logical trend to boldly predict the destruction of the Berlin Wall, the abolishment of the Warsaw Pact and the expulsion of all foreign troops from Germany in Force Structures: The United States and Europe in the Coming Decade, dated June 12, 1989, clearly six months before the domino developments in Eastern Europe occurred. Why am I telling you this? For a pat on the back? No, I want to demonstrate that logical progression, not surprise, has determined our future, that the long-range military strategy of our country which everyone is calling for is simply budget-driven and reactive (rather than proactive) support of our national interests and objectives. Simply stated by the Regional Conflict Working Group in its report, Supporting U.S. Strategy for Third World Conflict, our U.S. national objective is:

Survival as a free and independent nation with values and institutions, freedoms and security intact through healthy economic
growth, a 'threat free' stable and secure world, continued growth of
freedom, democratic institutions and free market economies (fair
and open international trading system) and healthy and vigorous
alliances.

National objectives are by their nature oversimplified and
somewhat vague. We rely on national policies to articulate
directions and rules of engagement for definitive actions,
concepts and, ultimately, resources. Reliance on the national
strategic objective "containment" proliferated hundreds of
policies which required conceptualizing and resourcing. As the
cold war terminates, we seem to accept that this strategic
objective has been achieved, and logical rationale for its
implementing concepts and resources, e.g., "deterrence,"
forward stationing, alliances and the military buildup, no longer
exists. Now we are left with a relook at our national objective
and acceptance of a new strategic objective which President
Bush terms "Beyond Containment"; and severe resourcing
constraints.

This same logical thinking process may be applied to the
North Atlantic Treaty Organization (NATO). Its political-military
objective has been achieved; its concepts and resources may
no longer be required. Now we must pursue a new security
policy for Europe. Germany is reunified. Accept it. And also
accept that in the very near future soldiers in Central Europe
will return to their country of origin. It is prediction that all U.S.
Army forces will leave Europe by 1995; however, certain air
and naval forces will remain in NATO's flank regions (in the
United Kingdom, Turkey and Italy). These forecasts are surely
assumptions, but they are logical assumptions, particularly
given today's rapidity of events.

All right, you say, even if I accept your assumptions, justify
the Army! O.K. Since Mr. Bush has declared that our new
enemies are instability and unpredictability, we need to
consider these new threats, much as we did communism. After all, these new enemies directly infringe upon our declared
inclusive national objective of "a threat-free, stable and secure
world."
My thesis is that since there are 140 other militaries in the world: since those nations have structured their forces predominantly in land power as opposed to sea or air power: since very few nations have invested in power projection forces (naval and air forces): the next war in which the United States is compelled to fight will be on land, and thus requires U.S. land forces. My rationale does exclude economic trade war, the most likely scenario, only if escalation of that war does not also include military support, an unlikely scenario.

The framework for my arguments includes four simple models which will size the force, establish missions for the force (to include gains and losses), resource the force, and integrate and utilize the force. The models are designed to be interactive, rather than mutually exclusive, to develop a comprehensive, logical justification for the Army. In model development I will also discuss the U.S. Marine Corps versus U.S. Army controversy, the rising economic dominance of Japan, the strategic resourcing debate, and the conceptual integration of economic and military power.

The Overwhelming Force Model.

With the fall of communism in Eastern Europe, the diminished Soviet threat, a potential disarmament free-fall, defense budget cuts, base closures, and weapons system cancellations, it has become nearly impossible to make sense out of what is going on. Are we still safe and secure, or will our security be at greater risk in the future? I think I have found a simple way to reassure you that we will remain "safe and sound."

First the facts. The U.S. Army is the seventh largest standing army in the world. Accounting for announced military reduction plans, we will soon be the eleventh largest. If all nations mobilized their reserve forces, we would be the seventeenth largest army in the world. Should the fact that the North Korean Army is bigger than ours matter at all? My answer is no. The reason I am comfortable with not being "number one" is that we have attained military sufficiency.
Traditionally, the military rule of thumb for the attacker to succeed against a defender has been 3:1, similar in number (but not in circumstance) to “Operation Just Cause” in Panama. If a nation can mount an attack force with 3:1 or more numbers of troops and weapon systems, it can “overwhelm” enemy defenses. That’s an assumption, not a fact, but for simplicity let’s use it.

The overwhelming force model (3:1) determines that we cannot be overwhelmed by anybody. The model indicates that not even the forces of a Sino-Soviet Pact can overwhelm us today. But will this be true after we reduce our forces? What if we use this 3:1 model in reverse? If Country X threatened U.S. interests or decided to attack U.S. property or citizens abroad, how would we respond? Would we retaliate with certainty of victory? No one can definitively answer those questions since so many important factors are involved. However, we can use the overwhelming force model as a guide to determine if we could defeat a potential enemy.

Figure 1 graphically depicts how we compare or are ranked at achieving overwhelming military superiority. Of the 140 other nations with military forces numbering more than 1,000, the fully mobilized (Active and Reserve) U.S. Marine Corps by itself can overwhelm 50 percent of them. The Total U.S. Army can singularly overwhelm 80 percent of these nations. The combined U.S. Marine and Army forces can overwhelm 90 percent. But there still remain 23 countries that we cannot overwhelm without adding massive air and sea power. Remembering that this is a simple model which does not include terrain, technology, ideology, nationalism, political will or religious fervor, we can theoretically overwhelm 138 of the 140 nations when air and sea power are added. A stalemate will result in facing the Soviet Union or the Peoples Republic of China, since we cannot overwhelm them, nor can either or both of them (as in a Sino-Soviet pact) overwhelm us.

A theoretical, operational art is applied in this model which is not visible. With both superpowers seeking military sufficiency at lower levels of forces and in a more defensive,
rather than offensive, posture (defensive defense), warning and reaction time of potential surprise attack has been dramatically increased. Time, which has always been an essential factor in troop mobilization planning, is becoming less relevant and will certainly diminish in importance after the Negotiations on Conventional Armed Forces in Europe (CFE) and a U.S. total force withdrawal (an assumption made earlier) are concluded.

