The Gulf and Transition

US Policy Ten Years After the Gulf War:

The Challenge of Providing USCENTCOM and US Power Projection Forces with Adequate Capabilities

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Introduction

This transition study reflects the result of a long-standing project on Gulf net assessment, funded in part by the Smith Richardson Foundation. This project has already produced some eight books, including two major studies of Iranian and Iraqi military forces published in 1999 – Iraq and the War of Sanctions and Iran’s Military Forces in Transition (Praeger 1999). Additional detailed briefings and supporting data on the military balance in the Gulf, energy and economic trends, Iranian and Iraqi proliferation, and Gulf arms transfers can be found on the CSIS web page at www.csis.org under the sections market as “Gulf in Transition” and “Strategic Assessment.

This volume is intended to support US policy making and the reader should be aware that the sources used are deliberately chosen to rely as heavily as possible on current official US government documents and reports, unclassified intelligence reporting and estimates, and official international institutions like the World Bank. The goal is to provide data that policy makers are familiar with and can trust. The author, however, is solely responsible for the conclusions and suggestions made in this analysis and no attempt was made to coordinate its content with either any officials or experts in the US government or other policy analysts in the CSIS.
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The US Department of the Defense has clearly described American objectives in the Gulf in its policy and posture statements for more than two decades. Secretary of Defense William S. Cohen describes the following US strategic goals in the broader Gulf region in his year 2000 Annual Report to the President and the Congress.¹

The United States seeks a Middle East and South Asia at peace, where access to strategic natural resources at stable prices is unhindered and free markets are expanding. The region cannot be stable until there is a just, lasting, and comprehensive peace between Arabs and Israelis and a peaceful resolution to Indian–Pakistani disputes. Stability also cannot be achieved until Iraq, Iran, and Libya abide by international norms and no longer threaten regional security. The Department, through the Cooperative Defense Initiative and various multilateral processes, is working actively with regional partners to address and deter the threat or use of chemical and biological weapons or long-range missiles by these states. DoD efforts will also concentrate on thwarting further proliferation of NBC technologies and successfully countering terrorism. The United States must continue working with regional allies and improving U.S. force capabilities to ensure that U.S.-led coalition forces have the ability to fight and win in an NBC environment. Stability in South Asia depends on improved relations between India and Pakistan, and a commitment from both countries to exercise restraint in their nuclear, missile, and chemical and biological weapons policies and practices.

The US must deal with two major sets of challenges in meeting these goals and in improving its own forces to deal with contingencies in the Gulf. The first is to maintain to conventional capabilities it needs to deter or win conflicts in the Gulf. The second is to deal with the new threat of proliferation. The years since the Gulf War have seen considerable progress in many areas of US military capability in the Gulf region, but they have also seen a number of contradictory trends in US capabilities. US planners have been forced to make complex trade-offs, as they attempt to deal with the conflict between the “top down” goals set by the Clinton budget and the “bottom up” force goals established by US defense planners.

The cuts in US capabilities since the end of the Cold War do not necessarily reduce US capabilities for a single contingency like the Gulf, but they do mean some reduction in sustainability, in several key areas of modernization, and in the overall technological “edge” that the US had originally planned to maintain over potential threats in the region. The Clinton Administration and the Congress have been confronted by a series of “Hobson’s choices.” They
have had to choose between cutting force strength, readiness, and modernization and so far have compromised by cutting all three.

**Cuts in US Total Forces Since the Gulf War**

The US no longer has anything like the total pool of forces it drew upon during the Gulf War. The US force cuts since the Cold War may represent a “peace dividend,” but they also have an inevitable impact on US warfighting and power projection forces. The question is just how serious have these cuts been, and to what extend do they affect US warfighting capabilities.

Similar uncertainties affect the funding of current US forces and their readiness. Even if US force levels are adequate to meet a reduced threat, questions arise about how well they are funded, and particularly about the funding for modernization.

There are no magic answers, but the reporting of the Department of Defense, Congressional Budget Office, General Accounting Office, and Chiefs of Staff does indicate that there are major problems that the next Administration must address. They also indicate that any debates or political policy statements that ignore such problems are not correct.

**Cuts and Plans as of the Mid-1990s**

Table VIII-1 shows a history of the US build-down between FY1990 and FY2002. It is clear that, the US had 27% less active military manpower in the mid-1990s than it had the time of Desert Storm., It had 30% fewer active Army divisions, 32% fewer battle force ships, and 36% fewer attack and fighter aircraft.

The Clinton Administration plan for the 1997 Quadrennial Defense Review (QDR) produced a 45% reduction in active Army divisions relative to Desert Storm, a 50% reduction in reserve component divisions, a 37% reduction in battle force ships, a 27% reduction in carriers, a 23% reduction in active carrier air wings, and a 50% reduction in reserve carrier air wings. They
would also have produced a 46% cut in active Air Force fighter wings and a 42% cut in reserve wings.

In the case of the Army, the 1997 Quadrennial Defense Review (QDR) called for at least a 34% cut in tanks, a 41% cut in other active armored fighting vehicles, a 17% cut in major artillery weapons, a 25% cut in surface-to-air missile launch units, a 53% cut in short range air defense systems, and a 31% cut in tactical wheeled vehicles.

These cuts in equipment numbers raised serious questions about the credibility of a two major regional contingency strategy by the mid-1990’s because the US Army had deployed roughly 76% of its inventory of many types of wheeled tactical vehicles during the Gulf War and had large numbers of commercial and Saudi wheeled vehicles as well.

Separate data provided by the Army staff also indicated that the Army was also to make a 41% cut in fixed wing aircraft, a 39% cut in active attack helicopters, a 31% cut in active medium lift helicopters, a 100% cut in active heavy lift helicopters, a 30% cut in active utility helicopters. If reserve aircraft are included, the Army will cut its total aircraft strength by 49%.²

The cuts in US Navy strength are more difficult to measure because of the number of different ship types, but the QDR called for the US Navy to cut about 30% of its active CGs and 78% of its CGNs, 100% of its FFs, and 34% of its FGGs. It was to eliminate 23% of its amphibious ships. It was to cut its active primary combat aircraft by 47%, its active ASW and patrol aircraft by 42%, and its active support aircraft by 42%. The US Marine Corps was to cut its active primary combat aircraft by 17%, and its active electronic warfare, observation, and refueling aircraft by 19%. It will have cut its reserve primary combat aircraft by 50%; its active electronic warfare, observation, and refueling aircraft by 19%; and its total reserve helicopters by 11%.³
The US Air Force was to cut its active bomber strength by 44%. It was to cut its active fighter/attack strength by 48% and its reserve strength by 48%. It was to cut the number of its active reconnaissance and special purpose aircraft by 48% and the number of its reserve aircraft by 96%. It was to increased its active special operations aircraft, but largely eliminate its reserve special operations aircraft. It was to reduce its number of active aircraft from 556 to 386, although its reserve aircraft were to increase slightly from 391 to 396. Figures are not available on the goal for tanker forces, but the number of active tankers had already been cut from 533 to 321, while the number of reserve tankers had been increased from 146 to 291.4

The data on FY2001 and FY2002 in Table VIII-1 shows that these cuts have been achieved or exceeded in virtually every area, with the exception of some categories of reserve forces. At the same time, it is important to keep them in perspective. The US no longer faces a major threat in Europe or a hostile Russia. China’s military build-up is very slow and China is not a hostile power. North Korea has faced years of economic crisis, has had to slow its military build-up, and has only had limited modernization. Iraq has faced a decade of arms embargoes, and Iran’s conventional arms imports have been much more limited than the US projected after the Gulf War.

As a result, it seems likely that the US retains enough forces to win any single major regional conflict. Its problems would arise only under the worst case for planning: two near-simultaneous major regional contingencies.
### Table VIII-1 – Part One

#### Evolving US Force Plans

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<tr>
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<td>Minuteman missiles</td>
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<td>Peacekeeper missiles</td>
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<td>Total Divisional and Separate Reserve brigades</td>
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<td>492</td>
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<td><strong>Marines</strong></td>
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<td>60/5</td>
<td>48/4</td>
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<tr>
<td>Active Combat Aircraft</td>
<td>662/57</td>
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<td>528/44</td>
<td>456/36</td>
<td>432/36</td>
<td>432/36</td>
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<tr>
<td>Reserve Combat Aircraft</td>
<td>97/9</td>
<td>-</td>
<td>38/3</td>
<td>38/3</td>
<td>36/3</td>
<td>36/3</td>
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<tr>
<td>Battle Force Ships</td>
<td>546</td>
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<td>372</td>
<td>354</td>
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<td>(315)346</td>
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<td>Support Forces Ships</td>
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<td>-</td>
<td>37</td>
<td>26</td>
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<td>19</td>
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<td>Ballistic Missile Submarines</td>
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<td>16</td>
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<td>(18)</td>
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<td>24</td>
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</table>

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### Table VIII-1 – Part Two

**Evolving US Force Plans**

<table>
<thead>
<tr>
<th>Area</th>
<th>Active (1,000s)</th>
<th>Reserve (1,000s)</th>
<th>Fighter Forces</th>
<th>CONVENTIONAL BOMBER</th>
<th>Total Civilians (1,000s)</th>
<th>STRATEGIC LIFT</th>
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<td>Air Force</td>
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<td>201</td>
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<td>Active personnel</td>
<td>400</td>
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<td>15</td>
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<td>54</td>
<td>171</td>
<td>173</td>
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<tr>
<td>Active Combat Aircraft</td>
<td>936/53</td>
<td>936/52</td>
<td>13</td>
<td>54</td>
<td>1,867</td>
<td>199</td>
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<tr>
<td>Reserve Combat Aircraft</td>
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<td>549/38</td>
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<tr>
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</table>

* An approximate equivalent and numbers are not comparable in the outyears. The BUR plan calls for 15 enhanced readiness brigades, a goal that DoD will begin to reach in FY1996. Backing up this force will be an Army National Guard strategic reserve of eight divisions (24 brigades), two separate brigade equivalents, and a scout group.** A MEF includes a Marine division, air wing, and force service support group. Figures in parenthesis show the FY2001 force plan and not the QDR goal.

Cuts and Plans as of 2000

The adequacy of current US defense budgets is a different issue. The Congressional Budget Office made a detailed comparison of current defense budget plans and the spending required to maintain current US force levels in September 2000. The CBO estimate of the recent and planned cuts in real US defense spending, and in US combat units since the Gulf War, Bottom Up Review, and Quadrennial Defense Review is shown in Table VIII-2. These force cut data track closely with the data show in Table VIII-1. Table VIII-2 shows CBO’s estimate of the current trends in US defense spending.

The most interesting figures in the CBO study, however, are the CBO’s estimate of the cost of maintaining the kind of force numbers shown in Tables VIII-1 and VIII-2 at suitable levels of modernization and readiness. These costs are shown in Table VIII-4, and it is clear that the US is falling far short of the expenditure levels it needs to properly fund even its present greatly reduced total force levels.5

The CBO estimate of the “sustaining budget” actually necessary to fund current forces defense totals about $340 billion in 2000 dollars. Thus amount represents the overall funding required to keep defense forces in a “steady state,” which CBO says it calculated by holding constant certain factors, including the numbers of personnel, forces, and military bases. The CBO estimate covers budget function 050, which includes not only funding for the Department of Defense but also budget authority for defense activities related to atomic energy in the Department of Energy and for national defense functions in other federal agencies.

The estimate of $340 billion is not an estimate of the required defense budget for any specific year, although CBO did organize the components of the estimate in traditional budget categories, but rather an estimate of the average annual expenditure required over time. More specifically, CBO’s estimate of sustaining funding for the Department of Defense’s portion of the defense budget includes funds to:

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• Keep increases in the pay of military personnel consistent with increases in pay in the private sector;

• Maintain current operating tempos (the pace of operations and training) and levels of maintenance and support for today’s forces and keep increases in pay for DoD’s civilian workforce in line with those in the private sector;

• Replace the military’s weapons and equipment at a rate consistent with projections of their service lives—in particular, replace old weapons and equipment with new systems that exist or are planned, or with items in DoD’s current inventory where no new system is in development;

• Provide funding for the research, development, test, and evaluation category consistent with the historical share of the budget that has been devoted to those activities; and

• Repair and replace the existing stock of military facilities and family housing units.

As Table VIII-4 shows, a total of $327 billion a year is required to fund the Department of Defense portion of our defense effort. This $327 billion compares with actual current funding of only $276 billion. About $13 billion more would support the defense programs in other agencies. Activities in the Department of Energy would account for $12 billion of these non-DoD funds, and the remaining $1 billion needs be dispersed among a variety of other agencies. Is these figures are added to the required Department of Defense funding, the total rises to $340 billion. This compares with total actual funding of $289 billion.

**The Procurement and Modernization Crisis**

The CBO indicates that increased defense spending is needed in a number of areas. These include $8 billion more a year for personnel, $5 billion for operations and maintenance, and $2 billion for research and development. The critical shortfall, however, is in procurement. The CBO estimate of the required procurement costs is $90 billion a year.

Tables Three and Four show that this is far higher than current actual funding, and the CBO notes that its estimate for procurement is conservative by the standards of the Gulf War. For example, the CBO makes the assumption the service lives of weapon systems and equipment. Should now be consistent with service-life projections that are much longer than those used in the past projections DoD is now keeping some equipment in service longer. If the CBO had based its
procurement estimate on experience in retiring equipment as quickly as the US did at the time of the Gulf War, the CBO estimate of sustaining funding for procurement would be $25 billion higher. This would create a total procurement budget requirement of $115 billion a year versus current funding of only $53 billion.

This lack of procurement funding is not new. The Joint Chiefs costed their procurement and modernization requirements at around $75 billion annually in the mid-1990s. They were only allowed to send requests of $60-$65 billion forward in their budget requests, however, and they got far less. As the 1997 Quadrennial Defense Review noted,

To modernize the force, the Department established a goal of increasing procurement funding to roughly $60 billion by FY 2001. The Chairman of the Joint Chiefs of Staff affirmed that goal during preparation and presentation to Congress of the last two defense budgets. Although we have made some reductions in the modernization program as a result of the QDR, $60 billion remains the rough level of procurement funding the Department believes is necessary to modernize even the slightly smaller force that will result from the QDR. On the path to that goal, the Department has established somewhat lower intermediate targets of $49 billion in FY 1999 and $54 billion in FY 2000. Continuing efforts to reduce the costs of the defense infrastructure will be needed to achieve those targets.

It is also a problem that will not ease with time. A GAO analysis of the FY2000 and FY2001 Future Years Defense Program notes that procurement spending over FY2001-FY2005 was actually slightly in the FY2001 request relative to the FY2000 request. These cuts are particularly striking in the outyears, when spending was supposed to rise. The FY2000 Future Years Defense Program called for $68.9 billion in procurement spending in FY2005. The FY2001 future years defense program calls for only $65.8 billion.

The GAO analysis also shows that that spending in constant FY2001 dollars will be $60.3 billion in FY2001, $62.0 billion in FY2002, $64.4 billion in FY2003, $64.0 billion in FY2004, and $65.8 billion in FY2005. If the Joint Chiefs’ figure of $75 billion a year is right, this will create a total procurement deficit of $58.5 billion over the next five years. If the CBO estimate of $90 billion a year shown in Table VIII-4 is correct, the deficit will be $192 billion. This is a truly massive shortfall in modernization, and it will either require major additional funding or lead to massive cuts and stretch outs in the US defense procurement plan and seriously erode both the
US qualitative edge and its ability to carry out anything approaching the revolution in military affairs.
Table VIII-2

U.S. Military Forces in Selected Fiscal Years, 1989-1999

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Strategic Forces</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Land-Based ICBMs</td>
<td>1,000</td>
<td>787</td>
<td>580</td>
<td>550</td>
<td>-45</td>
</tr>
<tr>
<td>Heavy Bombers</td>
<td>310</td>
<td>194</td>
<td>126</td>
<td>143</td>
<td>-54</td>
</tr>
<tr>
<td>Submarine-Launched Ballistic Missiles</td>
<td>576</td>
<td>408</td>
<td>408</td>
<td>432</td>
<td>-25</td>
</tr>
<tr>
<td><strong>Conventional Forces</strong></td>
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<td></td>
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<tr>
<td>Land Forces</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Army divisions</td>
<td></td>
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<tr>
<td>Active</td>
<td>18</td>
<td>14</td>
<td>10</td>
<td>10</td>
<td>-44</td>
</tr>
<tr>
<td>Reserve</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>-20</td>
</tr>
<tr>
<td>Marine Corps expeditionary forces</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Reserve</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Naval Forces</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Battle force ships</td>
<td>566</td>
<td>435</td>
<td>354</td>
<td>317</td>
<td>-44</td>
</tr>
<tr>
<td>Aircraft carriers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>15</td>
<td>13</td>
<td>11</td>
<td>11</td>
<td>-27</td>
</tr>
<tr>
<td>Reserve</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Navy carrier air wings</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Active</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>-23</td>
</tr>
<tr>
<td>Reserve</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-50</td>
</tr>
<tr>
<td><strong>Air Forces</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tactical fighter wings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>25</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>-48</td>
</tr>
<tr>
<td>Reserve</td>
<td>12</td>
<td>11</td>
<td>8</td>
<td>8</td>
<td>-33</td>
</tr>
<tr>
<td>Airlift aircraft</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Intertheater</td>
<td>401</td>
<td>382</td>
<td>345</td>
<td>331</td>
<td>-17</td>
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<tr>
<td>Intratheater</td>
<td>468</td>
<td>380</td>
<td>430</td>
<td>425</td>
<td>-9</td>
</tr>
</tbody>
</table>


Note: ICBMs = intercontinental ballistic missiles.

a. Forces with basically nuclear missions.
b. Includes some long-range bombers that do not have strategic missions.
c. Forces with largely nonnuclear missions.
d. Excludes separate brigades that are not part of a division.
e. A Marine expeditionary force includes a division, an air wing, and supporting forces for those combat elements.
f. Includes all Navy ships involved in combat—for example, ballistic missile submarines, surface combat ships, aircraft carriers, and amphibious craft—as well as some other vessels.