In our scenario, Country X threatened us and decided to attack U.S. property or citizens abroad. Our military strategy would simply be to punish Country X. Under a National Security Strategy of "Selective Engagement," we would most likely react by attacking the facilities of our new enemy by air. If this action did not bring him to the negotiating table, my logic says that we would escalate the number and severity of air attacks and sink his navy. Air attack escalation would continue as a regional, operational art, starting with fighters, fighter bombers, and strategic bombers until we had destroyed his infrastructure, troop and equipment concentrations, and will to fight. If none of the above actions influenced his national will to fight, we would send in land combat forces to seize and
secure his territory, defeat his army, and establish a legitimate government. At our present strength levels, we can accomplish these feats but not without great cost and sacrifice. Is this concept credible? Perhaps. Of the 141 militaries in the world, only the United States and the Soviet Union have achieved a balance among military capabilities to win on the sea, in the air, or on the ground. The other 139 nations have opted to structure their militaries in predominantly land forces. Of those 23 nations which we cannot overwhelm by land power alone (North Korea for example with its 1,430,000-man mobilized army), only China and the Soviet Union have 5,000 or more combat aircraft. We have nearly 7,500 combat aircraft (North Korea has 650 combat aircraft). The numbers of U.S. ships and aircraft indicate that U.S. sea and air power can overwhelm virtually all nations at a 9 or 10 or more to 1 ratio, except China and the Soviet Union. More credible is the notional aspect of this concept—that our military strength enables us to assert our will on potential aggressors, to deter them or prevent them from intimidating us, our citizens living or travelling abroad, and our free world friends and allies.

In determining how large reductions in our armed forces should be, we may consider numbers that continue to ensure that a Sino-Soviet Pact cannot overwhelm us and that powerful nations, which we barely can overwhelm today, don’t attain the numbers which propel them forward into the “stalemate” category along with the Soviets and Chinese.

Although the purpose of this model is to reassure you that we have attained military sufficiency, the model can also be used to properly “size” the army of tomorrow. Given our assumption that the CFE will be concluded (perhaps this year) and that all 200,000 U.S. soldiers stationed in Europe will be returned in the next few years, it is noteworthy to say that nearly 100 percent of these forces will be eliminated from the active Army. When one adds the announced reductions of units located in the United States, a total of 250,000 or one third of the Army will be eliminated. This leaves an active Army of 500,000. This number may be significant. When the Army numbered 781,000 soldiers, an odd number, critics demanded
to know what was in it. Such outside criticism, in addition to inside Army debates over what this new Army should consist of, e.g., more artillery, fewer tanks, less engineers, more infantry, etc., left the Army focusing inward in its Total Army Analysis (TAA) process at a time when we should have been focused outward, finding logical patterns of the future. In any case, 500,000 or half a million is the number which makes logical sense (since it's smaller) and a round, understandable number which staves off serious explanation of its internal composition. It is a politically viable number, which "sticks on the wall." (similar to the 600-ship Navy), but is it the right number for the Army? Will we still have the appropriate balance among the services to remain as secure as we are today?

Let's now test the model using Total Army figures, which include read and naye units. We have subtracted 250,000 from the U.S. Table 1, which depicts the United States and the largest 10 military forces of the 23 nations we cannot overwhelm with land power alone.

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (000)</th>
<th>No. of Tanks</th>
<th>No. of Combat Aircraft</th>
<th>No. of Combat Ships</th>
</tr>
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<tr>
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<td>1,713</td>
<td>15,992</td>
<td>7,514</td>
<td>362</td>
</tr>
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<td>USSR</td>
<td>6,906</td>
<td>53,350</td>
<td>8,189</td>
<td>632</td>
</tr>
<tr>
<td>PRC</td>
<td>3,500</td>
<td>9,200</td>
<td>5,670</td>
<td>149</td>
</tr>
<tr>
<td>India</td>
<td>1,400</td>
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<td>836</td>
<td>45</td>
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<td>North Korea</td>
<td>1,430</td>
<td>3,500</td>
<td>650</td>
<td>25</td>
</tr>
<tr>
<td>Vietnam</td>
<td>3,600</td>
<td>1,600</td>
<td>394</td>
<td>7</td>
</tr>
<tr>
<td>Iraq</td>
<td>1,805</td>
<td>5,000</td>
<td>513</td>
<td>5</td>
</tr>
<tr>
<td>Iran</td>
<td>665</td>
<td>1,000</td>
<td>121</td>
<td>8</td>
</tr>
<tr>
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<td>4,100</td>
<td>499</td>
<td>5</td>
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<td>2,440</td>
<td>517</td>
<td>16</td>
</tr>
<tr>
<td>Pakistan</td>
<td>980</td>
<td>1,750</td>
<td>451</td>
<td>23</td>
</tr>
</tbody>
</table>

Notes:
- Incluces all combat aircraft of military services including storage.
- Combat ships only include submarines and principal surface combatants.
- Number should approach 5,000,000 after unilateral and CFE reductions.
- Includes railroad construction, KGB and air defense troops.
- Number will be substantially reduced after CFE and unilateral reductions.