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### Table VIII-3

**Funding for National Defense and Personnel for the Department of Defense in Selected Fiscal Years, 1989-1999**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Budget Authority (In billions of 2000 dollars)</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Department of Defense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military personnel</td>
<td>109</td>
<td>93</td>
<td>78</td>
<td>73</td>
<td>-33</td>
</tr>
<tr>
<td>Operation and maintenance</td>
<td>116</td>
<td>99</td>
<td>99</td>
<td>109</td>
<td>-6</td>
</tr>
<tr>
<td>Procurement</td>
<td>97</td>
<td>58</td>
<td>44</td>
<td>52</td>
<td>-47</td>
</tr>
<tr>
<td>Research, development, test, and evaluation</td>
<td>47</td>
<td>42</td>
<td>38</td>
<td>39</td>
<td>-17</td>
</tr>
<tr>
<td>Military construction</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>-20</td>
</tr>
<tr>
<td>Family housing</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>-11</td>
</tr>
<tr>
<td>Subtotal</td>
<td>380</td>
<td>302</td>
<td>269</td>
<td>282</td>
<td>-26</td>
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<tr>
<td>Other Agencies</td>
<td>11</td>
<td>16</td>
<td>13</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Total, National Defense</td>
<td>391</td>
<td>318</td>
<td>282</td>
<td>296</td>
<td>-24</td>
</tr>
<tr>
<td><strong>DoD Personnel (In thousands)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Duty</td>
<td>2,130</td>
<td>1,705</td>
<td>1,439</td>
<td>1,386</td>
<td>-35</td>
</tr>
<tr>
<td>National Guard and Reserve</td>
<td>1,171</td>
<td>1,058</td>
<td>902</td>
<td>869</td>
<td>-26</td>
</tr>
<tr>
<td>Civilian</td>
<td>1,107</td>
<td>984</td>
<td>786</td>
<td>704</td>
<td>-36</td>
</tr>
</tbody>
</table>

**Source:** Congressional Budget Office using data from the Department of Defense and the Office of Management and Budget, as shown in “Budgeting for Defense: Maintain Today’s Forces,” Washington, CBO, September 2000,.cbo.gov.

**Note:** Apparent discrepancies in the calculations arise from rounding.

a. Covers defense activities related to atomic energy in the Department of Energy and national defense functions in other agencies.

b. Includes revolving and management funds, trust funds, and offsetting receipts. Excludes contract authority for the working capital funds because appropriations are used to liquidate that authority.

c. Strength measured at the end of the year.
Table VIII-4

<table>
<thead>
<tr>
<th></th>
<th>Appropriation for Fiscal Year 2000(^a)</th>
<th>Sustaining-Budget Estimate(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Defense (Budget subfunction 051)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military personnel</td>
<td>74</td>
<td>82</td>
</tr>
<tr>
<td>Operation and maintenance</td>
<td>102</td>
<td>107</td>
</tr>
<tr>
<td>Procurement</td>
<td>53</td>
<td>90</td>
</tr>
<tr>
<td>Research, development, test, and evaluation</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>Military construction</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Family housing</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Subtotal</td>
<td>276</td>
<td>327</td>
</tr>
<tr>
<td>Other Agencies (Budget subfunctions 053 and 054)(^c)</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Total, National Defense (Budget function 050)(^d)</td>
<td>289</td>
<td>340</td>
</tr>
</tbody>
</table>

SOURCE: Congressional Budget Office.
NOTE: The figures in the table include both discretionary and mandatory funding. Apparent discrepancies in the calculations arise from rounding.

a. Based on CBO’s estimates as of July 2000 but excluding supplemental appropriations of about $9 billion.

b. The sustaining-budget estimate is CBO’s calculation of the annual funding required to maintain U.S. military forces at their current size; to modernize their weapons and equipment at a rate that is consistent with expected service lives and with maintaining a technological advantage over potential adversaries; and to maintain current funding for readiness. It is a steady-state concept and not an estimate of the defense budget for any specific year.

c. Covers defense activities related to atomic energy in the Department of Energy and national defense functions in other agencies.

d. Includes revolving and management funds, trust funds, and offsetting receipts, which total less than $0.5 billion. Excludes contract authority for the working capital funds because appropriations are used to liquidate that authority.
The Problem of Readiness

As is the case with total force levels and defense spending, there is no way to translate the broad data on readiness into an assessment of US warfighting capabilities. It is also far from clear that Department of Defense reporting on readiness provides an accurate picture. While Department of Defense readiness reporting may sometimes overstate problems, it far more commonly overstates readiness capabilities.

Since 1995, the reports of Senator John McCain have revealed continuous problems in readiness that were not fully reported by the Department of Defense. Testimony before September 2000 hearings by the House Armed Services Committee also revealed a number of serious problems:

- Opening Statement of Chairman Spence: The most recent Quarterly Readiness Report to Congress covering the period from April to June 2000 stated that, "unit readiness ratings indicated that the overall readiness of our forces is improving." As it has in the past, the Department of Defense reported that the risk in executing ongoing operations and responding to a major theater war is "moderate," while the risk for a second MTW is "high."

- "...Admiral Jay Johnson, the Navy’s Inspector General recently conducted an evaluation of Naval Aviation. His report – completed in April 2000 – found that funding for the Navy and Marine Corps’ flying units had been "trimmed to the bone and beyond" to the point that "acceptable levels of risk have been exceded". According to the report, this has resulted in "debilitating levels of frustration and morale crushing drudgery at the operational unit level." The Inspector General report found that 75 percent of those polled stated that the current situation negatively impacted their decision to stay in the Navy.

- "...The Air Force is also experiencing readiness difficulties across the board. This past April, the Air Force experienced its lowest readiness levels in fifteen years, with only 67 percent of its combat units reporting C-1 or C-2, the highest readiness ratings. Although spare parts and personnel shortages continue, the Department’s latest Quarterly Readiness Report noted that the Air Force is "beginning to arrest the declining trend in aircraft mission capable rates."

- "...The Army’s readiness problems also appear significant. Ammunition stocks are low and nearing exhaustion, according to the Army’s testimony before the committee last week. In addition, an internal Army Training and Doctrine Command (TRADOC) report dated September 5th stated that the command’s C-4 rating – the lowest readiness rating possible – was due to the fact that the "level of funding and personnel (military and civilian) do not support mission requirements."

- "...Of particular concern is the fact that both the Army’s Infantry School and Artillery School – two key combat training centers – reported C-4. Major General Stricklin, the Commander of the Artillery School, said that the Artillery School "is nearing an unready state for training artillery soldiers." In light of these
comments, and similar comments made by the other thirty-one commanders in this report, I can only conclude that the Army’s Training and Doctrine Command is in crisis.

- “...The Marine Corps has also called attention to equipment and readiness concerns. In August, the Marine Corps grounded nearly one-third of its aviation fleet because of a variety of maintenance problems. Last week, Lieutenant General William Nyland, Deputy Chief of Staff for Programs and Resources, testified before our Procurement subcommittee that aircraft mission capable rates have declined since 1995. Moreover, he stated, "Acceleration of the pace of modernization is absolutely essential to our readiness.”

Overall Readiness

- **Statement of General Henry H. Shelton, USA, Chairman of the Joint Chiefs of Staff:** “Our review of overall force readiness indicates that forward deployed and “first-to-fight” forces remain capable of executing the National Military Strategy. But, as I have consistently testified, the risk associated with the most demanding scenario has increased over the past several years. Specifically, we continue to assess the risk factors associated with execution of the 1st MTW as moderate and for the 2nd MTW as high.

- “This does not mean that U.S. forces would not prevail in either contingency. What it does mean is that it would take us longer to respond to hostilities. In turn, this can mean territory lost and the potential for a longer fight with increased casualties.

- “This risk assessment for the 2-MTW scenario is based on many factors, including both traditional readiness issues voiced by the Services, and joint readiness issues reported by the Commanders in Chief (CINCs).

- “As the HASC well knows, the Services have reported declining readiness indicators in areas such as manning, training, and equipment readiness for several years, although not all Services have experienced problems to the same extent. While the readiness deficiencies are most visible in the later deploying and non-deploying forces, some forward deployed and “first-to-fight” forces -- **though ready** -- have also experienced some of these difficulties. The Services have taken active measures to address these deficiencies and we are now seeing evidence that those efforts, in conjunction with the much-needed funding increases in the FY 1999 and FY 2000 budgets, have arrested the declines in most cases.

- “In addition, two other areas of concern must be recognized. First, while our materiel is ready for combat operations, our long-term ability to sustain that equipment is slipping. One cause is due to the negative effects of a higher than planned tempo of operations on our aging equipment. This high tempo and the associated wear-and-tear require more frequent maintenance and repair, further highlighting the need for recapitalization and modernization of our forces. Moreover, we have not been able to procure enough new equipment to reduce the average age of our force structure. It is also important to note that we believe this higher maintenance tempo has also had a deleterious effect on the hardworking troops attempting to maintain this aging equipment, which directly impacts retention of our quality force.

- “Second, while the focus on current readiness issues is necessary and has produced positive results, those results have come at the expense of our ability to provide resources for maintaining infrastructure. The Services will continue their efforts to balance resources to meet the competing demands of personnel, current readiness, and infrastructure. However, continuing to improve our current readiness posture to

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desired levels while preparing for tomorrow’s challenges will require additional resources. Some of the required resources may be derived from additional Base Realignment and Closure rounds.

- “…Our latest Quarterly Readiness Report submitted to Congress also highlighted the “joint readiness” concerns of the CINCs regarding their ability to synchronize and utilize forces to meet theater and national objectives. These concerns generally reflect capability deficiencies that highlight shortages of specific types or quantities of systems or the need for additional personnel billets, as opposed to traditional readiness issues that are managed by the Services.

- “…The report emphasized eight areas of strategic concern: command, control, communications and computer (C4) deficiencies; intelligence, surveillance and reconnaissance (ISR) deficiencies; mobility shortfalls; logistics/sustainment shortfalls; terrorist and weapons of mass destruction (WMD) challenges; information vulnerabilities; stresses on the force from ongoing contingency operations; and the ability to disengage quickly from ongoing operations to meet timelines for a 2-MTW scenario.

US Army Readiness

- Statement by General Eric K. Shinseki, Chief of Staff, US Army: We…undertook last year to redefine the priorities whereby we fill our organizations with manpower. We began filling our warfighting units first; that is, we increased the percentage of personnel fill in our divisions and combat arms regiments. This priority necessarily entailed accepting risk in other areas, non-divisional units, higher-level headquarters, and the institutional Army. As a result, our early deployers are more ready than they were at this time last year. Predictably, we have felt some pain in those units from which we reassigned soldiers.

- “…The Army is too small to accomplish all of the missions that we are called upon to perform. We realigned our personnel priorities to test that hypothesis. We do not yet have all the requisite data to make a formal request for a change in endstrength, but I expect to receive reports in the near future that will enable us to conduct a manpower analysis. At that point, we will return to you with recommendations about the size of The Army of the future.

- “…The Army is globally engaged, heavily committed to meeting the daily requirements of the National Security Strategy (NSS) and National Military Strategy (NMS). On any given day, more than 140,000 Army personnel are forward stationed or deployed around the world. Soldiers and civilians stationed in the United States perform other critical roles, from keeping warfighting organizations ready for worldwide employment today to building the tools necessary to maintain readiness tomorrow.

- “…Since 1989, the Army has participated in 35 major deployments, many of which are small-scale contingencies in support of our national security interests. In nearly all these deployments, the Army provided the bulk of our nation’s deployed forces, and therefore, contributed to shaping the operational environment in major ways. During the same period, we reduced the size of our Army-Active, National Guard, and Army Reserve-by over 34 percent, a reduction that came in response to the end of the Cold War.

- “…The Army has remained ready at all times to meet the warfighting requirements of the NMS: to fight and win two nearly simultaneous major theater wars (MTWs). We are still able to meet the requirements of the NMS, but there is moderate risk associated with fighting the first MTW and higher levels of risk associated with the second MTW. In this context, risk does not mean that U.S. Forces would not prevail;
rather, it means that achieving our objectives would likely require a larger expenditure of our national 
treasure.

• “…the increased frequency of mission requirements has had detrimental impacts on the force, especially 
in terms of operational tempo, personnel tempo, and turbulence. Current Army endstrength does not 
permit us to fully meet all our manning requirements. Meeting our recruiting, retention, and attrition 
objectives has helped, but not enough to meet all requirements we have. Last year.”

• “… readiness in our active divisions has improved, even though our deployment tempo continues to 
increase. We will man our active divisions and armored cavalry regiments at 100 percent of pay grade 
and skill requirements by the end of this fiscal year. We will similarly man early deploying units to 100 
percent in FY01. We will fill all remaining operational units in the active force in FY02. Other units 
with approved authorizations will follow in FY03. The Army’s manning strategy is to fill all active units 
at 100 percent by grade and skill by the end of FY03.

• “…the U.S. Army Training and Doctrine Command’s (TRADOC) mission priority is accessing new 
personnel, training, and leader development. TRADOC is achieving its mission, but its level of personnel 
fill (both military and civilian) does not fully support mission requirements…The Army Materiel 
Command and other parts of the institutional Army are experiencing similar challenges.

• “…The increased readiness of our divisions does not address the readiness of the whole Army. Increasing 
mission requirements have resulted in increasing employment of our reserve components, particularly our 
National Guard divisions. The best and most recent example is the Texas Army National Guard’s 49th 
Armored Division deployment to Bosnia as the command element of Task Force Eagle. Of course, the 
increasing frequency and duration of deployment presents challenges to our National Guard and Army 
Reserve units, employers, soldiers, and families.

• “…The Army has a plan to provide additional full-time manning to the National Guard. We have 
engaged in a constructive dialogue with the Guard, the Reserve, and employer support groups to address 
concerns ranging from medical care and insurance to family support groups. Two weeks ago, we 
announced the alignment of all National Guard divisions with active duty corps for training oversight and 
mission focus. This missioning initiative builds on the success of division teaming and will push forward 
the full integration of the active and reserve components of The Army.

• “…The Army has fully funded operating tempo (OPTEMPO) requirements in accordance with defense 
planners. But readiness is more than OPTEMPO. We have training shortfalls in institutional training, 
training support, training range modernization, and combat training center modernization. Our depot 
maintenance program received a plus-up to achieve funding at 65 percent of requirement. Base 
operations support, which underpins training readiness, is funded at 91 percent of requirement. Real 
property maintenance is currently funded at 75 percent of requirement, a funding level that will not slow 
or prevent the ongoing deterioration of existing Army facilities.

• “…Old means of measuring our readiness can lead to reporting anomalies. For example, last fall two 
Army Divisions reported a C-4 rating for personnel because parts of their formations were conducting 
operations in the Balkans and were therefore unavailable for a wartime mission. Those divisions were 
clearly trained and ready, as evidenced by the fact that they were conducting military operations at the 
time. We will soon announce new readiness standards that will take into account such contingencies and 
thereby help us better to answer the question-ready for what?

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• “…Over the past year, we have made significant progress in sustaining and recapitalizing the Legacy Force, establishing the Interim Force, and beginning the all-important science and technology (S&T) effort for the Objective Force. We have established the first Interim Brigade Combat Teams at Fort Lewis, Washington. The organizations are in place and are fielding surrogate equipment in lieu of the yet-to-be-selected Interim Armored Vehicle (IAV). That IAV selection process is well under way, and we anticipate making an announcement within the next several weeks. We will then go forward with an Initial Operational Test and Evaluation. The S&T effort is the linchpin of the Transformation. Defense Advanced Research Projects Agency and the Army Science Board have begun this enterprise in earnest and their efforts are showing promise. However, we need greater resources to accelerate their research, enabling us to achieve better scientific and technological results sooner.

US Navy Readiness

• Statement of Admiral Vern Clark, US Navy Chief of Naval Operations: Our forward deployed forces today are ready to respond to all tasking. However, there is increasing concern that this high level of readiness is coming at the cost of our non-deployed forces. It is the readiness of these forces that continues to be of concern as we attempt to maintain the balance between current and future readiness.

• “…we have met our recruiting goal for the past two years. …Retention is at the heart of our efforts to achieve and sustain optimum personnel readiness. One of our greatest challenges is to improve enlisted and officer retention. Our retention effort this year has enabled us to reduce recruiting goals for FY00 and FY01. Although progress has been made in officer and enlisted retention, we are still below the steady state goals required to maintain our force structure.

• “…Some attrition is inevitable; however, the current level is too high.

• “…One-third of our Fleet is deployed on average every day, and our Navy is ensuring that deployed readiness remains high. We know too that non-deployed readiness bears the brunt of supporting our forward deployed presence. We have seen some improvement in the last three years in reducing shortfalls, but the limited availability of support material for our non-deployed units continues to be a significant readiness challenge…additional resources are required to ensure non-deployed readiness is funded at sufficient levels.

• “…our funding reflects the increasing operational costs associated with our aging aircraft (the Navy’s aviation force is now the oldest it has ever been in its history). …The same holds true for aircraft depot maintenance, which ensures that engine and airframe maintenance is sufficient to meet fleet requirements for available aircraft and spare engines. Until we have achieved a modernized force, we will continue to face the challenge of the increasing costs to maintain the existing, aging force. These shortfalls in maintenance, spare parts and support equipment are impacting our training readiness among non-deployed forces, particularly in our aviation community….For ships, as with our aircraft, the reduction of the force structure through the decade of the 90’s, coupled with OPTEMPO of the 90’s, has significantly increased the utilization rate of the existing force. This increase in utilization is accelerating aging and resulting in higher costs of operation.

• “…I am concerned about the inventory levels of Precision Guided Munitions…we are still below the current warfighting requirement. The shortfall of precision munitions is a major risk driver for our forces in a second MTW scenario. With our current inventory, execution of a second MTW will rely more on the
use of non-precision munitions, thereby increasing the risk to our pilots and the potential for collateral damage.

- “...The use of live ordnance, for example, is a vital means of training our forces in combined arms operations. The inability to conduct coordinated live fires exercises from ships and strike aircraft is particularly detrimental, given that our carrier battle groups continue to engage in combat operations soon after arrival in theater. Our ability to train jointly, especially with the Marine Corps, is also being affected by the lack of live fire capability for the Atlantic Fleet Forces. Our troops should get their first experience with live arms before actual combat.

- “...Our Fleet has gotten smaller, and the number of ships we deploy with each battle group has decreased. During this downsizing, demand for deployed battle groups and amphibious ready groups have remained steady at a minimum and in some cases have increased. Nonetheless, a carrier battle group routinely deploys today with fewer surface combatants than 10 years ago. Theater commanders have fewer assets to cover commitments, and must time-share assets among theater commanders, often leaving gaps in coverage. Fewer assets mean more underway time per unit. Increased utilization results in additional wear and tear on our ships and aircraft, requiring more maintenance. It is critical that we begin to fund 100% of our manning, maintenance, ordnance, modernization, recapitalization and training requirements.

- “…Current DoD plans require an 8-10 ship per year build rate to sustain a QDR force. The actual numbers of ships in our plan is not sufficient to meet this need. The steady erosion of the service life of our platforms and equipment and lack of a viable recoup plan will eventually lead to a point where we will be unable to sustain our operational commitments.

- “…The administration's FY 2000 Budget provided for an increase to base pay, restoration of the 50% retirement option, pay table reform, and special pays and bonuses, all of which are having a positive impact. These first steps will be key towards addressing our recruiting and retention challenges.

- “...Improving the quality of our workspaces requires a commitment to both Real Property Maintenance and MILCON, both of which are underfunded.

US Air Force Readiness

- **General Michael E. Ryan, Chief of Staff, U.S. Air Force:** Air Force units are the early responders in major theater war scenarios and in day-to-day operations throughout the globe. In this last year following the victory in Kosovo we maintained our involvement in the full spectrum of operations: keeping the peace in the Balkans, enforcing UN sanctions in Southwest Asia, responding to humanitarian crises, promoting worldwide mil-to-mil contacts, and engaging in counternarcotics support operations. To meet this kind of optempo we implemented our AEF scheduling one year ago. I believe it has been very successful in providing the CINCs trained-to-task forces while putting stability and predictability into the lives of our people.