Table 1. Survey of Combat Vehicles (1990).
From this survey of selected data we can theoretically determine that a reduction to an army of 500,000 will not change our security position in the model. We are still stalemated by the USSR and China (PRC), and although Vietnam has a much bigger land force, that country cannot overwhelm us in the model. If we reduce our active and reserve forces by 750,000 to 1,200,000, we risk being overwhelmed by the USSR, China, Vietnam or a Sino-Soviet Pact and thus, greatly decrease U.S. security. A Total Army reduction of 750,000 is too much. When U.S. Marines are added to the new U.S. Total Army figure (1,200,000 + 282,100 = 1,482,100), only the Soviet Union could overwhelm us in the model, which still increases risk and reduces security. A total U.S. land force reduction of 600,000 (add Marines, subtract 350,000 more than starting figure which includes a 250,000-man reduction) is as low as we dare go in reducing land forces, unless the Soviets reduce lower than an estimated 5,000,000-man force. Simple math may not be the right answer to the question of "how low can we go," but it is a starting point. My force mix solution of the model's 600,000 reduction intuitively would include a 250,000 cut in the Active Army, a 300,000 cut in ready reserves (Army Reserve and Army National Guard), and a 50,000 cut in total Marine forces (active and reserves). The logic for this vision will be explained when we discuss the Comparative Resources Model later in this report. At this point, however, the reader should look closely at the resources chosen in Table 1, even though we will be analyzing the data later on. Using our 3:1 model criterion, the air and sea data, after we discount the United States, USSR and PRC, should intuitively lead you to at least think about naval and air power arms control in some near-term timeframe.

Please remember that this is a highly generalized model, intended only to represent reality in terms of illustrative military sufficiency in the most basic manner. The model certainly is too simplistic for actual use in structuring detailed military capabilities, but it serves as a good guideline or framework for reassuring you that we will remain militarily strong in the future. Conceptually it allows us to preview and analyze force
reductions before they are made in the turbulent decade ahead.

Now let's turn our focus on the missions this smaller military force will perform in the next 10 years. The Aversion Policy Model, next at hand, is perhaps the most interesting we shall discuss.

The Aversion Policy Model.

In this section we will discuss a model which I use when teaching how to develop strategic vision at the U.S. Army War College. Earlier I started out describing our prophetic prowess in predicting the destruction of the Berlin Wall. The following method was used in an earlier form to make successful forecasts of future events. This model, although negative in structure, actually provides positive solutions of serious problems facing us in the next decade.

The Aversion Policy Model is a structural, conceptual model. That structure is presented in Figure 2. Here is how it works. Select an important domestic or international, political issue. In the ensuing discussion I have selected the economy, war, the environment, political disputes and the drug war. Travel to the right along the timeline through 1992 and beyond. We should already see some events in the near term, although they have not as yet taken place, e.g., EC 92. Farther along the timeline things concerning our chosen issue become cloudy and much less visible. Within that foggy environment try to articulate the worst thing that could possibly happen—a real catastrophic event or situation. You must make a strong case for your catastrophe. For instance, if you selected the U.S. economy as your issue, your catastrophe might be worldwide depression or something worse, which I'll describe later on. Once your catastrophe is determined, you can now work backwards in the model to determine what events must precede your catastrophe—events that lead into your scenario. You will find as you move backwards in a logical sequence one event must precede the next, finally arriving at the present or near term. Now return to your catastrophe and predicted
events, which must occur to "feed" it, and start identifying national policies and alternatives which would avert the events you have selected and the ultimate catastrophe itself. These are your options. Select the key options and then think about how the military can help support those policy options. This will provide you with military missions which should be accomplished to support national policy options to preclude or avert your catastrophe. To develop a strategic vision you must go beyond developing military missions in support of policy options on one single issue. You must take several issues through the model before your aperture of understanding and learning is opened wide enough to develop strategic vision. Imagine a mountain with only room for one person at the top. The higher up the mountain you climb, the more you can see. But only the man at the top can see it all, make the choices, set the priorities, point the direction. He's the President. You and I can develop this kind of perspective only by sequentially understanding each view, each issue. Then and only then can we develop policy which is logical in terms of its interrelational self.
The Economy.

The first issue is the U.S. economy. I have previously offered conjecture that this issue will be the one which leads us into the next war—trade war or real war. With the reunification of Germany stirring up old fears in Europe, EC 92 will probably become EC 93 or EC 94. The economic integration of Europe was not without criticism on both sides of the Atlantic before the recent events in Eastern Europe took place. Now we can certainly see along this timeline a stretchout of this major event. Continuing out the timeline, my catastrophe is not worldwide depression, which is certainly bad, but is what I call "economic slavery." Economic slavery means that we Americans are enslaved by a foreign power through ownership of all you can see. In such a catastrophe one need not dig too deep into imagination to see the Japanese with ownership of everything vital to us. We would be relegated to low skill labor while they enjoyed their management positions and great wealth. You couldn't borrow money unless they said you could and so forth. This would be the ultimate economic catastrophe as far as I am concerned. Following the timeline from the present we see tremendous Japanese investment in U.S. real estate, industry, banking, energy, and information industries. Twenty-five percent of California's banking institutions (the solvent ones I might add) are already owned by Japan. Imagine the "Japanese economic army" marching from west to east and taking over everything worthwhile—seizing the terrain without firing a shot. It is no wonder that Mr. Bush will face his biggest reelection challenge on this one issue.

How can we avert this catastrophic vision?
What are the policy options?

The first aversion policy which comes to mind is the establishment of trade barriers. But is this a good choice? No. Our national objective states "... free market economies (fair and open international trading system) ..." We're moving in the wrong direction. If we alter this protectionist option to address ownership investment rather than establish trade
barriers, we might find an appropriate policy. I call this aversion policy "legislative denial." What I intend is federal legislation which denies foreign ownership in the specific service, knowledge, informational, science and technology industries. Such a law would be applicable to all foreign investment to avoid a subtle racism criticism, but would only apply to those excluded industries. Foreign investment could be allowed in all U.S. companies not excluded. In effect this would allow foreign capital to flow into light and heavy manufacturing, industry, agriculture, moderate-level technologies and real estate, but would deny ownership in the financial, medical, informational, and educational market places to include the following technologies and sciences:

Technologies:

- Power: energy, propulsion, laser
- Space: satellite, vehicles, medicine
- Electronics: information, communication, computers, robotics, artificial intelligence
- Materials: design, construction, composition
- Food: agro-chemical, synthetic, preparation, storage
- Medical: biogenetics, bionics
- Management: command, control, design, training
- Intellectual: simulators, simulations, models

Sciences:

- Physical: physics, chemistry, mathematics
- Environmental: terrestrial, oceanographics, atmospheric, space
- Engineering: electronic, civil, mechanical, metallurgical
- Life: biological, medical, behavioral, social

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In projecting what post-industrial societies will look like, Mr. Charles W. Taylor, noted futurist, sees that the above sciences and technologies will characterize the modern world in 2010. When added to the knowledge, information and service industries, these fields will comprise 80 percent of the American work force.\(^1\) This option is the most significant in catastrophe aversion.