- “…Air Force readiness has not turned around—at best these efforts have leveled off the decline. …The overall combat readiness of our combat units is down 23% since 1996. Because we must assure the readiness of our engaged forces overseas, we have done it at the expense of our stateside units. The reasons for these readiness declines have their basis in operations tempo, past underfunding of spares, dealing with older and aging systems, and a workforce that is less experienced because of retention declines.
• “...Our operations tempo remains high. Our people are still deploying over 3 times more often with a force 60% its former size. A brief overview outlines the kind of constant activity in which Air Force people are engaged. America’s airmen are supporting Balkan air operations as part of the peacekeeping team providing stability there. In the past two years we’ve flown over 31,000 sorties, providing the top cover for NATO, in peace efforts in this fragile region of the world. In Southwest Asia, on almost a daily basis, our aircrews are fired upon and respond with force to police the no fly zones in northern and southern Iraq. Many are back in the desert for their fourth or fifth rotation, often in austere conditions. When floodwaters devastated the people of Mozambique and South Africa, Air Force people were there to respond. In that international effort, Airmen and aircraft provided relief distribution, aerial assessment of damage and water levels, and critical search and rescue. We also responded to humanitarian needs following floods in Venezuela and Vietnam, and a volcanic eruption in the Philippines.

• “...The level of peacetime spares is key to Air Force support of the ongoing day-to-day demands and surges in crisis and conflict. Additional funding we’ve received from the Administration and Congress in the past two years has been very helpful in putting parts on the shelves. Using these increases, we’ve been able to reduce backorders (the empty bins) in our supply system by half.

• “...The additional spares on the shelves help significantly. There is much left to do. A lack of parts permeates several aspects of readiness: mission capable rates, cannibalization rates, and added work-hours for our people who try to meet mission demands without the equipment that they need. ...The Mission Capable (MC) rates of our aircraft have continued to decline by over 10% since 1991. Mission Capable rates are directly proportional to how much time an aircraft is not available because of not having parts in supply (TNMCS) or because maintenance work needs to be done on the aircraft to make it ready (NMCM).

• “...one of the primary reasons is the average age of our current aircraft fleet. It is now almost 22 years old. The older the aircraft the more difficult and expensive it is to maintain. And even if we execute what is in our current fiscally constrained programs the aircraft age of a USAF aircraft will reach almost 30 years old in the next 15 years. That is why it is so important to continue the force modernization with needed capabilities such as airlift and trainers and revolutionary combat capability such as the F-22.

• “...Recruiting and retention of our enlisted force are key factors in the readiness equation. Although we recruited more airmen in 1999 than 1998, 1999 was the first year that we did not meet our recruiting goal—a goal which we had raised in order to make up for our losses. ...we’ve met our active duty recruiting goal for FY 2000.

• “...During the last several years, the overall retention rate remains a serious concern. We fell below our end strength authorization of 361,000 active duty members by 5,300 people. Enlisted retention levels are below goal for our first term, second term, and career airmen, and are the principal contributors to this shortfall. There are indications that the retention declines are leveling off but we are still below our retention goals. Officer retention is below our desired levels in both pilots and mission support. The negative retention trend exacerbates the high operations tempo problem because it places a greater burden on those who continue to serve.

• “...a shortage of 1200 pilots exists today, the additional bonuses have made an impact. Our projections show that we should be able to cut our pilot shortfall almost in half over the next five years through increased retention and production.
• “...In September of 1998 I stated the following: “Because of funding shortfalls, we have significantly under-invested in our base operating support, real property maintenance, family housing, and military construction. We cannot continue to mortgage this area of our force readiness without significant long-term effects.” That has not changed and remains true today. We are mortgaging the infrastructure aspect of our force readiness to stem the decline in operational readiness. Over the past six years we have averaged an investment in infrastructure at a 250-year replacement rate. Industry standard is 50 years. We have a $4.3 billion real property maintenance backlog. Our houses average 36 years of age. We can only afford to renovate a small percentage of these houses each year out of the almost 110,000 houses we maintain. While there is a need for another round of BRAC, we cannot continue this under-investment or it will have a compounding effect on our near term and long term readiness.

• “...We remain concerned about the continued downturn in near term readiness outlined in this and previous statements. Readiness remains a struggle we must win. But of equal concern is our long-term readiness. That will in large measure be driven by our ability to recapitalize our aging force structure. As we enter this next millennium, prudence dictates that we fund the recapitalization of the force structure for the tasks the Air Force is being asked to perform in the 21st century. As I said in 1998 testimony, “We need substantial and sustained funding” to continue to provide the full spectrum aerospace power our nation expects.” That has not changed.

US Marine Corps Readiness

• Statement of General James L. Jones, United States Marine Corps, Commandant of the Marine Corps: Today’s Marine Corps is healthy and remains central to the Nation’s efforts to promote and protect its many interests. There are currently 172,500 Marines on active duty. Of that total, over 114,000 are in the operating forces and nearly 30,500 are forward deployed, forward based, forward stationed, or deployed for training around the world. Key to our Total Force are the 39,000 men and women of the Marine Corps Reserve...This past year we reestablished the middle tier of our expeditionary warfighting capability, the Marine Expeditionary Brigades, to augment the smaller Marine Expeditionary Unit and to enhance the larger Marine Expeditionary Force.

• “...Though the last Quadrennial Defense Review led to tangible improvements, it also resulted in a reduction in our end strength that essentially removed the warfighting “shock absorber” of the Marine Corps. As a result there remains little flexibility in meeting the personnel demands inherent in a robust operational tempo. The dramatic increases in operational requirements coupled with topline constraints over the last several years, have mandated a very reduced rate of modernization. We are, in essence, continuing to maintain our current status at the expense of future readiness. We are at a point where failure to rectify modernization shortfalls can no longer be ignored.

• “...For the last eight years of the 1990s, the Marine Corps’ ground equipment funding was well below the “steady state” requirement of $1.2 billion...this extended period of underfunding has resulted in a recovery rate requirement of $1.8 billion per year that we do not reach in the Future Year Defense Plan. The longer recovery is deferred, the longer we must maintain aging legacy systems and confront the risks associated with them.

• “...While we have a viable, balanced plan to field new and improved aviation platforms (MV-22, JSF, KC-130J, AH-1Z/UH-1Y), the pace at which we will do so is critical. We are currently funded at approximately $0.5 billion below our historical steady state funding for aircraft procurement. Similar to the under financing of our ground equipment, this has left us with a recovery level of $2.4 billion.
Funding at that level would both accelerate our pace of modernization by moving forward our full fielding of these systems and shorten the period of increased expense for sustainment of our legacy airframes.

- “It is readily apparent that we are fast running out of short-term fixes for budget shortfalls. One-time increases in defense spending are not the solution. A sustained period of increased funding is required in order to ensure the future readiness of your Corps.

- “...The primary equipment and weapons systems in our ground combat element are aging and reaching their programmed service life all at the same time...We have taken maximum advantage of Service Life Extension Programs, which enable us to marginally improve our legacy systems but cannot fulfill our modernization needs. Our reliance on aging equipment negatively impacts our capabilities in many ways: the buildup of combat power ashore is slowed and more predictable, our ability to conduct in-stride breaching of mines and obstacles is limited, and our single artillery piece lacks sufficient range to provide essential fire support to maneuver elements.

- “...Additionally, the countless hours of maintenance on our aging ground systems directly impacts the quality of life of our Marines. The replacement of the 17,000-vehicle fleet of HMMWVs with the HMMWV A-2 is a crucial step in our efforts to modernize our ground mobility. Acquisition of major replacement systems such as the Advanced Amphibious Assault Vehicle (AAAV), the High Mobility Artillery Rocket System (HIMARS), and the lightweight 155mm howitzer is only part of the solution; work still remains to be done to identify successors for much of our aging equipment to include individual and crew-served weapons such as the replacement of nearly 1,800 squad automatic weapons in our infantry battalions this year. Lethality and the ability to maneuver our forces remain cornerstone requirements for the ground combat element.

- “…Many of our aircraft are approaching block obsolescence. In fact, the majority of our primary rotary-wing airframes are over twenty-five years old. Figure 4 reveals that the majority of our key aviation equipment is older than the Marines who use it. When our first KC-130F rolled off the assembly line, President Kennedy was beginning his first year as the Commander-in-Chief, thus underscoring the importance of the KC-130J. Similarly our CH-46E, an off the shelf platform, averages over thirty years old 34 some of our younger pilots are flying the exact same aircraft that their fathers flew. While we are now receiving the MV-22, their rate of production and delivery is neither economical nor efficient, and thus prolongs the retirement of the CH-46E. The Short Take Off Vertical Landing Joint Strike Fighter, the replacement for our F/A-18C/D Hornets and AV-8B Harriers, is scheduled to begin delivery in 2008 with an initial operational capability in 2010 34 we must hold the line on this.

- “…While the recent grounding of four different types of aircraft was primarily a flight safety issue, increasing maintenance challenges do influence our level of readiness. Since 1995, the direct maintenance man-hours per hour of flight increased by 33% and there has been a 58% increase in our “cannibalization” rate. During the same time period the full mission capable rate, though still within acceptable parameters, has decreased by 9.4% across the force. These statistics represent data for all Marine Corps aircraft and show a declining level of readiness.

- “…the equipment used in our combat service support element is also aging similar to that of the other elements of the Marine Air Ground Task Force. Despite the importance of combat service support to the flexibility and responsiveness of our forces, we continue to rely on aged vehicles, trucks, and materiel handling equipment that should be replaced. Acquisition of the Medium Tactical Vehicle Replacement (MTVR), a cost-effective replacement for our existing tactical trucks, and the Hercules M88A-2 Recovery
Vehicle, a successor to our tank retriever, are crucial steps in our efforts to modernize. We recognize that new vehicles and equipment will not materially improve our combat service capabilities without attendant improvements in doctrine, organization, and processes. Consequently, we have developed a pioneering Integrated Logistics Concept to underwrite our combat service support capability.

• “…While making progress in the replacement of family units, we continue to have a deficit of approximately 10,000 units. Our Backlog of Maintenance and Repair has been arrested, but it still amounts to over $600 million. Although this is a reduction from last October, it is not close to our intended goal of $100 million by Fiscal Year 2010.

• As you know, restoration of our deteriorating infrastructure is not limited to reducing our Backlog of Maintenance and Repair, but includes Military Construction (MILCON) as well. Budget limitations force us to make hard choices that result in funding only our most critical construction requirements. Although we have reduced our MILCON replacement cycle to approximately 100 years, it is still twice the industry standard.

• “…In the very near future, our Marines will benefit from the revolutionary MV-22 Osprey tilt-rotor aircraft and the Advanced Amphibious Assault Vehicle (AAAV). Along with the Landing Craft, Air Cushion (LCAC), the MV-22 and AAAV will allow the realization of the capabilities required for future Marine Air Ground Task Force operations. We are also prepared to further the capabilities of our ground combat element by fielding a new generation of modern ground equipment to include the High Mobility Artillery Rocket System and the lightweight 155mm howitzer. With your support, our aviation combat element will receive the Short Take Off Vertical Landing version of the Joint Strike Fighter 3 a truly joint weapons system that can be operated from expeditionary airfields, amphibious ships, and aircraft carriers. Furthermore, we are ready to improve our combat service support element with systems like the Medium Tactical Vehicle Replacement and Hercules Recovery Vehicle.

• “Fully exploiting the tremendous potential of equipment modernization and improvements to infrastructure will hinge, in part, on the achievement of a proper level of amphibious lift. Our amphibious lift requirement is well defined. The Department of the Navy Lift Study and Mobility Requirements Studies recognize a 3.0 Marine Expeditionary Brigade (MEB) equivalent amphibious lift capability as necessary to allow us to satisfy all forward presence requirements while maintaining the flexibility to deal with the unexpected. The 2001-2006 Defense Planning Guidance establishes a fiscally constrained amphibious force to support 2.5 MEB equivalents, equating to 12 Amphibious Ready Groups with a total of 36 ships (twelve big deck LHDs and LHAs, twelve LSD 41/49s, and soon with your help, twelve LPD-17s).

• “…Our ascendancy to superpower status 34 militarily, culturally, technologically, diplomatically, and economically 34 during the 20th century is due, in no small part, to the valiant accomplishments of those who wore the Nation’s uniforms during the emergence of our national identity. ..In essence, a sustained investment in national security is an investment to insure our way of life. It directly contributes to stability, the spread of democracy, growth of the world economy, and achievement of our multiple national security objectives. It is also, fundamentally, an insurance investment that must be made today to be effective tomorrow. Prudent people invest in insurance to offset the uncertainty of the future; long before a need arises that requires the insurer to indemnify. Similarly, we must not “under insure” our national security. Future contingencies will likely not permit time to overcome the consequences of miscalculation.

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• (There is) an approximately $1.5 billion requirement for unfunded priorities for your Marine Corps. These unfunded priorities addressed critical elements across the Corps: ground equipment, aviation modernization, and infrastructure support. The Congress was instrumental in financing some of these shortfalls. While our future projections clearly indicate improving trends, my concern remains the pace at which we modernize. In assessing the list of unfunded priorities that I provided to the Congress this past spring, I believe that $1.5 billion still accurately portrays our highest priority unfunded requirements.

In short, the Chiefs of the US military services have all made it clear that the US has serious near, mid, and long-term readiness problems that need to be addressed. Many would be most serious if the US faced two major regional contingencies, but some would affect all serious US operations in the Gulf. While the US may remain the “world’s only super power,” it clearly is not paying enough to keep this status, and is scarcely as “super” as it was at the time of the Gulf War.

The Problem of Contingency Funding

This is a point that is made all too clear in other ways by the General Accounting Office. The Department of Defense estimated that that cost of its ongoing contingency operations would be some $4.7 billion in FY2000, and that the US interventions in the Gulf and Balkans would account for 99% of the total. The costs for the Gulf (Southwest Asia) included $138.0 million in incremental personnel costs and $913.3 in operation and maintenance. The costs for the Balkans included $406.1 million in incremental personnel costs and $3222.3 in operation and maintenance. Another $25 million in operation and maintenance costs was budgeted for East Timor. The GAO found the incremental costs for all Gulf operations from 1992 through March 2000, totaled $7.44 billion and the cost of the Balkans totaled $13.82 billion.  

The Congress has voted adequate supplementals to cover the main costs of these contingency operations since FY2000. During the previous seven years, large amounts of these costs had to come out of training and readiness funds, and for legalistic reasons the services are not allowed to recoup most costs on areas like infrastructure. The expenditures for rehearsals and dedicated mission training for actual contingency operations are also counted as if they were general force-wide training expenditures. More important, no allowance is made in the incremental contingency
costs for any aspect of procurement, although they incur massive amounts of wear and shorten equipment life. 

**The Problem of Total Defense Spending**

This analysis makes no attempt to analyze the defense plans advanced by either party. It concentrates solely on the adequacy of the existing defense program. It is clear, however, that much will have to be done over the next Administration to fix a defense structure that is badly underfunded.

To put the required costs or force cuts in perspective, the CBO estimates in Table Four that the US should be spending $327 billion a year on the Department of Defense portion of defense activities to properly fund the current force structure – if the US, as the world’s only superpower, does not become involved in any major new contingency for the next five years. The US currently budgets $292.3 billion in FY2001, $289.6 billion in FY2002, $289.2 billion in FY2003, $289.1 billion in FY2004, and $289.7 billion in FY2005. This is a total of $1,450.0 billion in constant FY2001 dollars. The CBO estimate would mean that the US actually needs $1,635.0 billion. The shortfall for Department of Defense portion of defense activities over the entire future year period is close to $200 billion, or some $40 billion a year.

Put differently, the CBO estimates that that DoD would need to cut its current forces by roughly an additional 25 percent in order to reduce its total sustaining budget to $290 billion (the defense appropriation for 2000, excluding supplemental funding). That kind of reduction would mean cutting more than two more divisions in the active Army, three more carrier battle groups in the Navy, and the equivalent of more than three active fighter wings in the Air Force.

Such cuts are smaller than the reductions in forces that have already occurred since the end of the Gulf War... Nevertheless, they would have a major effect on the capability of U.S. forces because the cuts would be taken from today’s smaller military. It is fairly clear from such estimates that the US is not maintaining its existing forces at anything like the overall level of
capability they had at the time of the Gulf War, and that the US does not have the capability to fight two near-simultaneous major regional contingencies.\textsuperscript{14}

**US Power Projection Capabilities and Strategic Warning**

Capabilities are always more important than strategy and doctrine. The latter are the almost inevitable causalities of history. The former can actually fight. Nevertheless, strategy and doctrine have their place. While the Quadrennial Defense Review that was conducted in 1997 did not describe US warfighting strategy in the Gulf in detail, it did discuss overall US strategy in major theater wars in some depth, and it is clear that the US remains formally committed to both maintaining major power projection forces and to being able to fight two near-simultaneous theater conflicts:\textsuperscript{15}

At the high end of the crisis continuum is fighting and winning major theater wars. This mission is the most stressing requirement for the U.S. military. In order to protect American interests around the globe, U.S. forces must continue to be able to overmatch the military power of regional states with interests hostile to our own. Such states are often capable of fielding sizable military forces that can cause serious imbalances in military power within regions important to the United States. Allies and friendly states often find it difficult to match the power of a potentially aggressive neighbor. To deter aggression, prevent coercion of allied or friendly governments, and defeat aggression should it occur, we must prepare U.S. forces to confront this scale of threat far from home, in concert with our allies and friends, but unilaterally if necessary. Toward this end, we must have jointly trained and interoperable forces that can deploy quickly across great distances to supplement forward stationed and deployed U.S. forces, to assist a threatened nation, rapidly stop an enemy invasion, and defeat an aggressor.

As a global power with worldwide interests, it is imperative that the United States now and for the foreseeable future be able to deter and defeat large-scale, cross-border aggression in two distant theaters in overlapping time frames, preferably in concert with regional allies. Maintaining this core capability is central to credibly deterring opportunism - that is, to avoiding a situation in which an aggressor in one region might be tempted to take advantage when U.S. forces are heavily committed elsewhere - and to ensuring that the United States has sufficient military capabilities to deter or defeat aggression by an adversary that is larger, or under circumstances that are more difficult, than expected. This is particularly important in a highly dynamic and uncertain security environment. We can never know with certainty when or where the next major theater war will occur, who our next adversary will be, how an enemy will fight, who will join us in a coalition, or precisely what demands will be placed on U.S. forces. Indeed, history has repeatedly shown that we are often unable to predict such matters. A force sized and equipped for deterring and defeating aggression in more than one theater ensures the United States will maintain the flexibility to cope with the unpredictable and unexpected. Such a capability is the \textit{sine qua non} of a superpower and is essential to the credibility of our overall national security strategy. It also supports our continued engagement in shaping the international environment to reduce the chances that such threats will develop in the first place.
If the United States were to forego its ability to defeat aggression in more than one theater at a time, our standing as a global power, as the security partner of choice, and as the leader of the international community would be called into question. Indeed, some allies would undoubtedly read a one-war capability as a signal that the United States, if heavily engaged elsewhere, would no longer be able to help defend their interests. Such a capability could also inhibit the United States from responding to a crisis promptly enough, or even at all, for fear of committing the bulk of our forces and making ourselves vulnerable in other regions. This fact is also unlikely to escape the attention of potential adversaries. A one-theater war capacity would risk undermining both deterrence and the credibility of U.S. security commitments in key regions of the world. This, in turn, could cause allies and friends to adopt more divergent defense policies and postures, thereby weakening the web of alliances and coalitions on which we rely to protect our interests abroad.