Other options are available, including development of a "Buy America" campaign if feasible in the global economy, development of closer U.S. Government/U.S. business joint ventures, and development and expansion of USSR and East European markets (some analysts even view the new Soviet Union as being as promising as the last century's development of the American West). All of these policy options trigger actions on the part of the military and, thus, alter existing missions. Legislative denial ultimately means we must withdraw U.S. forces from our greatest competitors; "Buy America" would have procurement and thus, budget consequences; a partnership policy might trigger the use of military forces to improve economic competitiveness (will discuss in the Economic Integration Model); and developing the "Red" marketplace may require scores of "nationbuilding" advisors.

The Environment.

In generically viewing the world environment issue, it may take a little imagination to view my selected catastrophe—artificial, subterranean life. The ultimate consequences of continuing to pollute and deplete our air, water and other natural resources could lead us to move underground for survival. This is close to the ultimate catastrophe, envisioned by many science fiction authors, if not environmentalists. But what policy options do we have to avert this catastrophe? My first choice is to support a strong United Nations' resolution against polluting nations and enforce its provisions. Such an option would require additional military support from multinational forces for compliance.
Other options include passive ones encompassing increased investment in environmental protection, research and development. These passive options may require active military utilization of personnel and equipment. A final option is to legislate waste elimination by requiring that every product package be biodegradable or serve an alternative or reusable need. In any option, environmental cleanup must be considered, and certainly one of the world's largest sources of organized, trained and skilled manpower (the U.S. military) will be involved, more so than in the past, to include cleanup and command, control and supervision of other involved U.S. Government agencies (U.S. Army Corps of Engineers).

War.

My issue of war leads us to its ultimate catastrophe—nuclear war. Although we have used treaties like SALT I, SALT II, the ABM Treaty, the Non-Proliferation Treaty, the INF Treaty, and currently the START Treaty to raise the nuclear threshold of war, defense analysts now predict that 20 nations will be members of the nuclear club by the end of the decade. Perhaps the event which triggers such a nuclear war will start between two smaller, rival nations. The smaller, weaker of the two would preempt his larger foe. The ultimate treaty is not the ultimate aversion policy. None of our treaties to date have articulated how a violation of the treaty will be punished. We must place signatory sanctions on multilateral treaties. We must fully develop SDI to preclude preemption or nuclear blackmail. An alternative policy option might entail a U.S./USSR bilateral treaty to punish any first users of nuclear weapons with a massive retaliatory nuclear strike from the superpowers. In support of treaties we know that the military will reduce its nuclear force structure and increase its intelligence and verification resources. Continued expenditure on SDI will also help develop and staff the U.S. Space Command for utilization.
Drug War.

A catastrophe stemming from losing the drug war may be previewed on your television set nightly. The catastrophe of failure may be expressed as anarchy, with roving bands of thugs, rapists, thieves and murderers. Our aversion policy list includes increasing supply-side effort, demand-side effort, enactment of strict gun control laws with mandatory sentencing, and use of Federal Government assets to transport the drug addicted to punitive, treatment, and/or education complexes. Military support to the supply-side effort involves increased combat operations and interdiction efforts outside U.S. borders. We could reorganize the U.S. Coast Guard as a subordinate military service under the Department of Defense. Military support to demand-side effort would certainly encompass use of military bases, personnel and equipment on an escalating basis. Retired military could be recalled to active duty to provide job training, education, and other services to either inmates or patients, depending on whether we finally classify illegal drugs as a crime against society, or as a personal illness.

Political Dispute.

The political dispute issue, whether over boundaries, religion, ethnic, ornational rivalry can certainly lead to war. My chosen catastrophe is a conventional war of attrition—a war in which we are participants, not bystanders. Another World War I, World War II, Korean or Vietnam War would be catastrophic, even for the winner. To avert a war of attrition we should opt for support of regional conferences on security and cooperation, patterned after the highly successful Conference on Security and Cooperation in Europe (CSCE). The CSCE agreements reached have never been violated. This process of open political dialogue concerning security, economics, and human rights is applicable to all regions of the world. Our policy should be to actively support the establishment of regional CSCs around the world. In addition we should widen the applicability of "Open Skies" and "Open Seas" negotiations. We should insist upon teeth in United
Nations resolutions which establish sovereign, inviolate international borders and demand agreement of all UN member nations to mandatory economic sanctions for violators. Such options imply greater support to multinational forces; increased need for intelligence concerning agreement verification and compliance; more utilization of existing, qualified military advisors to civilian negotiations; but they also reduce the need for U.S. military assistance programs to warring nations.

Missions: Gains and Losses.

These five issues, and their catastrophes and aversion policies, lead us to U.S. military mission gains and losses listed below:

**Mission Gains**
- Space
- Multinational Forces
- Environmental Cleanup
- Drug War
- Domestic Policy Support Forces (health, engineering, transport, communications, information, intelligence, civil affairs, military police)
- Research and Development

**Mission Losses**
- Nuclear Forces
- Forward Stationed Forces
- Procurement/Acquisitions
- Military Assistance
- Heavy Combat Forces

The five issues presented here are only snapshots of the "tip of the iceberg," issues which need to be studied and addressed in the Aversion Policy Model, but they have been representatives of worst case planning, negative in approach, which brings about positive change. We have now "sized" the military force and determined its missions. We are now ready to determine how we can resource the force.
Figure 3.

The Comparative Resources Model.

The Comparative Resources Model is shown in Figure 3. In this model we will revisit the Overwhelming Force Model (3:1 model) and the data provided in Table 1. This time we are going to compare the force data from the International Institute for Strategic Studies *The Military Balance* 1989-1990 with the data presented in the 1987-1988 version to analyze what happened to our 10 selected militaries from 1986 to 1990. (See Table 2 and Table 3.) Next we will determine the increases and the decreases in each comparison category—Army size and numbers of tanks, combat aircraft, submarine and principal surface combatants. Then we will analyze the increases and decreases to discover where other nations are spending their defense dollars to find an allocation of U.S. defense dollars in the appropriate land, air and sea services which strengthens our weaknesses while maintaining our strengths. Finally, we will input our new numbers back into the 3:1 Model to insure we have not increased risk or lost security.
<table>
<thead>
<tr>
<th>Country</th>
<th>Army Population (000)</th>
<th>Number of Tanks</th>
<th>Number of Aircraft</th>
<th>Number of Combat Ships</th>
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<tbody>
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<td>USA</td>
<td>1.851</td>
<td>13.300</td>
<td>7.458</td>
<td>338</td>
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<td>1.600</td>
<td>270</td>
<td>7</td>
</tr>
<tr>
<td>Iraq</td>
<td>1.605</td>
<td>4.500</td>
<td>500</td>
<td>5</td>
</tr>
<tr>
<td>Iran</td>
<td>655</td>
<td>1.000</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>Syria</td>
<td>570</td>
<td>4.000</td>
<td>478</td>
<td>5</td>
</tr>
<tr>
<td>Egypt</td>
<td>820</td>
<td>2.250</td>
<td>441</td>
<td>21</td>
</tr>
<tr>
<td>Pakistan</td>
<td>950</td>
<td>1.600</td>
<td>381</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 2. Survey of Combat Vehicles (1986).\(^{16}\)

For Table 3, I have presented increases (+), decreases (-), and status quo (nc) from 1986 to the present:

<table>
<thead>
<tr>
<th>Country</th>
<th>Army Population (000)</th>
<th>Number of Tanks</th>
<th>Number of Aircraft</th>
<th>Number of Combat Ships</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>-138</td>
<td>+2,692</td>
<td>+58</td>
<td>+24</td>
</tr>
<tr>
<td>USSR</td>
<td>+345</td>
<td>+50</td>
<td>+525</td>
<td>-2</td>
</tr>
<tr>
<td>PRC</td>
<td>-600</td>
<td>-2,250</td>
<td>+290</td>
<td>-21</td>
</tr>
<tr>
<td>India</td>
<td>+60</td>
<td>+500</td>
<td>+135</td>
<td>+7</td>
</tr>
<tr>
<td>North Korea</td>
<td>+180</td>
<td>+600</td>
<td>-190</td>
<td>-4</td>
</tr>
<tr>
<td>Vietnam</td>
<td>-500</td>
<td>nc</td>
<td>+124</td>
<td>nc</td>
</tr>
<tr>
<td>Iraq</td>
<td>+200</td>
<td>+1,100</td>
<td>+13</td>
<td>nc</td>
</tr>
<tr>
<td>Iran</td>
<td>nc</td>
<td>-470</td>
<td>+61</td>
<td>+1</td>
</tr>
<tr>
<td>Syria</td>
<td>+122</td>
<td>+50</td>
<td>+21</td>
<td>nc</td>
</tr>
<tr>
<td>Egypt</td>
<td>nc</td>
<td>+190</td>
<td>+76</td>
<td>-5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>+30</td>
<td>+150</td>
<td>+70</td>
<td>+8</td>
</tr>
<tr>
<td>Trend Totals</td>
<td>-160</td>
<td>+80</td>
<td>+1.125</td>
<td>-16</td>
</tr>
</tbody>
</table>

Table 3. Survey of Data increases and Decreases (1986-90).
A quick analysis of the non-U.S. numbers indicates that 60 percent increased the size of their armies; 70 percent increased the number of tanks; 90 percent increased the number of combat aircraft; and 30 percent increased the number of combat ships. The trend totals above indicate decreases in Total Army population and number of combat ships, with increases in tanks and combat aircraft. Analysis by population column indicates that USSR data in the IISS figures is suspect and that Vietnam drew down forces when retiring from Cambodia. In the tank column, Iran lost a lot of tanks in the Iran-Iraq War while data on the PRC is suspect. In the aircraft column there does not seem to be an adequate explanation for North Korea's data. Finally, the ship column depicts reducing ships at twice the pace of those who increased their inventories (India and Pakistan).

Although analytical excursions should be run concerning the suspect data, the general trends include increased resourcing of land and air power and a significant decline in sea power resourcing. Then where should we put our money? Should we follow the trends of potential adversaries or continue balancing our resources among the three services? To begin our discussion let's return to the 3:1 Model and use Table 1.

As notes c. and d. under Table 1 state, CFE and Soviet unilateral reductions will impact greatly on the final military balances. Of the 7,574 U.S. aircraft, over 1,700 are currently in storage with hundreds more subject to the CFE negotiations. Based on a revised estimate of 7,000 combat aircraft for both the United States and the USSR after CFE agreement, less aircraft in storage, I estimate that both sides will maintain approximately 5,000 combat aircraft, if the budgets permit such, but they won't on either side. This indicates that, although the 3:1 Model would allow us to fly as few as 3,000 combat aircraft in the U.S. Air Force, Navy and Marines combined, and still achieve stalemate with the USSR and PRC, while maintaining a decisive 3:1 or more advantage over the nearest competitor, further arms control (CFE II) would be the best way to approach air power reductions. Sea power is also "ripe" for harvest and it may be in our best interest to proceed.
even though naval arms control is certainly problematic. Any savings generated in storing submarines and principal surface combatants must be reallocated back to the Navy to redress current threats of increasingly undetectable new classes of submarines. Antisubmarine warfare (ASW) capability must be improved. The P-7 replacement for the P-3 Orion must be brought on board soon. Surface Ship Towed Array Radars must be improved in the real world, not in this model. We need a new, lighter, more lethal tank and an effective antitank weapon now for the Army. However, in resourcing the Air Force we must look at the B-2 bomber, the C-17 transport, the Advanced Tactical Fighter (ATF) and two versions of ICBMs.