Obviously, in this dynamic, uncertain security environment, the United States must continually reassess the environment, our strategy, and the associated military requirements. If the security environment were to change dramatically and threats of large-scale aggression were to grow or diminish significantly, it would be both prudent and appropriate for the United States to review and reappraise its warfighting requirements.

At least three particularly challenging requirements associated with fighting and winning major theater wars merit special attention. The first is being able to rapidly defeat initial enemy advances short of their objectives in two theaters in close succession, one followed almost immediately by another. Maintaining this capability is absolutely critical to the United States’ ability to seize the initiative in both theaters and to minimize the amount of territory we and our allies must regain from the enemies. Failure to halt an enemy invasion rapidly can make the subsequent campaign to evict enemy forces from captured territory much more difficult, lengthy, and costly. It could also weaken coalition support, undermine U.S. credibility, and increase the risk of conflict elsewhere.

Another especially challenging requirement is to be able to achieve our war aims against an adversary who uses or threatens to use NBC weapons, information warfare, terrorism, or other asymmetric means against us. Because of the prevalence of such capabilities in the hands of potential future adversaries and the likelihood that such adversaries would resort to such means in the face of overwhelming U.S. conventional dominance, U.S. forces must plan and prepare to fight and win major theater wars under such conditions.

In particular, the threat or use of chemical and biological weapons (CBW) is a likely condition of future warfare, including in the early stages of war to disrupt U.S. operations and logistics. These weapons may be delivered by ballistic missiles, cruise missiles, aircraft, special operations forces, or other means. To meet this challenge, as well as the possibility that CBW might also be used in some smaller-scale contingencies, U.S. forces must be properly trained and equipped to operate effectively and decisively in the face of CBW attacks. This requires that the U.S. military continue to improve its capabilities to locate and destroy such CBW, preferably before they can be used, and defend against and manage the consequences of CBW if they are used. But capability enhancements alone are not enough. Equally important will be adapting U.S. doctrine, operational concepts, training, and exercises to take full account of the threat posed by CBW as well as other likely asymmetric threats. Moreover, given that the United States will most likely conduct future operations in coalition with others, we must also encourage our friends and allies to train and equip their forces for effective operations in CBW environments.
Finally, as noted above, U.S. forces must also be able to transition to fighting major theater wars from a posture of global engagement - that is, from substantial levels of peacetime engagement overseas as well as multiple concurrent smaller-scale contingency operations. In the event of one major theater war, the United States would need to be extremely selective in making any additional commitments to either engagement activities or smaller-scale contingency operations. We would likely also choose to begin disengaging from those activities and operations not deemed to involve vital U.S. interests in order to better posture our forces to deter the possible outbreak of a second war. In the event of two such conflicts, U.S. forces would be withdrawn from peacetime engagement activities and smaller-scale contingency operations as quickly as possible to be readied for war.

Because both the nature of the threats we face and the way in which we will choose to fight future conflicts are changing, the forces and capabilities required to uphold this two-theater element of the strategy will differ from the "Major Regional Conflict building blocks" developed in the 1993 Bottom-Up Review. Specifically, the accelerating incorporation of new technologies and operational concepts into the force calls for a reexamination of the forces and capabilities required for fighting and winning major theater wars. As U.S. and enemy forces change in effectiveness, these force requirements will change.

The US does not provide a large amount of unclassified detail on the power projection capabilities it plans to provide to implement this strategy in the Gulf. However, the war in Kosovo in 1999, showed both US strength and that the ongoing cuts and underfunding in the total size of US forces inevitably limit the power the US can project overseas, which is the critical factor determining US war-fighting capabilities in any serious contingency in the Gulf.

The 1997 Quadrennial Defense Review set goals did calling for six Army land-based brigade sets of prepositioned equipment (three in Europe, one in Korea, two in Southwest Asia) plus a Marine brigade set in Norway, and significant stocks of prepositioned equipment afloat - three Marine Corps Maritime Prepositioning Ship squadrons, one heavy brigade set of Army equipment, and selected munitions for the Air Force. Consideration is being given to creating a third heavy brigade set for Southwest Asia. It called for airlift capability of approximately 50 million ton-miles per day, and a surge sealift capacity of 10 million square feet, made up of fast sealift ships, large medium-speed roll-on/roll-off (LMSR) vessels, and the Ready Reserve Force. It called for an afloat prepositioned cargo capacity of four million square feet for the Army and Marine Corps and a complementary land-based prepositioning program.
Present US expeditionary capabilities now seem to be limited to the deployment of about one corps of ground troops over a period no shorter than 75 days, plus several additional light US Army divisions and up to two Marine Expeditionary Forces. The US also can only deploy and support about 50-66% of its 13 USAF fighter wings, and 50-66% of its US Navy and Marine Corps tactical air power, in sustained combat.

Put differently, the US can only deploy about 45% to 60% of the total deployable land forces to any one contingency that the US used to create a two Corps force in Desert Storm, and only about 60-70% of the total air power. It is also important to note in this context that the US often employed 60% or more of its world-wide assets of special purpose aircraft and logistic equipment during Desert Storm, and these total assets have since suffered from significant force cuts. This became all too clear in Kosovo, where the US ran into shortfalls in key systems like electronic warfare aircraft and precision guided munitions.

Further, US contingency capabilities depend heavily on strategic warning. The US has many rapid deployment capabilities that can deal with low to mid-intensity conflicts. It takes time, however, to deploy and sustain a full corps of expeditionary forces and the massive levels of air power the US would need for a high-intensity or major regional conflict in the Gulf.

The US can deploy its air and missile power relatively quickly but it would need one to two months of strategic warning, and take action on that warning to use its airlift and sealift to fully deploy a corps-sized force in Kuwait if it sought to act before Iraq could attack. It would take additional months to redeploy US forces if US power projection capabilities where already involved in a second contingency. Further, the US would begin to encounter major problems from a lack of long lead-spares if it suffered serious attrition in even one contingency and does not have the stocks of munitions and supplies to support two near simultaneous intense conflicts or the industrial base to rapidly replenish its existing stocks. The US would face particular problems in
producing the advanced and precision-guided munitions necessary to exploit its technical edge and minimize US and allied losses.

In short, key aspects of US expeditionary capabilities for any contingency involving a major land war in the Gulf depend heavily on strategic warning as well as prepositioning and support from US regional allies. Moreover, the constraints on US forces and readiness have effectively denied the US the ability to fight more than one contingency at a time. Cuts in spending, modernization, forces, and readiness also mean, however, that “near simultaneous” is slowly slipping from a real-world gap of about six months between US ability to win in one contingency and fully deploy to another contingency, to a gap of roughly nine to 15 months depending on the seriousness of each contingency. This growing inability to implement a strategy of being able to fight “two near simultaneous regional contingencies” scarcely means US military power is crippled, but it does mean that any analysis of the evolving US contingency capabilities in the Gulf must increasingly take into account the global limits on US military power, and the risk that US forces needed in the Gulf may be engaged in other contingencies.

Regardless of the strategy the US declares, any US military planners, including senior planners in the Joint Staff and the military staffs of the US services, believe that these cuts have effectively reduced the to one major contingency strategy. They feel that the US is already in the process of adopting a single MRC, or “win-hold-win” strategy, in which the US would only be able to fight one major contingency at a time, and could do little more than conduct air and missile attacks in second -- although the US has improved its ability to use air and missile power to strike at any aggressor during the “hold” phase of a second contingency.

The fact that the US is now forced into a “win-hold-win” or single major contingency strategy must also be kept in careful perspective. It can be argued that sizing US forces for two near simultaneous major regional contingencies is planning for a worst-case scenario, and that there is little probability that the US will have to fight major conflict in the Gulf and Korea at the same time. It can also be argued that even if two crises do occur at the same time, the US could...
focus on the more serious threat and adopt an aggressive variant of a “win-hold-win” strategy in dealing with the less serious case. Even under worst-case conditions, the US should be able to bring powerful air and missile assets to bear in a Gulf contingency and to begin offensive attacks on enemy strategic and tactical targets during the “hold” phase of such a conflict.

The US may not always be able to “hold” in a worst-case contingency like an all-out Iraqi attack on northern Kuwait, or an Iranian grab of some strategic island or location in the Gulf. However, Iran and Iraq have no prospect of being able to attack with impunity or to see the US paralyzed or forced into a purely defensive role because of an involvement in a contingency or contingencies outside the Gulf region.

**Modifying the Phases of Conflict**

There have been other changes in US strategy and capabilities which improve US war fighting capabilities in the Gulf. One of the most important changes US planners made in the early 1990s was to modify the objectives assigned to each phase of a war in the Gulf. They realize that future aggressors may not repeat Iraq’s decision to stop at a given border and may advance much more quickly in an effort to create decisive “facts on the ground” before the US can react. As a result, the US is placing far more emphasis on decisive action during the “halt phase.”

Rather than simply trying to check the enemy’s advance during the “halt phase,” US planners now envisage a campaign of aggressive engagement aimed at seriously degrading enemy military capabilities at the start of any enemy attack, and reducing the requirement for US forces during the build-up phase. This emphasis on decisive engagement has increased the US emphasis on early offensive air and missile strikes, including both strategic and tactical attacks on a potential enemy, on forward presence, and on rapidly deployable offensive strike forces.

This change in strategy and in the planned phases of US military action in a Gulf War allows the US to exploit one of the key lessons of the Gulf War: a strategic and tactical air and missile offensive could begin immediately, without waiting to win air superiority or to deploy the
land forces necessary to commence an offensive AirLand battle. This change allows the US to exploit the steadily improving air and missile technology it demonstrated in Kosovo, it allows the US to quickly exploit advantages like “stealth,” “24 hour” air operations, greatly improved near real-time targeting, precision stand-off attack capability, and greatly improved anti-armor and hard-point attack capabilities. It reduces the risk of having to deal with fact accompli and having to liberate friendly territory, and ensures that an aggressor will come under immediate strategic pressure in the form of attacks on homeland targets of critical value to an attacking nation’s leadership. This exploitation of air and missile power is an essential complement and preface to the improvements that the US is making in its capabilities for the AirLand battle.

**Other Improvements in US Conventional Capabilities Since the Gulf War**

In spite of the cuts in the total size of US forces, the US has been able to react to many of the detailed lessons of the Gulf War, to make significant improvements in organization and training, and to improve “jointness” and its capability to conduct highly sophisticated combined operations.

The US has already demonstrated some of the benefits of these force improvements in Bosnia, Desert Fox, and Kosovo. While the US did continue to experience serious problems in the coordination of National Technical Means within its intelligence community, it achieved a substantially higher level of accuracy in precision air strikes. Its performance reflected training by simulating missions before their execution, better air defense weapons suppression planning and strikes, better resources in terms of laser illuminators and advanced attack avionics, more effective use of daytime strikes, better reconnaissance and targeting and the use of advanced UAVs, substantial improvements in the C4I systems and organization used to task strikes, use of improved Tomahawk missiles and some types of precision ordnance, and improved battle damage assessment.17

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The US also is scarcely the only power which has encountered resource and modernization problems. As the last chapter has shown, it is in the fortunate position that its major potential opponents in the Gulf have faced far more serious problems. Iran and Iraq now have much smaller total conventional forces than the US used in sizing the nominal threat for a major regional contingency in the Bottom Up Review and Quadrennial Defense Review. It seems likely that the US will retain the ability to intervene decisively in the Gulf against any current conventional threat posed by Iran or Iraq.

**Uncertainties in Future US Power Projection Capabilities**

These contradictory trends, and the fact so few unclassified details are available on the details of US contingency capabilities in the Gulf, make it extremely difficult to draw a balance between the impact of the cuts in the total size of US forces and long-term readiness and the improvements the US has made in the ability of its remaining forces to fight in the Gulf area. It is clear, however, that US capabilities in the Gulf will be shaped largely by how the US deals with the key military uncertainties that affect the size, readiness, and modernization of the forces it relies on in deploying to Southwest Asia.

The most serious uncertainties affect the overall funding and pace of the procurement of the modern aircraft, land weapons, ships, and advanced munitions the US needs to maintain a decisive edge over all regional opponents, and surge massive amounts of force into the Gulf with minimal time and warning. There are, however, many more specific areas of uncertainty. These areas include.¹⁸
US Army force strength: The Army faces serious funding constraints, however, that it may force it to hollow out some aspects of its planned 10 division force structure, with an inevitable impact on readiness and power projection capabilities. Further, the Army could be forced into further cuts in future years.

US Army readiness for power projection: The US Army now plans its power projection capabilities around its Contingency Corps (XVIII Airborne Corps) which consists primarily of three light divisions (the 82nd Airborne Division, 101st Air Assault Division, and 10th Mountain Division) and one heavy division (the 24 Mechanized Infantry Division). The US Army has a goal of being able to deploy the entire four division corps to the Gulf in 75 days by 1998, and one light and two heavy divisions in 30 days. The Army also has a Reinforcing Corps (III Corps), which consists of five divisions. Three of these divisions, however, are active divisions that require Army Reserve and National Guard Round outs, and two are reserve component divisions. The Army also has some separate brigades and additional ranger and special forces units.

US Army heavy divisions: The US Army is seeking to create new, lighter, and more mobile heavy forces as a result of the lessons it learned in Kosovo. Implementation of redesigned heavy Army divisions has resulted in the following changes: one less combat company per combat battalion, a dedicated reconnaissance troop assigned to each brigade, a shift of organic combat service support assets from combat battalions to forward support battalions, and an increased emphasis on command, control, and information support structures. The Total Army Analysis for FY 2003 and FY 2005 identified adjustments to the support needed to sustain Army combat forces across the range of military operations. As a result, the Army is taking steps to convert lower-priority support and combat units to higher-priority support units. Pending the completion of the Total Army Analysis FY 2007, the Army will continue to work with its reserve components (including representatives of the Adjutants General) to refine options for reconfiguring appropriate reserve units so that they mirror active units and maintain their relevancy to national needs. At present, however, Contingency Corps consists primarily of light forces, is a relatively limited land component to fight a high-intensity armored battle in a major regional conflict, and the capability of the Reinforcing Corps to fight such an armored conflict without more than three to five months of prior preparation and deployment is uncertain.

The Army also faces problems in supporting these forces. It is modernizing much of its equipment, but at a far slower rate than was planned in 1990, and many important programs have been slipped or canceled - including the armored gun system. The US Army has also had to cut back on stock levels and munitions modernization plans since the early 1990s. These cuts mean a significant cut in the technical superiority or “edge” the US Army can deploy in future regional contingencies and they have been accompanied by significant cuts in the longer term aspects of readiness. It is unclear that the US Army is fully funded to modernize and improve its ability to rapidly deploy units from casernes to sea and air ports, or to conduct the kind of advanced large-scale air-missile and AirLand training needed to be fully ready for a contingency in the Gulf.

Equally important, the Army has been forced to rely on National Guard and Army Reserve combat support and service support units for deployment of many of its contingency forces although these can present serious political problems in calling up the necessary reserves, and many proved to have C-4 or C-5 readiness during Desert Shield.

Army light divisions: These developments are occurring at a time when the US Army is becoming steadily more dependent on airlift to rapidly move firepower. The cancellation of the US Army Armored Gun System (AGS) -- which was to replace the obsolete M-551 Sheridan in the 82nd Airborne Division -- has forced the Army to consider rapid air deployment of the Bradley as a substitute. While the C-17 can carry one M-1A2 Abrams, it requires at least a 2,800 foot hard runway to do so and runway length increases with temperature and altitude. The Bradley weighs less than half the weight of the M-1A2, and a C-17...
can carry up to three Bradleys if equipment is taken off them to reduce their weight. The question is whether the TOW missiles and 25 mm chain gun on the Bradley can substitute for the 105 mm gun on the AGS. US light divisions may lack the tank-killing power and mobility they need. The Army’s plans also call for the immediate creation of new, more responsive brigades that will initially use surrogate equipment and loaned vehicles. Off-the-shelf medium armored vehicles will then be procured to extend this capability in the interim until technology allows for the fielding of a new family of combat vehicles. The long-term goal is to erase the distinction between traditional heavy and light forces, thereby creating a standard force (termed the Objective Force) for the entire Army that is both more responsive and more capable. The question is how soon these reforms will be implemented and how effective they will prove to be.

- **US Carrier strength:** US commitments in other areas and declines in readiness and carrier strength have made it progressively hard to deploy a carrier in the Gulf, and two carriers in the Gulf and Mediterranean/Red Sea areas. The US Navy has increasing been forced to leave gaps in carrier coverage, although the US has compensated in the past by deploying USAF fighters to Bahrain and Jordan. Until late 1998, the Navy deployed a CVBG and an ARG about 75 and 80 percent of the time, respectively, in the Mediterranean; about 75 and 50 percent of the time, respectively, in the Indian Ocean; and on a nearly continuous basis in the western Pacific. Since 1999, a CVBG has been deployed in the Southwest Asian region on a continuous basis to support contingency operations. Maintaining a continuous presence in that theater has been accomplished by adjusting CVBG deployments in other regions. Plans call for a CVBG to be deployed continuously in Southwest Asia through FY 2001, thus obviating the need for the Air Force to provide AEFs to fill any gaps in CVBG presence.

- **US Marine Corps capabilities for mid to high-intensity conflict:** Marine units are employed as part of Marine Air–Ground Task Forces (MAGTFs) consisting of four elements: command, ground combat, aviation combat, and combat service support. A Marine expeditionary force (MEF) is the largest MAGTF organized for combat, comprising one or more divisions, aircraft wings, and force service support groups. The Marine Corps maintains three MEFs in the active force, headquartered in California (I MEF), North Carolina (II MEF), and Okinawa (III MEF). Embarked on amphibious ships, MEU(SOC)s (consisting of about 2,000 Marines each) are task-organized and forward deployed continuously in or near regions of vital U.S. interest. The Marine Corps found during the Gulf War that it lacked the heavy armor for high-intensity regional conflicts, lacked sufficient artillery firepower and mobility, needed improved air support capability, needed improved tactical airlift, and needed at least one additional prepositioning ship per MEB. The Marine Corps has obtained some additional M-1A1 tanks from the Army and has upgraded the avionics and precision strike capabilities of its AV-8Bs and F/A-18s. It has not, however, acquired the number of tanks it originally sought, has seen plans to modernize its AAVs slip by half a decade or more, and must rely on towed 155 mm artillery that must be supplemented by the deployment of supporting US Army units in mid to high-intensity combat. It continues to experience major delays in modernizing its tactical lift and will not acquire the added prepositioning ship for each MEB it once sought. Equally important, the Gulf War demonstrated that the USMC lacked the sustainment capability for intensive land warfare. At present, the Marine Corps can only sustain about 1.5 to 2 of its three MEFs in intense combat for more than 30-45 days.