Although this resource model does not address the strategic triad or selection of Marines or the Army when addressing land power, let’s make short discursive excursions to increase our understanding of the resourcing problem.

In strategic forces we need to simply determine whether SDI is going to work or not, and if it will, determine its true cost to society and its true benefit to security. Let’s assume it will work at a price we are willing to pay. If such is the case, logically we should scrub the B-2 and at least one of the missiles (preferably the Midgetman because it’s more expensive). If SDI won’t work or will, but is just too costly, then pare down SDI to its land-based weapons research in directed energy, particle beams and lasers; give it a new name; and still cancel one missile and the B-2. This would leave sufficient funding for a reduced purchase of the ATF and the C-17 (due to reduced needs) with funds left over for other service needs.

In articulating the Marines versus the Army debate I’ll start by stating that there is no debate. Although several journalists, ex-sailors, Marines, and even ex-Naval Secretaries are quite vocal concerning their support of increased budget market share for the Marine Corps and Navy in relationship to the Army’s budget, there is no official debate at the highest level of military leadership, the Joint Chiefs of Staff.
There is a logical thought process for a debate which focuses on the current budgets for the Army, Navy and Air Force. The 1991 budget gives 25.7 percent to the Army, 33.7 percent to the Navy and Marine Corps, and 32.1 percent to the Air Force. All percentages have remained virtually unchanged for the past decade. When we begin to address the hard force structuring and budget questions concerning fiscal constraints and strategy development, most Pentagon observers logically view a real debate between the nation’s land forces for budget supremacy, or minimally, mission selection.

Those who support the Marines for such favor cite several practical reasons for their service of choice. Some of their thoughts are:

- Marines are the obvious choice for a small, highly trained, versatile and mobile rapid-deployment force (RDF).
- They are already organized for fast overseas deployment.
- Marines are internally equipped with transport, air support, and interoperability within the Navy.
- It is easier to fix what is missing to an existent, cohesive, functioning service than to tailor forces for specific missions.
- The battlefield of tomorrow will be in the Third World, which does not require heavy, conventional forces, similar to those stationed in Western Europe.
- The Marines do not have to rely on foreign bases for support, which can lead to political problems.
- Naval surface ships internally provide a base of operations and supply.

In effect these arguments speak to the actual mission of the U.S. Marine Corps as stated in Title 10, United States Code.
To maintain the Marine Corps, which shall be organized, trained, and equipped to provide Fleet Marine Forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign..." 

The U.S. Army counterargument is no argument at all—the U.S. Marine Corps and the U.S. Army are complementary services, not competing services. The missions of the two land forces are different. Title 10 states that the Army’s mission is:  

To organize, train, equip, and provide forces for the conduct of prompt and sustained combat operations on land—specifically, forces to defeat enemy land forces and to seize, occupy, and defend land areas...  

In fact all four military services are components of a larger team, not unlike the offense, defense and special teams of a football team. But for the sake of argument, I’ll take issue with the Marines—that they are the service of choice for future conflict warfighting in the Third World. My debating thesis is that the U.S. Army is the service of choice for small wars because:  

- The Marine Corps can only defeat 50 percent of the nations with land forces (using the 3:1 Model) without a massive increase in force structure, which would be a counterculture move ("a few good men").  
- 141 nations are structured predominantly in armies. Only 28 countries have marines, whose use is naval base security.  
- Of the 70 countries which the Marine Corps can theoretically defeat, 25 are landlocked and approximately 10 have substantial natural barriers against conquest by sea—shallow-shore depth, few landing craft sites, bad weather and sea state conditions. This leaves 35 of the 140 nations suitable for Marine conquest, or 25 percent. The other 75
percent of nations with armies will require the U.S. Army to insure success.

- U.S. Marines comprise two-thirds of the world’s total marine forces (282,100 vs. 144,750). Why do we have so many Marines?

- The Marines are offense-oriented by mission, while the Army is defensive in posture. (The future points to defensive defense, not offensive defense.)

What both of these arguments indicate is that the military services—all of them—are complementary. It is not an "either-or" debate. The real debate is between advocates of low cost/low tech defensive strategies and high cost/high tech solutions. People or expensive things? When time was the critical element in mobilization, high cost/high tech solutions were favored because there would not be time to build expensive power projection vessels in a short-warning scenario. Now things have changed. We have plenty of time, which should favor people over things. This argument is now moot. We should seek solutions which are low cost/high tech, and that means favoring research and development which support soldiers, sailors, marines and airmen, rather than R & D which replaces them.

The Marines versus Army debate leads us logically into a mission specialization discussion. Each service is attempting to retain structure in what it does best. In doing so duplication of capabilities is inevitable. If we are truly moving to a "joint" force in accordance with the Defense Reorganization Act of 1986, in time of drastic budget reductions we will need to eliminate such duplication. We must learn how to interchange missions among the services.

The Army has conducted a Total Army Analysis (TAA) for years. During the TAA, many trade-offs are made. The TAA is a formal process to determine the force structure requirements for both Active and Reserve Components through the program years, while generating the base force which reflects the most recent doctrinal modifications.
earlier years support forces were removed from the Active force and placed in the Reserve Component, while backfilling the resultant support force requirement with Wartime Host Nation Support (WHNS) forces. The 1982 WHNS agreement with the Federal Republic of Germany (FRG) involved the creation of a German reserve force of 93,000 to perform a variety of combat service support (CSS) missions, including airfield damage repair and transportation support. The startup and sustainment costs of this force structure ultimately was to be shared about equally by the FRG and the United States. (We should relook our funding commitment to this program in light of current budget constraints and assumptions made for the future.) This agreement, which trades capability for funding, was necessary to replace U.S. support structure which in turn was converted to combat structure. The TAA process is a personnel space-by-space process designed to increase the deterrent value of force structure without increasing capital costs. The TAA process does consider other Army programs such as Functional Area Assessment (FAA) and Mission Area Assessment (MAA), both conducted on a biannual basis. These programs seek to structure our Army with more firepower, mobility and logistical support from within existing structure and they have been successful. It is now time for the Joint Chiefs of Staff to consider establishing a Joint Service Analysis to enhance the firepower, mobility and logistical support of joint force structure, which necessitates mission trade-offs:

- All services have special operations forces.
- All services have air forces.
- All services have engineers.
- All services have base security forces.
- All services have medical, religious and legal forces.
- Three services have boats and ships (Navy, Marine, Army Transportation Corps).
From lists like the above, hard questions need to be asked. Does each service need a given capability? Can a mission trade-off benefit jointness, e.g., resolve naval on-shore parking problems, while enhancing military effectiveness? Are customs and traditions of each force more important than the whole of U.S. defense? Such a joint program would certainly enhance internal debate among our senior leaders to fight for customs, traditions and budget market share. But through conflict resolution and trade-offs, won't we arrive at a more beneficial force structure than the Congress could design? If we don't tackle this debate and make sound, logical decisions, Congress will do it for us based upon location of forces and industry. Because the Department of Defense in its latest base closure debacle did not insist that the services examine each others' closure offerings, we made illogical mistakes and Congress knows it. When we return forces from Europe, we aren't going to leave the equipment there. That's illogical. Where will we store 10 divisions' worth of equipment now located in Europe? Logical storage sites are located at or near ports. Then why are we closing the Philadelphia Naval Yard? This is an illogical decision, brought about by traditional separate service mindsets, not a joint service mindset. Congress will "eat our lunch" on base closures and other issues unless we learn to trade off missions and respond with joint rationale.

Discursive excursions such as these are germane to understanding the comparative resources problem. Do we structure to offset our weaknesses or strengthen areas where we are strong? I think we might best use U.S. Competitive Strategies theory in reverse. Attacking an opponent's weakness, the current comparative strategies doctrine, does not seem as logical as it did just a year ago. A balanced strategy, one able to respond to a wide array of policy options, while utilizing the force in peacetime for purposes which increase American productivity, is my answer. Forget competitive strategies. Trade off missions which will produce the best cost-benefit ratio. From the Overwhelming Force Model we can consider decreasing landpower by 600,000. We can park 4,500 airplanes and seek naval arms
control for sea service reductions. From the Aversion Policy Model we can find mission increases and decreases which are neutral in size (as one is reduced, one is increased). From the Comparative Resources Model we find that our traditional balanced approach to structuring the services is more appropriate than focusing on enemy weakness: that mobilization time has been lengthened to rationally deflate arguments for increased power projection lift capability; that defensive rather than offensive forces may offer greater utility in the next decade; and that limited resources need to be allocated to alleviate defensive weaknesses in a balanced approach (ASW, antitank, etc.). Now let’s look at the last theoretical model, the Economic Integration Model.

The Economic Integration Model.

The key to understanding this theory is recognition that real power has shifted from military to economic and diplomatic or political might. The revolutionary events in Eastern Europe were allowed politically by Mr. Gorbachev to overcome drastic economic shortfalls in the USSR brought about by an archaic political system. Continued competition in the arms race with the West only compounded Soviet economic problems. The United States as well has experienced economic woes because of superpower military competition, costing 28-30 cents of every tax dollar collected in 1986. Although real U.S. defense growth has been negative since then, we are still spending 24 cents of every tax dollar on defense in 1990. As long as we continue to keep defense expenditure growth at less than Gross National Product growth (and thus below tax revenue growth), the cents of every dollar spent on defense will continue to decline. That’s the good news. The bad news is that to remain economically competitive in the world, we may reduce defense expenditure to levels which may erode today’s U.S. military sufficiency. The obvious answer to our deficit and economic woes is twofold. We must either increase our national productivity and savings, or cut government expenditure, or both. I propose both. By offering force reductions and weapons cancellations, we can help American competitiveness. But we must not reduce defense
In the model we will find a horizontal axis of reductions and utilization. What is depicted are bounds of two options: reduce forces or keep forces, but use them for national economic gain as well as defense. The horizontal axes are quantitative. If we reduce Active Army force structure to 500K, we have also reduced the amount of defensive capability (in the shaded area). This reduction was noted in our discussion in the 3:1 Model. At the utilization bound we may begin to use existing force structure to make us more economically competitive. Both vertical quantifier lines slide as an engineer slide rule does. As we increasingly use existing soldiers for nonmilitary missions, we also will lose some portion of our defense capability, e.g., the force will not be as ready to go to war if it
does not train for war. What is left in the model is the difference between the reductions and the number of troops integrated into economic support. This difference is our ready army, one which trains for combat. Although those who work to make us more competitive also train, they are not as ready for war because war readiness is directly related to training time (a military axiom).