- **US amphibious lift capabilities:** The downsizing of the US Navy and the potential block obsolescence of some aspects of US amphibious lift create significant potential problems in terms of maintaining forward deployed carrier task forces and adequate amphibious assault capabilities. These problems have been increased by the long delay in modernizing Marine Corps tactical airlift, and the need for improved vertical lift capability to counter the improved mine warfare capabilities in areas like the Gulf. These problems could significantly affect US capabilities in a high-intensity regional conflict in the Gulf, and USN studies project a potential problem in amphibious lift retirements and modernization after 2005.
Amphibious forces are typically employed in three-ship ARGs. A vital component of the maritime force structure, ARGs provide the ability to project forces into littoral regions rapidly from points over the horizon, utilizing both air and surface platforms. During Operation Allied Force, Marines from two ARG/MEUs demonstrated the flexibility that amphibious forces bring to bear in contingencies by simultaneously conducting attack missions in support of the air campaign while providing humanitarian assistance and protection for displaced Kosovars. The FY 2001–2005 program sustains a 12-ARG force capable of supporting three forward-deployed Marine expeditionary units in peacetime and lifting the equivalent of 2.5 Marine expeditionary brigades (MEBs) in wartime. By FY 2005, the amphibious force will consist of 38 active and two reserve ships, including six new San Antonio-class LPD-17 amphibious transport dock ships.

- **US mine warfare capabilities**: The funding of US mine warfare capabilities remains uncertain. The US Navy is currently focusing on shallow water assault breaching, distributed explosive technology, and remote minehunting systems, and has accelerated the airborne mine neutralization system. It is continuing to fund upgrades to mechanical sweep systems, unmanned underwater vehicles, remote mine hunting systems and the Quickstrike mine. The Navy, however, has sought at least $40 million more per year in the past for mine warfare to speed up the deployment of mine countermeasure capabilities. It is seeking more funds for mine countermeasure ships, airborne mine hunting helicopters, divers for mine clearing, route surveys of ocean lanes and a mine warfare data base on underwater obstacles, new C4I/IBM systems for mine warfare, mine tracking systems, and deployment of the Remote Minehunting System and Magic Lantern laser mine detection system.

- **US bomber forces**: Congressional efforts to procure more B-2s have delayed the upgrading of the US bomber force and have left questions about the ability of the B-2 and B-1B to meet their goals for delivery of smart weapons like the Sensor Fused Weapon with the lethality projected in US plans. In a major theater war, bombers need to deliver large quantities of unguided general-purpose bombs and cluster munitions against area targets, such as ground units, airfields, and rail yards. Bomber forces will also play a key role in delivering precision-guided munitions (including cruise missiles) against point targets, such as command and control facilities and air defense sites. The ability of these forces to have an immediate impact on a conflict by slowing the advance of enemy forces, suppressing enemy air defenses, and inflicting massive damage on an enemy’s strategic infrastructure can only expand as new munitions are deployed. More advanced weapons now entering the inventory or in development will enable bomber forces to bring a wider range of targets under attack, while taking advantage of the bombers’ large payloads. The rapid-response, long-range capability provided by bombers could make them the first major U.S. weapon system on the scene in a fast-breaking crisis. The bomber inventory currently includes 208 aircraft—94 B–52s, 93 B–1s, and 21 B–2s. The B–52 force is programmed to decline to 76 aircraft in FY 2001. Within the existing inventory, 44 B–52s and 52 B–1s are primary mission aircraft, fully funded in terms of operations and maintenance, load crews, and spare parts, and ready for immediate deployment. An additional 12 B–52s are held ready for nuclear missions. All B–52s and B–1s in the inventory, including those in attrition reserve, will be kept in flyable condition and will receive planned modifications. B–1 primary mission aircraft will rise to 70 by 2004, when increasingly capable conventional weapons become available. Bombers will be an integral part of the expeditionary air force, with both B–1s and B–52s available for AEF deployments.

- **US air and missile strike capabilities**: Two major issues are unresolved in current US force plans which will have a major impact on US capabilities to conduct long-range air strikes. The US does not have a clear detailed credible plan for bomber modernization, and for providing the advanced munitions, targeting, and C4I/IBM capabilities needed to operate any given mix of the B-52/B-1, and B-2 in combat. At the same time, the US Air Force and US Navy have canceled the A-12 and A-X, the USN is withdrawing the A-6 from service in 1997, and the USAF is debating withdrawing the F-111. Even if the
Joint Advanced Strike Aircraft (JAST) program should be funded, the US will have no plans to deliver a new long-range strike-attack aircraft that can be used by carrier aviation, the Marine Corps, and the USAF until well after the year 2010.26

The US is upgrading its cruise missile and stand-off strike missiles. Key new systems like the JSOW and SLAM-ER are on schedule, and the TLAM is being upgraded. The TSSAM cruise missile program has been canceled, however, and funds seem likely to be lacking for adequate procurement of the JSOW, SLAM-ER, and TLAM.

The US has partially compensated for these problems (a) by improving the strike/attack capabilities of existing aircraft like the AV-8B, F-15E, F-16, and F/A-18C/D, (b) by procuring the F/A-18E/F for US carrier forces, and (c) by providing a stealth strike capability for the F-22 air superiority fighter. The fact remains, however, that there is no coherence or stability to US plans to improve long-range strike capabilities, and these capabilities will improve at only a fraction of the rate planned in 1990. The current US force plan conceals role and mission debates, inter-service debates, and program uncertainties that badly need to be resolved.

- **Target acquisition and analysis/battle damage assessment capability (BDA):** In spite of USCENTCOM and other US efforts to improve target acquisition and BDA capability, US intelligence officers and some air war planners feel that the US experience in Desert Fox and the war in Kosovo has shown that the Department of Defense has failed to react adequately to the lessons of the Gulf War in developing improved regional capabilities for targeting and battle damage assessment capability to support US C4I/BM capabilities and improved precision strike capabilities. They feel the US has failed to develop adequate regional strike plans against Iran and Iraq, that many target acquisition systems lag far beyond schedule, and that the improvements made in BDA that have been made so far are more bureaucratic cosmetics than real improvements.

- **US mobility forces:** The 1997 Quadrennial Defense Review set goals calling for six Army land-based brigade sets of prepositioned equipment (three in Europe, one in Korea, two in Southwest Asia) plus a Marine brigade set in Norway, and significant stocks of prepositioned equipment afloat - three Marine Corps Maritime Prepositioning Ship squadrons, one heavy brigade set of Army equipment, and selected munitions for the Air Force. Consideration is being given to creating a third heavy brigade set for Southwest Asia. It called for airlift capability of approximately 50 million ton-miles per day, and a surge sealift capacity of 10 million square feet, made up of fast sealift ships, large medium-speed roll-on/roll-off (LMSR) vessels, and the Ready Reserve Force. It called for an afloat prepositioned cargo capacity of four million square feet for the Army and Marine Corps and a complementary land-based prepositioning program. The overall availability and readiness of these capabilities is not described in detail in the open defense literature.27

- **US sealift:** US sealift plays a critical role in deployment to the Gulf, although sheer distance inevitably limits the speed of reaction. It is 8,600 sea miles and 20+ days sailing time from the US east coast to the Gulf through the Suez Canal and 11,400 sea miles and 26+ days sailing time around Africa. Much of US sealift is in reserve, and has uncertain readiness, or relies on strategic warning to assemble large fleets of commercial ships:

  - There are major ongoing improvements in US sealift. The most rapidly deployable elements of US sealift include the Army prepositioning ships (AR-3), which include seven RO-ROs from the RRF, one auxiliary crane ship, three barge carriers (LASH), and one heavy prepositioning ship (HLPS). This force can carry about 40% of the equipment needed to deploy and sustain one brigade, and each RO-RO ship can either carry the equipment for an armored battalion (51 M-1A1 tanks) or the equipment for a mechanized battalion (72 M-2 Bradleys.) The total force can carry about 40% of the total equipment load for two armored battalions, two mechanized battalions, and the required
transportation, engineer, supply, medical, and maintenance units. At present, 4 RO-ROs, 3 LASH, and 1 HLPS out of this total are deployed in the Indian Ocean and homeported in Diego Garcia, and the US is seeking to homeport the rest in Thailand.  

- The four Navy ships include three tankers and one 500 bed hospital. The 13 USMC ships include three squadrons, each of which support one Marine Expeditionary Force of about 16,000 men. They each hold about 30 M-1A1 tanks (being increased to 58), 109 AAVs, 30 M-198 howitzers, 289 5 ton trucks, 530 HUMMMWs, 10 LCM-8s, and 35 causeway sections. The four USAF ships provide sustainment and ammunition.  

The total present surge capability of the MSC is also only about 45% of the total requirement called for in US mobility requirements. To meet its requirements, the US must acquire 19 large medium-speed roll on/roll off (LMSR) ships and two more container ships. The total requirement for the RRF is 36 RO-RO ships. The US had 17 before Desert Shield, is acquiring 12, and needs 7 more.  

- The majority of government–owned ships are maintained in the Ready Reserve Force. This 87–ship fleet is composed primarily of RO/RO vessels, breakbulk ships, and tankers held at various levels of readiness. The Navy states that more than half of the ships are able to get underway in four to five days; the remainder can be readied for service in 10, 20, or 30 days. Other sources indicate that the US is badly underfunding the readiness of its RRF ships.  

- Augmenting the Ready Reserve Force are eight fast sealift ships and two hospital ships manned by partial crews. The fast sealift ships can begin loading on four days’ notice, while the hospital ships can be readied for deployment in five days.  

- LMSRs support both the prepositioning program and surge sealift. Once the full 20–ship LMSR fleet is deployed, these vessels will provide nearly all of the afloat prepositioning space required for Army unit equipment and approximately one–third of surge sealift capacity. Ten LMSRs have been delivered to date, and eight additional ships are scheduled for delivery by FY 2001. The remaining two vessels will join the fleet by the end of FY 2002. One LMSR, slated for deployment with the Maritime Prepositioning Force (MPF), will be configured specifically to carry Marine Corps equipment.  

- To support peacetime operations, the Department charters dry cargo ships and tankers from commercial operators. These ships transport military cargo to locations not normally served by commercial routes. The U.S.–flag commercial fleet contains 198 ships with military utility. These include 110 dry cargo ships, 87 tankers, and one passenger ship. Another 175 commercial vessels that could contribute to military missions—81 dry cargo ships, 84 tankers, and 10 passenger ships—are maintained in the Effective U.S. Control (EUSC) fleet. These ships are owned by U.S. companies or their foreign subsidiaries and are registered in nations whose laws do not preclude the ships’ requisitioning for military operations. A number of the commercial vessels listed above can be made available for military contingencies under the Voluntary Intermodal Sealift Agreement (VISA), maintained by the Departments of Defense and Transportation with commercial cargo carriers. VISA provides access to commercial shipping capacity and to the intermodal capabilities of commercial carriers, such as rail, truck, and pier facilities. As with the CRAF program for airlift, VISA is structured to make sealift available in stages.  

- **US prepositioning:** In Southwest Asia, the Army stocks equipment for two heavy armor brigades. One brigade set is prepositioned in Kuwait, and the other set—which includes equipment to support a division headquarters—is located in Qatar. The Air Force stores air base operation sets in the region, many of which are being used to support contingency operations.
The US uses a mix of government–owned ships and commercial vessels to stockpile materiel at sea. Army equipment and supplies are carried aboard a fleet of chartered vessels, LMSRs, and an RRF ship. Stationed in the Indian and Pacific Oceans, these ships provide materiel for an armor brigade and selected combat support and combat service support units. Additionally, the fleet carries Army watercraft for port–opening operations. Plans call for an additional Army brigade set to be prepositioned afloat by FY 2001. Marine Corps equipment and supplies are carried on a mix of vessels operating with the Maritime Prepositioning Force. The ships are organized into three squadrons, each capable of supporting a 17,300–person MEB for 30 days. The squadrons are stationed in the western Pacific, Indian Ocean, and Mediterranean Sea. The MPF will receive a new ship in FY 2000, and two additional vessels will join the force by the end of FY 2002. The new ships, converted specifically for MPF operations, will be allocated among the three MPF squadrons.

The sea–based prepositioning force also includes chartered ships carrying Air Force munitions and a Navy fleet (ashore) hospital. The remaining vessels—a government–owned tanker and two RRF ships specially equipped to transfer fuel directly ashore—are maintained for use by all U.S. forces. During Operation Allied Force, ammunition from one of the Air Force–chartered ships was used to support air combat operations in Kosovo.

These capabilities meet many important requirements, but even the rapidly deployable elements are still underfunded. The US Army currently can only preposition about 40% of a full 2X2 combat brigade and combat support/combat service support slice. It does not have the ability to provide 30 days of sealift for sustainment of its 4 division contingency force.

- **US airlift:** The Gulf is 7,000 air miles and 24 hours flight time from the US. The US cut its total requirement for strategic airlift from 57 MTM/D to 52 MTM/D during the Bottom Up Review, and even further in the Quadrennial Defense Review in 1997. Even so, there is little probability that it will meet its goals. The DoD has established an intertheater airlift objective of about 50 million ton–miles per day (MTM/D) of cargo capacity. Of that amount, about 20 MTM/D is provided by commercial aircraft, which contribute to military missions as participants in the Civil Reserve Air Fleet (CRAF). The remaining 30 MTM/D of intertheater airlift capacity is provided by military aircraft, which are designed to perform missions that cannot be flown by commercial planes. The Department will have an organic strategic airlift capacity of 27 MTM/D at the end of FY 2001. By the end of FY 2001, the military airlift fleet will consist of 58 C–17s, 88 C–141s, 104 C–5s, and 418 C–130s (all figures denote aircraft assigned for performance of their wartime missions). These aircraft are operated by active, Air National Guard, and Air Force Reserve squadrons. The C–141 has only about five more years of useful life and the USAF must deal with the near-term implications of a combination of the aging of the C–141, delays in the C–17, and cost problems in procuring the C–17 and other lift aircraft. USAF plans call for procurement of 120 C–17s, but still indicate that US strategic and tactical airlift will be limited to less than 90% of the current requirement until the end of the present planning period (2020), even if the C–17 is fully funded and a new aircraft type is purchased to supplement the C–17. The US also has no attrition reserve of lift aircraft, and its current plans make no allowance for any peacetime or wartime attrition of USAF lift aircraft for nearly the next quarter century. Current plans also conceal the fact that the USAF only has enough major long lead spare for its strategic lift aircraft for about 45 days of high-intensity wartime operations. It seems likely that the US will face major lift capacity problems by the end of the 1990s, and may be reduced to about 80% of its present requirement.

- **Readiness and sustainment:** In spite of Department of Defense claims that readiness is not declining, each of the services states that current funds are not adequate and that the cost of peacekeeping and other partially funded unprogrammed operations continues to force declines in training, combat and support unit readiness, stock levels, depot and major maintenance, and refits. Many air, naval, and Marine Corps...
units are forced to deploy much longer than is desirable, and this is stressing manpower as well as equipment.

- **Theater missile defense systems**: The US has invested heavily in the development of theater missile defense systems like the Patriot Advanced Capability 3, the Theater High Altitude Area Defense (THAAD), and Navy lower tier program. It has not, however, been able to create a stable deployment program. The wide area capabilities of its systems are now limited by US mishandling of negotiations with Russia over the ABM treaty, and initiatives to create a “net” of land-based surface-to-air missile in the Southern Gulf countries have made only limited progress. This means that US deployment of effective ATBM capabilities may lag behind Iranian missile deployments, and that progress in creating an effective joint US-Southern Gulf surface-to-air missiles/ATBM capability may be limited or inadequate.  

- **Chemical and Biological Warfare Capabilities**: Development and/or deployment of improved detection systems, protective gear and equipment, decontamination gear, and vaccines/medical systems still lags behind the goals the US set immediately after the Gulf War.  

### The Paradox of Coalition Warfare

There is another set of uncertainties that is inherent in the very nature of the US search for force improvement to execute a “revolution in military affairs.” Each improvement in US capabilities creates the paradox that the US is potentially increasing the tactical, technical, training, and sustainability problems it faces in coalition warfare in the Southern Gulf at a time when it has a growing need for such support from its allies.

The US has placed far more emphasis on jointness within US forces and upgrading its own technology since the Gulf War than on designing its tactics, weapons, and battle management systems to interoperability with Southern Gulf, British, and other allied forces. The US has bought a much more sophisticated mix of long-range conventional strike assets, air superiority assets, “smart” munitions, and C⁴I/BM assets than it possessed during the Gulf War. All of these assets contribute to high technology methods of combat and to an intensity of operations that either requires allied forces to have similar capabilities or to be “compartmented” in ways which ensure that they do not interfere with US operations or present problems in terms of friendly fire.

The Coalition-oriented rhetoric of the Gulf War has disguised the fact that many allied contributions had little war fighting value, while others presented almost as many complications as they were worth. The Saudi Air Force, for example, was the only Coalition air force with the technical sophistication to carry out forward air defense operations in combined warfare with the
USAF -- in fact, the USN F-14s lacked the proper C^4I assets to be integrated into the air defense operations over the Kuwaiti Theater of Operations.

US forces flew nearly 90% of all strike-attack sorties, and nearly 85% of all strike, attack, and air defense sorties. US air forces dominated every aspect of reconnaissance, electronic warfare, and command and control activity. They flew 90% of all reconnaissance missions, 96% of all command and control missions, and 97% of all electronic warfare missions. With the exception of the RAF, no allied air force made a significant contribution to the air offensive. Allied sorties were generally directed against low-priority static targets, and allied aircraft lacked the avionics and munitions required to achieve the proper lethality and survivability. Even the revised Tornado-Buccaneer force had significant C^4I/BM integration problems in operating with US attack aircraft.

The US was forced to supply most of the theater-wide C^4I/BM links for Coalition forces. The US Defense Satellite Communications System (DSCS) furnished about 75% of intra-theater connectivity during Desert Storm. The US provided virtually all satellite and advanced intelligence collection capability, and still experienced serious problems in the secure dissemination of such data to its own forces -- much less its allies. Britain and Saudi Arabia were the only nations with full access to most threat data.