What do these folks do in the right side of the model? They are used in many ways. Recently the Governor of Michigan offered his Army National Guard for use in demolishing "crack houses" and dilapidated houses on sheriff sale books. The Mayor of Detroit immediately requested that the National Guard demolish 1,500 properties in his city. Soon, on weekend training assemblies and during annual summer training, the guardsmen will be actively engaged in this worthwhile activity. In effect, the mayor and the governor will get "Two-fers" because the city's tax base will increase as new commercial structures are built on the old properties (with no current tax revenue), and the elimination of crack houses will contribute to the security of local neighborhoods. In effect, the federal government is also receiving a "two-fer" deal. It pays for soldiers it needs for national security, while it fights the drug war simultaneously. There are lots of examples of federal and state National Guard support to the drug war which accomplish the same thing, e.g., military customs inspection support, radars, helicopters, naval and air force support. Drug war support, however, is not a classical example of the integration of military and economic power because much of the support provided can be performed as military training, and thus, no reduction in readiness occurs. The use of soldiers by East Germany to replace industrial workers and coal miners as a result of the flight of those workers to the West is an example of what I am advocating.

As we reduce the force we should be looking for units which can assist the private sector with support which equates to training readiness: the emergency medical personnel, helicopter pilots, clerical and information management specialists should be retained and integrated into the civilian
world. Their training is their work and vice versa. They can easily support police work by freeing the administrative personnel slots taken in a municipal police force for more line officers. Hospitals in remote rural areas could utilize our military medevac units in cases where the communities could not afford such services. Is this irrational? Imagine the Chairman of the Joint Chiefs of Staff asking an annual mayors' or governors' convention if the military could help them. He would be besieged with requests for support which would cover the full spectrum of military occupational specialties (MOS). There is much we can do to increase economic productivity. Quantifiable things. Excess military bases could be used for a variety of functions including prisoner overflow, drug rehabilitation centers, housing for the homeless, and education and training centers for captured illegal aliens. (We capture and return over 1,000,000 per year. Why let them go? Why not train them in our language, customs, and a skill needed as noted by shortages in our labor market?) Even the military's transportation capabilities can be utilized to move the unemployed through a training center to a programmed job somewhere. We performed these kinds of activities during the highly successful Civilian Conservation Corps in the 1930s. The political viability for these many activities may seem low, but how does this concept compare with trying to shut down a major military installation in a powerful congressman's district? It certainly is more feasible to use military assets for domestic needs than it is to close military bases. Passing legislation needed to help America compete is surely easier than preparing environmental impact statements—anytime!

The integration of economic and military power is an evolutionary concept. As we utilize soldiers more in the drug war and in support of other domestic policies, new paradigms for use will naturally develop. The Aversion Policy Model presented earlier also addresses this utilization of military assets in support of national policies, but we only addressed five of several hundred issues which need to be put into that model. An important tenet to remember when using this Economic Integration Model is that the more we utilize existing troops to support domestic policies, the less defense we have.
Certain combat troops (in the model I dedicated 250,000) must be isolated from integration to retain a military option for crisis resolution. The active 250,000 combat force is then backed up with 250,000 support troops. I refuse to state what this 500,000 Active Component Army consists of below the resolution provided. So should the Army Staff. It is the Army's job to construct the force. The job of the Congress is to raise the funds. Again, the estimate of 500,000 protects itself from external audit by its simplicity, but only if we keep it that way. If I said that the 500,000 consists of 10 divisions at 15,000 each; 250,000 support troops; 50,000 special operations forces; and 50,000 miscellaneous, Congress would surely take the miscellaneous away from us. But Reserve Component strength surely will be closely scrutinized. This Army of the United States, as opposed to Active forces in the United States Army, particularly the state National Guard, has more political integration and influence with the U.S. Senate than the Regular Army. Their work in disaster relief, crowd control, rescue operations, drug war support, playground and park construction and repair, and many other domestic missions assigned or approved by state governors make these forces more difficult to direct, command and control by the Regular Army.

This evolving internal debate is consuming much of the Army's intellectual capital. How do we resource and structure the Reserve Components to balance risk encountered when we reduce the active force? The source of my proposed 600,000 reduction in the 3:1 Model is intuitive: 250,000 Active; 300,000 Reserve Component; and 50,000 Marines (either or both components). Subjective Pairwise Comparison and other analytical tools won't work. However, if we structure for the new mission gains in the Aversion Policy Model and ensure a balanced resourcing of scarce budget dollars in the Comparative Resources Model, and learn how to utilize troops to increase American economic competitiveness in the Economic Integration Model, political as well as security concerns will seek consensus in support of economic necessity. Numbers need to be used as targets for the future. Mixes of resourcing should remain balanced among the
services and within Army components. All decisions will need to be flexible in our ultimate justification of the Army.

**Summary.**

In presenting four new theoretical models we have reduced the military: 600,000 land forces; 4,500 combat airplanes; and will reduce naval principal surface combatants and submarines upon successful conclusion of not yet existent naval arms control. We have presented a technique of developing strategic vision which took a quick look at mission changes in the next decade to include gains in space, multinational force support, environmental cleanup, the drug war, combat support and service support units, and research and development, while predicting declines in nuclear forces, forward stationed forces, procurement/acquisition forces, military assistance, and heavy combat forces. We have discussed resourcing issues arriving at the current budget balance of forces, but not without discursive excursions into our most difficult resourcing issues: strategic vs. strategic, strategic vs. conventional, low cost/low tech vs. high cost/high tech, Marines vs. Army, Reserve vs. Active; to derive a balanced resourcing strategy based upon difficult mission trade-offs. And finally we surveyed our forces from a utilization vs. pure defense posture in pursuing ways to integrate economic and military power for improvement in overall American competitiveness. Above all else, we should have learned that illogical policies and weapons procurement enhance our "incredibility" with Congress; that we must use "joint logic" if credibility is to be improved. Congress will structure us via the pork barrel if we don't learn this lesson.

**ENDNOTES**


2. Lieutenant Colonel David E. Shaver, *Force Structures: The United States and Europe in the Coming Decade*, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, June 12, 1989, pp. 9, 17-18. This paper was actually presented months earlier, September 30, 1988, to the


6. Ibid.

7. Ibid.

8. Ibid.


10. Ibid.


14. We made an argument for this in Ibid., p. 85.


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