The US provided the bulk of the heavy armor and artillery committed to Desert Storm, and Britain proved to be the only European power able and willing to provide significant tank strength. In spite of the much-publicized deployment of naval contingents from the smaller NATO states and France, these forces contributed nothing to Desert Storm. Britain and the US provided all of the operational naval forces in the upper Gulf. In spite of the fact that several European powers sent mine clearing forces, only British mine forces led the way into combat. Every other Coalition naval contingent stayed safely out of harm’s way.
In many cases, the US and/or Saudi Arabia were forced to provide much or most of the support required for smaller Southern Gulf forces, and substantial intra-theater air or land lift. For example, Britain could provide commercial sea-lift, but not airlift. British forces had to make use of US C-5 transports, and British commercial cargo aircraft.

These problems do not prevent allied European and Southern Gulf forces from playing an important role in coalition missions that are relatively repetitive or static in nature, or which do not require the intensity of “24 hour” high-technology warfare. Bosnia and Kosovo have demonstrated that the changes to US forces scarcely preclude coalition operations. There are many contingencies which do not require the intensity of combat and integration of tactics, training, and technology the US is developing for mid and high-intensity conflict. Such contingencies include most peace-making, deterrent or demonstrative operations, and low-intensity combat operations.

At the same time, the US plans to make far more intense use of advanced C^4I/BM than it did at the time of the Gulf War. It is emphasizing the near real-time fusion of all aspects of its C^4I/BM systems in joint operations -- virtually all of which require compatible technology, training, and tactics and which attempt to substitute force quality for force quantity. The US approach to war fighting is becoming more and more complex. Armies that do not adopt advanced digital battle management systems of the kind being developed by the US Army, and which do not have compatible sensors and mobility, will present more problems. Air forces that are not trained in AWACS/JSTARS/ABCCC operations will have less value. Joint forces that lack overall C^4I/BM and joint training capabilities will present growing problems.

The US will also have progressively fewer lift and sustainability resources to make up for the gaps in coalition force capabilities. It will progressively speed up the rate of offensive air operations in the early phase of battle against a major opponent. This means intensifying the sophistication of operations from the start of a conflict. As a result, US forces are evolving in
directions which may make it more and more difficult for moderate technology forces to act as a full partner in sophisticated main-battle operations, and which make it difficult for even advanced technology forces to act as a full partner unless they have fully compatible secure communications, data processing, C4I/BM systems, and training.

**Uncertainties in Future US Contingency Capabilities**

There are also problems in US capabilities that are contingency dependent. They are the inevitable result of the geography of the Gulf, and its dependence on the Southern Gulf states to participate in many aspects of their own defense. No US force posture can deal with every risk, and the overall strength of US forces relative to Iran and Iraq is not always the critical issue. As the previous analysis has shown, there are several key contingencies where the US will continue to face problems, regardless of how it budgets its present force structure:

- **A Sudden Iraqi Attack on Kuwait City**: Kuwait and Kuwait City remain vulnerable to a sudden Iraqi attack in which the Republican Guards and/or heavy regular Iraqi units invade Kuwait with only minimal preparation and warning. In spite of the improvements in US power projection capabilities, it is only about 80 to 120 kilometers from the Iraqi border to the edge of Al Jahrah and Kuwait City. Unless US prepositioned land forces and a significant number of Kuwaiti and other Arab land forces are positioned to screen the border and defend at the Mutlah pass north of Al Jahrah, it is unlikely that air power alone can halt a determined Iraqi force, particularly if that force uses some cover like an exercise to limit strategic warning. Once an Iraqi force penetrated into Kuwait City, it would be extremely difficult to dislodge -- particularly if it held the Kuwaiti people hostage. The US would face severe limitations in using use air and artillery firepower.

- **An Iraqi Attack on Kuwait and Eastern Saudi Arabia**: There is little doubt that a combination of US, Kuwaiti, and Saudi forces could defeat any Iraqi invasion in the near to mid-term. There is also no question that the US could carry out devastating air and missile attacks on Iraq in reprisal for such an invasion within days after the Iraqi attack began. If Iraq was willing to take these risks, however, it could almost certainly occupy a substantial part of Kuwait and penetrate into Saudi Arabia before a combination of allied air and land power could halt an Iraqi invasion. Iraq might not only be able to take Al Jahrah and Kuwait City hostage, but also may be able to occupy Saudi cities and towns like Ar’ar, Rafha, and Khafji. Such a “hostage war” would involve massive risks for Iraq, and almost certain eventual defeat, but Iraq has made similar mistakes twice in the recent past. The US would need substantial support from Kuwaiti, Saudi, and other Gulf forces to minimize Iraqi success, and much would depend on both warning and immediate reaction to that warning.

- **Iranian pressure or attacks on Kuwait**: Iran demonstrated during the Iran-Iraq War that it could carry out terrorist attacks and assassination attempts in Kuwait using Iranian residents and/or Shi’ite Kuwaitis. It conducted threatening air movements and fired anti-ship missiles from the area around
Nahr e-Qasr at naval targets near Kuwait’s coast. It is also still suspected of playing a role in the bombings of the National Guard Headquarters in Saudi Arabia and the USAF barracks in Al Khobar. These kinds of low-level attacks must be dealt with largely by Kuwaiti military and security forces.

- **An Iranian War of Intimidation in the Gulf or Gulf of Oman:** Iran does not have the air of sea power to win a naval war in the Gulf, or the amphibious and air assault capability to successfully invade even a small Southern Gulf state like Bahrain. Iran has, however, steadily built up its land and sea-based anti-ship missile capabilities, its air defenses along its southern Gulf coast, the strength of the naval branch of the Revolutionary Guards, its mine warfare capability, and its forces on the islands in the Gulf. It has acquired submarines and can use dhows and other small craft to infiltrate and attack naval and coastal targets. The US, British, and Southern Gulf navies can defeat any regular Iranian naval attack, but these steadily growing Iranian capabilities could be used for less orthodox military purposes, including threats and intimidation, and low-level and unconventional warfare. US forces would find it difficult to patrol the entire Gulf, and maintain the security of Gulf shipping, coastal, and off-shore facilities against such campaigns because of the sheer area to be covered and the unpredictable nature of Iranian actions. The US also cannot produce instant solutions to Iranian attacks. It will take time to prepare for and defeat well-organized Iranian uses of seapower, and the US military cannot guarantee that Iran will not provoke a series of crises or incidents that will lead to temporary success or incidents which temporarily affect the flow of Gulf shipping.

- **Mine Warfare in the Gulf:** Both Iran and Iraq have modern mines which are hard to detect and destroy. Both have large stocks of older mines that can be covertly deployed in the Gulf, or allowed to float in shipping lanes. The US is improving its mine warfare capabilities and has deployed some new mine warfare vessels in the Gulf. Broad coverage of the Gulf, however, requires strong local Southern Gulf mine warfare and maritime surveillance capabilities.

- **Air, missile, and coastal defense against sudden selective raids on critical targets:** The US cannot possibly provide comprehensive defense along a coastal area of more than 1,500 kilometers, or day-to-day coverage of the Gulf. There are many critical ports, oil and gas facilities, desalination plants, power plants, and other facilities that Iran or Iraq could attack successfully in slash and run raids before US forces could respond. Overall air and missile defense capability and maritime and coastal surveillance must be a Southern Gulf responsibility.

- **Divisions among the Southern Gulf States:** The US cannot resolve feuds, tensions, and local conflicts between the Southern Gulf states. It can attempt to mediate or negotiate, but US forces are not a substitute for cooperation and unity within the Southern Gulf, and cannot deal with local quarrels that could divide the Southern Gulf, or lead given states to align themselves with Iran or Iraq.

- **Internal Unrest within a Southern Gulf State:** The US cannot use military force to save a regime from its own mistakes or its own people. Political unrest, extremism, internal violence, and coup attempts could bring a radical regime to power in the Southern Gulf, and change the regional alignments with Iran or Iraq. The US is a non-Arab and non-Islamic power and cannot use force to interfere in Southern Gulf internal issues. Similarly, US naval and air surveillance cannot substitute for local defense and internal security capabilities in preventing Iran or Iraq from smuggling in support to local dissidents.

- **Terrorism and Unconventional Warfare:** Terrorism and unconventional warfare can range from attacks on US forces designed to create domestic political problems in the US to the use of weapons of
mass destruction against major targets in the Southern Gulf. The US can assist in dealing with such threats, but defense against this kind of low-level or covert threat requires the coverage of the entire Southern Gulf, and must be primarily dependent on local internal security capabilities.

- **Use of Weapons of Mass Destruction:** As is discussed in the next chapter, the stakes change fundamentally if Iran and/or Iraq are willing to use weapons of mass destruction or even threaten the use of such weapons. The US now has far stronger conventional capabilities than capabilities to conduct wars which involve the actual or threatened use of chemical, biological, and nuclear weapons. The US needs to develop much stronger counterproliferation capabilities if it is to deal with such threats, and Southern Gulf countries need to develop the kind of air and missile defenses, and nuclear-biological-chemical (NBC) war fighting capabilities, necessary to give them the resolve, deterrent, and defense capabilities they need to deal with Iranian and Iraqi weapons of mass destruction.

Many of these uncertainties are more an indication of the fact that the Southern Gulf must be ready to play a stronger role in its own defense than an indication of US weakness or vulnerability. The United States alone cannot hope to fill a power vacuum in the Southern Gulf. As is the case in NATO, the defense of the Southern Gulf must be a collective responsibility and even the smallest Gulf nations must play a vital role.

As has been discussed in previous chapters, however, the US is dealing with sovereign countries that will pursue their own strategic interests in a crisis. It is also dealing with nations which often have deep internal divisions which limit the level of cooperation they can implement with the US. The Southern Gulf states all face major cash flow crises which are limiting the force expansion and military modernization, and they have shown little progress in moving away from strategic dependence on the US or in creating effective regional cooperation under the Gulf Cooperation Council. There are always uncertainties in how long the US can preserve the present level of strategic cooperation in the face of internal divisions within the Gulf states, and economic pressures that are leading many Gulf states to limit their military spending and burden sharing expenditures.

At the same time, these arrangements have helped to allow the US to substantially increase its power projection capabilities in the Gulf. The US has also been able to increase its number of combined exercises, military construction, and security assistance. The US now carries
out roughly 100 joint and combined exercises in the Middle East each year. These exercises include numerous naval and special operations exercises, the Intrinsic Action series in Kuwait, and the Ultimate Resolve series of exercises. These exercises are used to maintain access, promote interoperability with regional partners, enhance the forward presence of US forces, and improve the individual and collective capabilities of the GCC states.

The importance of these improvements in prepositioning and cooperation in the region became clear in October, 1994, when Iraq moved two Republican Guards divisions and three additional divisions to positions near its border with Kuwait. The US was forced to deploy the largest number of US forces to the Gulf since the Gulf War. These power projection forces initially included the 18,000 men in the 1st Marine Expeditionary Force, 16,000 troops from the US Army’s 24th Infantry Division, 306 fixed wing aircraft (including A-10s, F-16s, RF-4Cs, F-15Es, F-15Cs, F-111s, EF-111s, F-117s, JSTARS, F/A-18s, B-52s, and E-3As, 58 helicopters (including 54 AH-64s), two batteries of Patriot missiles, and a carrier battle group. The US then decided to deploy another 73 fixed wing aircraft.

By October 12, the US had a total of 19,241 men in the Gulf area (1,923 Army, 11,171 Navy, 1,977 Marine, 3,844 Air Force, 173 Special Operations, and 153 Joint Task Force Headquarters). It had two carrier task forces with 15 ships (counting one carrier battle group in the Red Sea), and 200 combat aircraft. It was deploying significant numbers of aircraft, US Army units were beginning to join the prepositioned US armor in Kuwait, and 5 Marine Corps Maritime Prepositioning Ships, 8 US Army Brigade Afloat Ships, and 6 USAF and US Army Prepositioning Ships were moving towards the Gulf. US forces were involved in combined exercises with Kuwaiti forces in the border area within a matter of days, and the US held a major, demonstrative, anti-armor exercise using B-52-strike aircraft by the end of October. In contrast, the Gulf Cooperation Council was only able to make a token commitment of the Peninsula Shield force -- a force which lacked the combat capability to play any significant role in defending Kuwait.

While Iraq soon backed down, and the US was able to cut its planned deployments, at one
point the US had 210,000 personnel deployed, en route, or on alert.

The US demonstrated a similar mix of resolve and capabilities in late August, 1995, when there were indications that Iraq might again be deploying forces to invade Kuwait. It deployed a total of 12 prepositioning ships from Diego Garcia and other locations to the Gulf, with enough armor, artillery, food, fuel, water, vehicles, and other equipment to sustain a 16,500 Marine Corps MEF (Forward), and a 15,000-17,000 man US Army Corps in combat.\(^{35}\)

At the same time, the US improved the way in which it reacted to Iraqi provocation. In January 1996, when US intelligence concluded that Iraq had brought five armored divisions to sufficient readiness to deploy to Kuwait with only five hours notice. The US deployed 12 prepositioning ships -- enough to equip a Marine Division and a US Army Brigade -- into the Gulf. The US did not send troops, but this move allowed the US to deploy up to 20,000 troops on short notice. The US also deployed additional combat aircraft to Bahrain and Kuwait, and extended a joint exercise with Kuwait. The US already had some 20,000 troops in the Middle East area, and deployed 35 ships, and 14,000 sailors and US Marines, in its Fifth Fleet between the Suez Canal and Indian Ocean. These forces included the \textit{Nimitz} carrier battle group, and a Marine Corps amphibious ready group. It is interesting to note that the US only had 250 naval personnel stationed permanently ashore in Bahrain.\(^{36}\)

\textbf{The Challenge of Adequate Prepositioning}

**** In October 2000, the US had a well-distributed forward presence in the Gulf region, supported by significant forces in Turkey and the Eastern Mediterranean. These forces gave the US the core capabilities it needed to deter Iraq and Iran, and to support rapid power projection into the area. At the same time, they kept the US presence in any Gulf country relatively limited, and allowed USCENTCOM to pursue an engagement strategy that minimized the “visibility” of US forces in ways that could cause ethnic and religious resentment, and which emphasized partnership between US and local forces. This US presence – which varies according to the level

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of tension in the region – is summarized in Table VIII-5

Table VIII-5

US Forward Presence in the Gulf Region: October 2000

<table>
<thead>
<tr>
<th>Country/Fleet</th>
<th>Army</th>
<th>Air Force</th>
<th>Navy</th>
<th>Marines</th>
<th>Total</th>
<th>Ships</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth Fleet (Gulf)</td>
<td>0</td>
<td>0</td>
<td>(12,880-------12,880)</td>
<td>12,880</td>
<td>22</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Bahrain</td>
<td>0</td>
<td>0</td>
<td>900</td>
<td></td>
<td>900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kuwait</td>
<td>3,000</td>
<td>2,100</td>
<td>10</td>
<td>80</td>
<td>4,980</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oman</td>
<td>0</td>
<td>630</td>
<td>60</td>
<td>0</td>
<td>690</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Qatar</td>
<td>30</td>
<td></td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>650</td>
<td>4,800</td>
<td>20</td>
<td>250</td>
<td>5,720</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sub-Total in Gulf</td>
<td>3,680</td>
<td>7,530</td>
<td>(14,200-------14,200)</td>
<td>25,410</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sixth Fleet (E. Med.)</td>
<td>0</td>
<td>0</td>
<td>(13,010-------13,010)</td>
<td>13,010</td>
<td>17</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>290</td>
<td>1,180</td>
<td>1,900</td>
<td>220</td>
<td>3,599</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>290</td>
<td>1,180</td>
<td>1,900</td>
<td>220</td>
<td>3,599</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Region</td>
<td>3,970</td>
<td>8,710</td>
<td>(29,330-------29,330)</td>
<td>42,010</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>


The key problem that the US now faces in shaping its forward presence in the Gulf, in creating effective power preejection capabilities, and in developing cooperative arrangements with its Gulf allies is to complete the prepositioning of US Army, Marine Corps, and air equipment to the Gulf. The US feels this prepositioning is essential to improve the speed of US deployment capability, and to provide the ability to deter or halt any sudden Iraqi move against Kuwait. Its goal is to have enough prepositioning and forward basing capability by 2000 to deploy 8-10 tactical air wing equivalents within five days, and at least two US Army divisions within two weeks. These forces would be followed by a 4-5 division US Army Corps, a Marine Expeditionary Force, and supporting air wings within eight weeks -- twice as fast as it took to deploy a similar force in 1991.37

So far, the US has prepositioned one mechanized brigade set into Kuwait. This brigade set is located in northern Kuwait, and was activated in October, 1994. The US was able to fly in
troops, marry them up with their prepositioned equipment, and deploy the brigade to the Kuwaiti border within two weeks. The US has prepositioned most of one brigade set afloat, and is seeking the additional sealift necessary to preposition two armored and two mechanized battalions on five new RO-RO ships in the Gulf.

The Marine Corps Maritime Prepositioning Force now includes three Maritime Prepositioning Squadrons, each able to support a Marine Expeditionary Force (Forward) and nearly 15,000 men for 30 days with equipment and supplies. One of these squadrons is normally deployed at Diego Garcia. The Air Force has four logistic ships, carrying supplies and ammunition, and the US Army now has two container ships which carry 30 days of supplies for the early deploying units of the entire contingency Corps. The US goal is to have about 200,000 tons of heavy weapons, support equipment, and other supplies afloat in the region, and another 350,000 tons prepositioned ashore.

The US has negotiated with Qatar and the UAE to prepositioning of a second and third brigade set on land. The prepositioning of a brigade set offers the US major advantages in terms of time and cost. A brigade can deploy to a prepositioned brigade set in six days at a cost of $26 million. It would take the equivalent of 28 Boeing 747 aircraft to move the soldiers and 28 C-141 flights to bring in additional equipment. In contrast, such a redeployment would cost $345 million, would take 28 days to airlift an entire brigade, and would require 679 C-141 flights and 532 C-5 flights.

**Strengths in US Capabilities**

Force numbers and deployment speed are not the only issue which must be considered in summarizing the trends in US military capabilities. The US enjoys major qualitative advantages over most Third World forces, particularly nations like Iran and Iraq. Table VIII-6 summarizes the way in which the US exploited these advantages during the Gulf War, and most are likely to
continue to give the US an important mix of “force-multipliers” in any major regional contingency in the Gulf.
Table VIII-6

US Military Advantages in Coalition Warfare in the Gulf War

- **Decoupling of political and military responsibility:** No war is ever free of command controversy or friction between political and military leadership. However, US forces fought the Gulf War with an exceptionally effective delegation of responsibility for military decisions to military commanders. The fact that this system worked was partly a matter of individual personalities, but it also reflected important changes in the way national command authority was exercised in the US in comparison with Korea and Vietnam and from the nature of coalition command in past wars. Unfortunately, Desert Fox and Kosovo indicate this may not be a lasting feature of the US way of war.

- **Unity of command:** In spite of the formal Coalition command structure, effective unity of command took place at the level of USCINCENT. The planning and operational control of all Coalition forces, regardless of service, had a high degree of central coordination. There was no division of command by military service, or separation of operations and intelligence. National forces preserved a high degree of autonomy because they were assigned specific functions, areas, and responsibilities, but Coalition commanders supported de facto unity of command -- largely due to the support that Saudi Arabia, Britain, Egypt, and France were willing to give the US. The level of unity of command, and "fusion," achieved during the Gulf War was scarcely perfect, but it was far more functional than in previous military conflicts.

- **Creation of new air battle capabilities:** Advances in aircraft, air munitions, and C^4I/BM systems allowed the US to develop the capability to rapidly suppress Third World air and ground-based defense systems while simultaneously carrying out deep strategic and theater offensive strikes against both strategic and tactical targets. This gave the US the capability to initiate a major air campaign before the AirLand battle and before it defeated or suppressed enemy air capabilities and defenses.

- **Combined arms operations, joint operations, and the "AirLand Battle":** While US doctrine had always placed a *pro forma* emphasis on combined arms operations, many US operations in Vietnam did not properly integrate combined arms, common inter-service training in joint and combined arms operations was limited, and air operations were not properly integrated into land operations. In the years that followed, the US reorganized to place far more emphasis on combined arms and joint operations. It greatly strengthened joint operations training and career rotations into joint commands. At the same time, it developed tactics that closely integrated air and land operations into what the US came to call the "AirLand battle". These tactics were critical to the success of the ground battle.

- **Emphasis on maneuver:** The US had emphasized firepower and attrition during the end of the Vietnam War. In the years that followed, it converted its force structure to place an equal emphasis on maneuver and deception. This emphasis was supported by Britain and France, and was adopted by Saudi Arabia.

- **Emphasis on deception and strategic/tactical innovation:** No country has a monopoly on the use of deception and strategic/tactical innovation. The Coalition, however, demonstrated capabilities that were far superior to those of Iraq.

- **"24 hour war" - Superior night, all-weather, and beyond-visual-range warfare:** "Visibility" is always relative in combat. There is no such thing as a perfect night vision or all-weather combat system, or way of acquiring perfect information at long-ranges. US and British air and land forces, however, had far better training and technology for such combat than they have ever had in the past, and were the first forces designed to wage
warfare continuously at night and in poor weather. Equally important, they were far more capable of taking advantage of the margin of extra range and tactical information provided by superior technology.

- **Near Real-Time Integration of C^3I/BM/T/BDA:** The Coalition took advantage of major US C^3I/BM/T/BDA organization, technology, and software to integrate various aspects of command, control, communications, and intelligence (C^3I); battle management (BM), targeting (T), and battle damage assessment (BDA) to achieve a near real-time integration and decision-making execution cycle.

- **Integration of space warfare:** The Coalition integrated US space-based intelligence, communications, and command and control assets into its tactics and organization. This "space advantage" would have been even greater if space-based imagery had been better disseminated at the theater and tactical levels.

- **A new tempo of operations:** The Coalition exploited a superiority in every aspect of targeting, intelligence gathering and dissemination, integration of combined arms, multi-service forces, and night and all-weather warfare to achieve both a new tempo of operations and one far superior to that of Iraq.

- **A new tempo of sustainability:** The Coalition forces had maintainability, reliability, reparability, and the speed and overall mobility of logistic, service support, and combat support force activity that broadly matched their maneuver and firepower capabilities. The benefits of these new capabilities were reflected in such critical areas as the extraordinarily high operational availability and sortie rates of US aircraft, and the ability to support the movement of heliborne and armored forces during the long thrust into Iraq from the West.

- **Beyond-visual-range air combat, air defense suppression, air base attacks, and airborne C^4I/BM:** The Coalition had a decisive advantage in air combat training, in beyond-visual-range air combat capability, in anti-radiation missiles, in electronic warfare, in air base and shelter and kill capability, in stealth and unmanned long-range strike systems, in IFF and air control capability, and in airborne C^4I/BM systems like the E-3 and ABCCC. These advantages allowed the Coalition to win early and decisive air supremacy.

- **Focused and effective interdiction bombing:** While the Coalition’s strategic bombing effort had limitations, most aspects of offensive air power were highly successful. The interdiction effort was successful in most respects. The Coalition organized effectively to use its deep-strike capabilities to carry out a rapid and effective pattern of focused strategic bombing where planning was sufficiently well coupled to intelligence and meaningful strategic objectives so that such strikes achieved the major military objectives that the planner set. At the same time, targeting, force allocation, and precision kill capabilities had advanced to the point where interdiction bombing and strikes were far more lethal and strategically useful than in previous conflicts.

- **Expansion of the battlefield: “Deep Strike”:** As part of its effort to offset the Warsaw Pact's superiority, US tactics and technology emphasized using air-strike and cruise-missile capabilities to extend the battlefield far beyond the immediate forward edge of the battle area (FEBA). The Coalition exploited the resulting mix of targeting capability, improved air-strike capabilities, and land-force capabilities in ways that played an important role in attriting Iraqi ground forces during the air phase of the war, and which helped the Coalition break through Iraqi defenses and exploit the breakthrough. This achievement is particularly striking in view of the fact that the US was not yet ready to employ some "deep strike" targeting technologies and precision strike systems designed to fight the Warsaw Pact that were still in development.

- **Technological superiority in many critical areas of weaponry:** The Coalition scarcely had a monopoly on effective weapons, but it had a critical edge in key weapons like tanks, other armored fighting vehicles, artillery systems, long-range strike systems, attack aircraft, air-defense aircraft, surface-to-air missiles, space,
attack helicopters, naval systems, sensors, battle management and a host of other areas. As has been discussed in Chapter One, this superiority went far beyond the technical "edge" revealed by "weapon on weapon" comparisons. Coalition forces exploited technology in "systems" that integrated weapons into other aspects of force capability and into the overall force structures of the US, Britain, France, and the Saudi Air Force to a far greater degree than Iraq and most military forces in Third World states.

- **Integration of precision-guided weapons into tactics and force structures:** The Coalition exploited a decisive US technical edge in the capability of most of its precision-guided weapons over Iraq, had far more realistic training in using them, and the ability to link their employment to far superior reconnaissance and targeting capability.

- **Realistic combat training and use of technology and simulation:** The US and Britain used training methods based on realistic joint, combined arms, armored, air warfare, and AirLand training, large-scale training, and adversary training. These efforts were far superior to previous methods and were coupled to a far more realistic and demanding system for ensuring the readiness of the forces involved. Equally important, they emphasized the need for the kinds of additional training that allowed US forces to adapt to the special desert warfare conditions of Desert Storm.

- **All volunteer military/higher entry and career standards:** British, French, US, and Saudi forces were all-volunteer professional forces. They had a decisive advantage in professional standards, training levels, and merit-based promotion.43

- **Emphasis on forward leadership and delegation:** Virtually all of the successful Coalition forces were aggressively led from the front. Iraqi forces were led from the rear.

- **Heavy reliance on NCOs and enlisted personnel:** There was nothing new about the heavy reliance that Western forces placed on the technical skills, leadership quality, and initiative of non-commissioned officers (NCOs) and experienced enlisted personnel. This is a reliance which is common to virtually every Western military force, and which has given them a major advantage over Soviet and those Third World forces which do not give the same authority and expertise to NCOs and career enlisted personnel. Better educated, trained, and experienced NCOs and enlisted personnel were critical to the British, French, and US ability to exploit technology, and sustain high tempo operations.

- **High degree of overall readiness:** Military readiness is a difficult term to define since it involves so many aspects of force capability. Western forces entered the Gulf War, however, with two great advantages. The first was far more realistic standards for measuring readiness and ensuring proper reporting. The second was adequate funding over a sustained period of time.

It is important to note that the advantages listed in Table VIII-6 can be far less significant in dealing with unconventional warfare, politically dominated low-intensity and guerrilla conflicts, urban warfare, and other specialized types of conflict, than in direct conventional combat.
Weaknesses in US Capabilities

The US also is scarcely “ten feet tall.” The problem with words like “super power” is that the US may take them seriously and ignore the problems discussed throughout this report. Table VIII-7 presents a list of potential weaknesses and vulnerabilities in US forces that could also affect the outcome of a contingency in the Gulf, and which an intelligent enemy might exploit in a future conflict. The US has already encountered some of these challenges in Vietnam, Beirut, Somalia, Bosnia, Iraq, and Kosovo and it has no guarantee that it will not encounter them in future contingencies in the Gulf.
Table VIII-7

Weaknesses in US Capabilities for Future Warfare in the Gulf

- **Accepting the true politics of war:** Much of the writing on the "revolution in military affairs" still assumes that the US will only have to use military force where there is clear popular and legislative support, and tacitly assumes that any action by the US and/or its allies will have broad international support. There are two problems with this approach. The first is that the defense of strategic interests cannot always be tied to an act of naked aggression like Iraq's invasion of Kuwait. The second is that popular, legislative, and international support is always conditional and often volatile. Beginning a conflict or peace action is only the start of the political nature of war. If the enemy can exploit the political situation, there will be no contract between the military and society that will guarantee continued support.

- **Internal security and political warfare:** The US cannot rescue any Gulf government from its own people. It may help support allied internal security forces with training and technical aid, but the US position in the Gulf is ultimately dependent on the popular support available to each Gulf regime, popular perception of that regime’s legitimacy, and the extent to which each Gulf government maintains a "social contract" with its people that provides them with security, jobs, and hope for the future. Most of the Southern Gulf states -- excepting Bahrain, Oman, and the poorer sheikdoms of the UAE -- have the oil and gas wealth to maintain relatively high current standards of income, and the wealthier Gulf states have the financial ability to help the poorer states. The question is whether the Southern Gulf states will make effective use of their wealth and be able to meet the expectations of their minorities and youth (over 40% of the population of the Southern Gulf is under 15). If Gulf governments do not deal with these problems, the US will be no more able to help them against their people than it was able to help the Shah.

- **Islamic extremism:** The US is not equipped to deal with the challenge of Islamic extremism. It can address the technical aspects of counter-terrorism and security operations, but it cannot deal with the cultural, political and religious aspects of the Islamic revival, or deal at a political level with its violent and extremist elements. Iran, Iraq, or other regional threats are almost certain to attempt to exploit the secular, Western, Christian, and pro-Israeli character of the US and to attempt to discredit the Islamic character of the Southern Gulf states. Iran is certain to exploit the Shi’ite issue as well, and Iraq to exploit its Arab identity. If the US lacks regional allies which are seen as having Islamic legitimacy, there is little the US can do to deal with the resulting politico-military problems.

- **Low-intensity realism:** Low-intensity wars are almost invariably fought in confused political circumstances against people, not things. Such wars are highly political and focus on killing rather than on destroying weapons and facilities. Western preparation for using the revolution in military affairs in peace-keeping and low-intensity conflict sometimes tacitly denies this political reality, while policy makers often commit military forces on the basis of expectations of success without fully assessing the risks. While it may be argued that the West has learned from Somalia, it is not clear what or how. The current peacekeeping effort in Bosnia, for example, still presents similar risks, and a characterization of Serbian, Croatian, and Muslim forces during the crisis has scarcely been a model that can support a countervailing strategy.

- **Mountain Warfare and Warfare in Rough Terrain:** Many of the systems and tactics that the Coalition exploited in the Gulf War were only possible because of the relatively flat terrain and open nature of that terrain. They would be much less decisive if better cover was available.
• **Sudden attack:** One of the key lessons that future threats are likely to draw from Desert Storm is the potential advantage of sudden and decisive action, and the potential value of exploiting the problems in the power projection capabilities of the US and other Western military forces. US strength may often deter war, but when deterrence fails, it is important to understand that threat powers are likely to escalate suddenly and stress surprise. It is equally important to understand that threat nations actively exploit reporting on shifts in US defense spending and force levels, and will focus on the problems in Western power projection capabilities revealed in budget documents, legislative debates and the media.

• **Extended deterrence and battles of intimidation:** At present, the US is better prepared for war-fighting than it is in defining a clear structure of regional deterrence based on exploiting the weaknesses of threat nations, and reassuring and strengthening allies. Many crises and regional issues, however, are decided by "no intensity" conflict. They are the product of whether one nation can intimidate another, often to win limited victories that do not threaten the survival or ruling elite in neighboring states. The current Iranian build-up in the Gulf seems to have this focus. So do some aspects of North Korea's manipulation of its nuclear threat, (or threat of acquiring nuclear capability), and the Chinese build-up of capabilities that may affect decisions on control of the South China Sea. The problem the US faces in countering such pressures and in extending deterrence to a regional level is one that it is only beginning to address.

• **Ecological and environmental warfare; Water and infrastructure warfare:** The burning oil fields and oil spills of the Gulf War did not materially affect the ecology of Kuwait and the Gulf. They did, however, set a precedent for environmental warfare that may be more important in the future. There is often only a narrow line between military actions that affect the environment, and actions that affect key aspects of human survival like attacks on water facilities and power facilities that affect key human services and attacks on fuel facilities. Weapons of mass destruction are not the only way of achieving large-scale damage or high civilian casualties.

• **Limits of UN/cooperative/Coalition warfare:** While coalition warfare offers many potential advantages, it also confronts the West with the practical problem of understanding the strengths and weaknesses of potential and actual allied nations and forces, and integrating them into the "revolution in military affairs". Britain, France, and the US deployed to Saudi Arabia in Desert Storm under conditions where it took several months to realistically assess Saudi forces and begin efforts to develop more interoperable war-fighting capabilities. The fact that Egypt and Syria were reluctant to execute an offensive into Kuwait came as a surprise to USCINCENT, although this should scarcely have been a surprise in the case of Syria.

• **Weapons of mass destruction:** The Coalition emerged from Desert Storm claiming a victory over Iraq in destroying its weapons of mass destruction that it never achieved. It had firmly identified only two of 21 major Iraqi nuclear facilities before the war, struck only 8 by the time the war ended, did not properly characterize the functions of more than half the facilities it struck, and never completed effective BDA. Coalition strikes on Iraqi chemical facilities left 150,000 munitions intact -- most of which suffered far more from design defects than Coalition attacks. Iraq's biological warfare capabilities seemed to have been evacuated, and remain largely intact. The Coalition "Scud Hunt” failed and never produced a confirmed kill. Future wars are certain to present far more serious and time urgent threats, and involve far more developed planning to try to exploit possession of such weapons.
The Problem of Asymmetric Warfare

There is no way to predict which of the weaknesses in Table VIII-7, if any, Gulf states will try to exploit in a future crisis or conflict, or how they will compare to the strengths the US can bring to bear. Nevertheless, every reaction produces an equal and opposition reaction, and it is clear that hostile states all over the world are pursuing two major options on this list. One is the use of asymmetric warfare and the other proliferation of weapons of mass destruction. As a result, it is scarcely surprising the current plans of the Department of Defense give high priority to asymmetric warfare, and to the possibility that this will involve terrorism and the use of weapons of mass destruction.44

The most demanding military requirement on U.S. forces is the capability to fight and win two major theater wars in overlapping time frames. This requires that U.S. forces have a full spectrum of military capabilities in quantities sufficient to defeat any two regional adversaries in full-scale warfare involving land, sea, and aerospace forces in two separate and distant theaters of conflict, with only a short period of time separating the beginnings of the two conflicts.

Major theater war presents the United States with three additional challenges. First is the ability to rapidly defeat the offensives of both adversaries well short of their objectives. Maintaining this capability is critical to the United States’ ability to seize the initiative in both theaters and to minimize the amount of territory to be regained from enemy forces. Failure to rapidly defeat an enemy offensive can make the subsequent campaign to evict enemy forces from captured territory much more difficult, lengthy, and costly. It could also weaken coalition support, undermine U.S. credibility, and increase the risk of conflict elsewhere. By the same token, a force that is clearly capable of defeating aggression promptly will serve as a robust deterrent by denying would-be aggressors the prospect of success. Thus, the Department must ensure that the appropriate forces and infrastructure are ready and available to project power sufficient to rapidly defeat enemy forces in the early stages of a major conflict.

A second challenge is the threat or use of chemical and biological weapons, a likely condition of future warfare, especially in the early stages of war for purposes of disrupting U.S. operations and logistics. These weapons may be delivered by ballistic missiles, cruise missiles, aircraft, special operations forces, or other means. This requires that U.S. forces continue to improve their capabilities to locate and destroy such weapons, preferably before such weapons can be used, and to defend against and manage the consequences if these weapons are used. Capability enhancements alone are not enough. Equally important is continuing to adapt U.S. doctrine, operational concepts, training, and exercises to take full account of the threat posed by chemical and biological weapons and other likely asymmetric threats. Moreover, given that the United States will most likely conduct future operations in coalition with other countries, the United States must also continue to encourage its friends and allies to train and equip their forces for effective operations in chemical and biological weapons environments.
Finally, U.S. forces will transition to fighting major theater wars from a posture of global engagement—that is, from substantial levels of peacetime shaping activities overseas and potentially from multiple concurrent SSC operations. In the event of one major theater war, the United States would need to be extremely selective in making any additional commitments to either engagement activities or smaller-scale contingency operations. The United States would likely also choose to begin disengaging from those activities and operations not deemed to involve vital U.S. interests in order to better posture its forces to deter the possible outbreak of a second war. In the event of two such conflicts, U.S. forces would be withdrawn from peacetime engagement activities and SSC operations as quickly as possible to be readied for war. The United States was mindful of this strategy when it undertook Operation Allied Force in Kosovo the spring of 1999, and continually assessed the impact of this operation on the ability of U.S. forces to defend effectively in potential warfighting theaters. Should the United States have faced the challenge of withdrawing forces to mount two major wars in defense of U.S. vital interests elsewhere, the Department is confident that it would have been able to do so, albeit at higher levels of risk. The United States made various adjustments in its posture and plans to mitigate these risks during the Kosovo operation.

The risks associated with disengaging from a range of peacetime activities and operations in order to deploy the appropriate forces to the conflicts can also be mitigated, at least in part, by replacing withdrawing forces with an increased commitment of reserve component forces, coalition or allied forces, host nation capabilities, contractor support, or some combination thereof. Ultimately, the United States must accept a degree of risk associated with withdrawing from SSCs and engagement activities in order to reduce the greater risk it would incur if the nation failed to respond adequately to major theater wars.

...To be a truly full–spectrum force, the U.S. military must be able to defeat even the most innovative adversaries. Those who oppose the United States will increasingly rely on unconventional strategies and tactics to offset U.S. superiority in conventional forces. The Department’s ability to adapt effectively to adversaries’ asymmetric threats—such as information operations; nuclear, biological, or chemical weapons use; ballistic missiles; and terrorism—is critical to maintaining U.S. military preeminence into the 21st century.

... The terrorist threat has changed markedly in recent years due primarily to five factors: changing terrorist motivations; the proliferation of technologies of mass destruction; increased access to information and information technologies; a perception that the United States is not willing to accept casualties; and the accelerated centralization of vital components of the national infrastructure. As a result of these constantly changing threats, the United States must continue to improve its ability to stay ahead of terrorists’ ever–expanding capabilities.

DoD’s program for combating terrorism has four components: antiterrorism, counterterrorism, terrorism consequence management, and intelligence support. Antiterrorism consists of defensive measures used to reduce the vulnerability of individuals, forces, and property to terrorist acts. Counterterrorism consists of offensive measures taken to prevent, deter, and respond to terrorism. Terrorism consequence management consists of measures to mitigate the effects of a terrorist incident, including the use of a weapon of mass destruction. Intelligence support consists of the collection, analysis, and dissemination of all–source intelligence on terrorist groups and activities to protect, deter, preempt, or counter the terrorist threat to U.S. personnel, forces, critical infrastructures, and interests.

Five key DoD initiatives support its antiterrorism efforts. First, the Joint Staff Integrated Vulnerability Assessment Teams and CINC and Service Vulnerability Assessment Teams provide commanders with...
critical assistance to force protection programs. Second, DoD continues to improve its Antiterrorism Force Protection Training Program. This program provides antiterrorism awareness training to all DoD military and civilian personnel and their families, specialized training for Antiterrorism Force Protection Officers, pre–command training for prospective commanders, and operational level seminars for senior officers. Third, the Combating Terrorism Readiness Initiative Fund provides an important means for combatant commanders to fund time–critical, emergent requirements that cannot wait for the normal budget or acquisition processes. Fourth, DoD has embarked on a major effort to provide minimum force protection standards for military construction projects. Finally, technology continues to be important in enhancing DoD’s ability to counter terrorism. Key technology enablers include threat analysis and warning, explosive device detection, and early detection of weapons of mass destruction.

In the area of counterterrorism, U.S. armed forces possess a tailored range of options to respond to terrorism directed at U.S. citizens, interests, and property, both domestically and overseas. DoD can employ the full range of military capabilities, including rapid–response Special Operations Forces that are specifically trained, manned, and equipped to pre–empt or resolve incidents of international terrorism. DoD also continues to refine its capabilities which have been intensively exercised with interagency counterparts.

In the area of terrorism consequence management, DoD continues to work hard to deter, and when necessary, minimize the effects of a weapons of mass destruction incident. DoD has created, and is continually refining, an excellent response capability. For example, in October 1999, the United States Joint Forces Command established Joint Task Force Civil Support to assume overall responsibility for coordinating DoD’s consequence management support efforts to civil authorities for weapons of mass destruction incidents within the United States, its territories, and possessions. See Chapter 7 for further information on consequence management.

In the area of intelligence support, DoD recognizes the importance of timely dissemination of terrorist threat information from the Intelligence Community to the operators in the field. DoD continues to strive toward its goal of having fully coordinated joint operations and intelligence fusion cells at all levels. DoD intelligence organizations remain engaged in an aggressive, long–term collection and analytic effort designed to provide information that can better alert local commanders to potential terrorist attacks. Close working relationships with other members of the national Intelligence Community are being strengthened, and intelligence exchanges with U.S. allies have been increased.

There is nothing new about asymmetric warfare per se, or about the fact it poses a global threat. China posed a major asymmetric threat to the US in Korea by using deception, surprise, and human wave tactics. The US was decisively defeated in Vietnam by asymmetric warfare although it won virtually every conventional battle. The US was driven out of Lebanon and Somalia by such methods of warfare, and faced a major threat in Kosovo.

The Department of Defense report on the lessons of the war in Kosovo notes that: 45

“Military ground forces in Operation Allied Force. Milosevic was unable to challenge superior allied military capabilities directly. His fielded forces were compelled to hide throughout most of the campaign,
staying in caves and tunnels and under the cover of forest, village, or weather. He was forced to husband his antiaircraft missile defenses to sustain his challenge to our air campaign. Therefore, he chose to fight chiefly through asymmetric means: terror tactics and repression directed against Kosovar civilians; attempts to exploit the premium the alliance placed on minimizing civilian casualties and collateral damage; creation of enormous refugee flows to create a humanitarian crisis, including in neighboring countries; and the conduct of disinformation and propaganda campaigns.

“These tactics created several serious challenges for our forces, all of which we were able to overcome thanks to excellent training, leadership, equipment and motivation. Nevertheless, these challenges underscored the continued need to develop new operational concepts and capabilities to anticipate and counter similar asymmetric challenges in the future. Simply put, adversaries will use unconventional approaches to circumvent or undermine U.S. and allied strengths and exploit vulnerabilities. Milosevic illustrated very clearly his propensity for pursuing asymmetric approaches. He chose his tactics in the hope of exploiting the NATO nations’ legitimate political concerns about target selection, collateral damage, and conducting military operations against enemy forces that are intentionally intermingled with civilian refugees.

“In the case of refugee flow, the time-scale was so rapid and the numbers so great that it initially overwhelmed the neighboring countries, particularly the Former Yugoslav Republic of Macedonia (FYROM) and Albania. The humanitarian crisis created by Milosevic appeared to be an attempt to end NATO’s operation by “cleansing” Kosovo of ethnic Albanians, overtaxing bordering nations’ infrastructures, and fracturing alliance cohesion. He failed, despite all these efforts, principally because NATO adapted to the changing circumstances. One general lesson learned is that similar attempts at asymmetric challenges should be anticipated in future conflicts as well.”

It is important to note that Serbia had at least some aid from Iraq in planning asymmetric operations during the Kosovo conflict, and while there have been no major uses of asymmetric warfare from within the Middle East, there are numerous other examples of a shift toward asymmetric threats. For example, Chinese military literature shows a new interest in asymmetric warfare, and Iran has shown considerable originality in using submarines, mines, unconventional forces, and anti-ship missiles to create a tailored asymmetric threat to naval movement through the lower Gulf.

As a result, the US and its allies are vulnerable to asymmetric forms of warfare in many ways:

- **Sudden or surprise attack:** Power projection is dependent on strategic warning, timely decision making, and effective mobilization and redeployment for much of its military effectiveness.

- **Saturation:** There is no precise way to determine the point at which mass, or force quantity, overcomes superior effectiveness, or force quality -- historically, efforts to emphasize mass have been far less successful than military experts predicted at the time. Even the best force, however, reaches the point...
where it cannot maintain its “edge” in C^4I/battle management, air combat, or maneuver warfare in the face of superior numbers or multiple threats. Further, saturation may produce a sudden catalytic collapse of effectiveness, rather than a gradual degeneration from which the Israeli Defense Force could recover. This affects forward deployment, reliance on mobilization and reliance on defensive land tactics versus preemption and “offensive defense.”

- **Collateral damage:** The US and its allies will operate under growing and even more severe constraints regarding inflicting damage on enemy civilians and civilian facilities in any but the highest levels of conflict.

- **Taking casualties:** War fighting is not measured simply in terms of whether a given side can win a battle or conflict, but how well it can absorb the damage inflicted upon it. Many powers are highly sensitive to casualties and losses. This sensitivity may limit its operational flexibility in taking risks, and in sustaining some kinds of combat if casualties become serious relative to the apparent value of the immediate objective.

- **Inflicting casualties:** Dependence on world opinion and outside support means some nations increasingly must plan to fight at least low and mid-intensity conflicts in ways that limit enemy casualties and collateral damage to its opponents, and show that Israel is actively attempting to fight a “humanitarian” style of combat.

- **Low-intensity combat:** Low-intensity conflict makes it much harder to cannot most technical advantages in combat -- because low-intensity wars are largely fought against people, not things. Low-intensity wars are also highly political. The battle for public opinion is as much a condition of victory as killing the enemy. The outcome of such a battle will be highly dependent on the specific political conditions under which it is fought, rather than RMA-like capabilities.

- **Hostage taking and terrorism:** Like low-intensity warfare, hostage-taking and terrorism present the problem that advanced technology powers cannot exploit their conventional strengths, and must fight a low-level battle primarily on the basis of infantry combat. HUMINT is more important than conventional military intelligence, and much of the fight against terrorism may take place in urban or heavily populated areas.

- **Urban and Built-Up Area Warfare:** Advanced military powers are still challenged the problem of urban warfare. They did not perform particularly well in urban warfare. Most western forces are not trained or equipped to deal with sustained urban warfare in populated areas during regional combat -- particularly when the fighting may affect large civilian populations on friendly soil.

- **Extended conflict and occupation warfare:** Not all wars can be quickly terminated, and many forms of warfare -- particularly those involving peace-keeping and peace-enforcement -- require prolonged military occupations.

- **Weapons of mass destruction:** The threat or actual use of such weapons can compensate for conventional weakness in some cases and deter military action in others.
Fortunately, asymmetric warfare is not a one-way street. For example, the US use of carbon fiber weapons against power grids in Kosovo illustrates the fact that moderate states in the Middle East and North Africa, and US and Western power projection forces, can introduce new asymmetric warfare techniques as well as radical states and extremist movements. However, it is clear that the moderate states in the region need to recognize and reduce their vulnerabilities in such forms of conflict, which include protracted conflict, urban warfare, guerrilla warfare, use of human shields, casualties, collateral damage, and the failure to plan effectively for conflict termination.

The US has used the word “terrorism” in so often to attack hostile movements and nations that it sometimes seems to forget that it is one more form of asymmetric warfare, and its "legitimacy” lies heavily in whether one is the user or the target. The Gulf has already been the scene of two major examples of asymmetric warfare or terrorism directed against the US, both of which may have some connection to Iran. These include the bombings of the Saudi National Guard training center in Riyadh in November 1995, the USAF barracks in Al Khobar in June 1996, and the USS Cole in October 2000. Coupled to numerous threats and attempts, and far more bloody attacks on US Embassies in Kenya, and Tanzania, it is obvious that this threat poses a continuing threat to US forces and facilities in the region, as well as to each of our allies.

At the same time, it is important to note that the overall patterns in Gulf and Middle Eastern terrorism are mixed. The US State Department counts of total international attacks by region indicates that the Middle East as whole – which includes a significant number of additional attacks in the Levant and North Africa -- has ranked fourth in the number of incidents over the last six years, after Western Europe, Latin America, and Asia. This reporting also shows a sharp decline in the number of incidents from 116 in 1994 to less than 50 in 1995-1999, and only 25 in 1999. If terrorism is measured in terms of casualties, the Middle East ranks third, after Asia and Africa, with annual peaks of as many as 1,097 casualties in 1996, and lows of 31 in 1999. The
total Middle Eastern casualties during 1994-1999 were about one-third of those in Asia, and one half of those in Africa.\textsuperscript{46}

The US State Department and US intelligence community report that these trends may change in the future, and do so with little warning. Middle Eastern terrorist groups and their state sponsors continue to plan, train for, and carry out acts of terrorism at levels comparable to those in recent years. Important international terrorist groups remained active and continued to try to mount lethal attacks. These included Usama Bin Ladin’s multinational al-Qaida organization as well as The Islamic Resistance Movement (HAMAS) and Palestinian Islamic Jihad (PIJ), both of which receive support from Iran.\textsuperscript{47}

Iran and Iraq all persisted in their direct or indirect state sponsorship of terrorism, although this rarely had global effects or implications. In most cases, this support has been limited. It has mainly included providing assistance, training, or safehaven to terrorist groups opposed to the Middle East peace process. In some cases, particularly Iran, it also included targeting regime dissidents and opponents for assassination or harassment.

It is also important to note that global aspects of terrorism affect the region from outside it. Europe and the US are important sources of funding for extremist and terrorist movements inside the region. Afghanistan and Pakistan have become sanctuaries or sources of funding for movements like Usama Bin Ladin’s al-Qaida, Afghanistan has also become a massive source of narcotics and narcoterrorism inside Iran.

**Implications for US Policy**

It is easy to oversimplify the problem of evaluating and improving US conventional military capabilities in the Gulf and issue dire warnings or exaggerated complaisance. It is equally easy to present long and detailed “shopping lists” for force improvements to correct the impact of years of funding and force cuts. In reality, however, the trends in US military capabilities in the Gulf are highly complex and are sometimes contradictory. It is also dangerous to speculate on
detailed force improvement priorities without access to classified information and USCENTCOM’s detailed knowledge of US contingency needs. As a result, there are significant problems in reaching any decisive conclusions about US capabilities, and whether the cup is half-empty or half-full.

It is clear that the US has many strategic and military strengths in the region, which combine with the strengths of its Southern Gulf allies:

- The lack of any major outside opponent: a legacy of the end of the Cold War.
- The Coalition victory in the Gulf War.
- A decisive US and allied superiority in the Gulf region in many areas of deployed military technology.
- Southern Gulf allies which offer the US more support than at any time in the past, and which are capable of both aiding US rapid reinforcement and sustaining many aspects of US power.
- Relatively robust world oil export capabilities.
- Improvements in US power projection capabilities in many of the areas exposed as problems during the Gulf War -- including upgrading the strike capabilities of US fighters, improved prepositioning, improved sealift, and improved readiness and force management for US Army forces.
- A current ability to win control of the seas in the Gulf and achieve air superiority rapidly.
- UN sanctions which have destroyed most of Iraq’s capability to use and produce weapons of mass destruction, coupled to half a decade in which Iraq has been cut off from major arms imports.
- An Iran that lost 40% or more of its ground force equipment in 1988, and which is still heavily dependent on US and British supplied equipment that is now worn and largely obsolete -- with ages of 15 to 25 years without MSIPs or comprehensive renovation. An impoverished Iran has also had to cut back sharply on its arms imports since the Gulf War, and so far is only making slow progress in acquiring nuclear weapons.
- Time in which to help build-up Southern Gulf forces, complete efforts to improve US power projection capabilities, and develop counterproliferation capabilities, because of the inevitable delays in any Iranian and Iraqi military build-up.

At the same time, it is equal that the US faces many military problems, ongoing regional problems, and challenges in dealing with Iran and Iraq, Southern Gulf states, and issues in dealing
with the impact of declining US defense budgets of problems and future challenges in dealing with Iran and Iraq, Southern Gulf states, and the impact of declining US defense budgets:

- The probability that Iraq will remain a revanchist and authoritarian state, the possibility of a backlash against US policy, and the probability that Iraqi will break out from the UN sanctions before the year 2000.

- Growing problems with the Kurdish security zone and infighting between the Kurds of Talabani and Barzani.

- Near isolation in pursuing a policy of “dual containment” towards Iran, with little or no practical support -- even in the region -- for the economic and political isolation of Iran.

- Problems in establishing US credibility regarding claims about the Iranian threat -- including recent US charges about Iranian deployment of chemical weapons on islands in the Gulf, the volume of Iranian arms sales, and the role of Rafsanjani and the Iranian ruling elite in terrorism.\(^{48}\)

- The risk of a sudden “breakout” in Iranian or Iraqi nuclear capabilities if either state should be able to buy fissile material from the former Soviet Union or any other suppliers, or “breakout” in deploying advanced biological weapons.

- The failure of the Gulf Cooperation Council to emerge as a cohesive military alliance.

- Continuing waste and lack of integration in most Southern Gulf military purchasing efforts and the slow development of integrated air, maritime surveillance, and anti-mine capabilities.

- Tensions between the friendly Southern Gulf states: Saudi vs. Oman, Bahrain vs. Qatar, Qatar vs. Saudi, divisions in UAE, old tensions with Kuwait.

- Growing uncertainties within the Southern Gulf states regarding US forces and commitments, and the impact of US budget and force cuts on US capabilities in the Gulf.

- Growing economic and ethnic problems in many Southern Gulf states, coupled to the problem of Islamist extremism.

- A lack of full coordination with the Southern Gulf states in prepositioning US land forces equipment, and dealing with the problem of counter-terrorism.

- US attitudes and politics that exacerbate the Western tendency to confuse the Islamic revival with Islamist extremism, and make the “clash of civilizations” a self-fulfilling prophecy.

- The lack of clear force plans and contingency plans to deal with the problem of counterproliferation.

- A lack of a clear long-term US policy for dealing with energy emergencies, coupled to weak US and GCC modeling of energy vulnerabilities and trends in the Gulf region.
It is highly unlikely that the US can ever “fill the cup” by developing all of the forces and capabilities it needs to eliminate all of its military weakness and vulnerabilities. In fact, it is virtually certain that the real test of US capabilities will be the willingness to engage in an enduring struggle to keep the cup at least two-thirds full. The US certainly has the present and planned military resources to win any conventional conflict in the Gulf if it only faces a single major commitment in the Gulf, particularly if it receives continuing support from its Southern Gulf allies.

There is, however, a clear need to look in detail at the weaknesses in US forces and power projection capabilities for war fighting in the Gulf, and to reexamine the options for force improvements in ways which are not bound by the limits of the fiscal guidance used in recent budgets or the new Quadrennial Defense review underway in 2000. What is needed is a major net assessment and programming exercise by USCENTCOM, the command with real expertise in the region, and which can be done without the awkward bureaucratic trade-offs and compromises that seem to characterize such efforts by the Joint Staff. The problems in US capabilities are not failures in strategy, tactics, and technology, or in developing an effective engagement strategy to deal with our allies. They are problems in priorities and resources and determining what is need with the proper expertise. 49

At some point, the President, the Congress, and the American people must also decide whether they are willing to spend what it takes to maintain the present commitment and superpower status of the US. The US strategic debate often concentrates on the search for new strategies, new technologies and new force mixes that can somehow allow the US to do more militarily with less manpower, fewer forces, and smaller defense budgets. There is good reason to suspect, however, that such a search for new ways to do more and more with less and less is largely illusory. The last quarter century has been filled with attempts to make the US defense establishment more efficient, and none have changed the basic ratio of the cost of US military capabilities relative to US military commitments. Ultimately, the choice may boil down to one of
whether the US is willing to devote at least 3% of its GNP, or around $350 to $400 billion a year, to maintain its military forces. At least in the mid term, the US is unlikely to be able to spend less without accepting growing military risks in the Gulf and the rest of the world.


5 The Congressional Budget Office carried out the study using data from the Department of Defense and the Office of Management and Budget, as shown in “Budgeting for Defense: Maintain Today’s Forces,” Washington, CBO, September 2000, cbo.gov.

6 Statement of Dan L. Crippen, Director, Budgeting for Defense: Maintaining Today’s Forces, before the Committee on the Budget, United States Senate, September 14, 2000.


14 The Congressional Budget Office carried out the study using data from the Department of Defense and the Office of Management and Budget, as shown in “Budgeting for Defense: Maintain Today’s Forces,” Washington, CBO, September 2000, cbo.gov.

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16 The unclassified portions of the Department of Defense data base for the Conduct of the War or “COW” study reveal many cases where the US used more than 50% of its inventory of special purpose equipment, weapons systems, and stocks for the Gulf War. For example, the US Army used more than 76% of many of its world-wide stocks of key types of logistic vehicles in spite of massive assistance from host countries, and Japanese aid in providing civilian vehicles.


22 The FY 2001–2005 program supports an aircraft carrier force structure of 12 fully deployable units. At the end of FY 2001, the carrier force will consist of nine nuclear–powered vessels—eight of the CVN–68 Nimitz class plus the Enterprise (CVN–65)—and three conventionally–powered units. One of these ships, the J. F. Kennedy (CV–67), has been serving as an active as well as a reserve/training asset. The FY 2001 budget redesignates this ship as an active unit, enabling it to be incorporated fully into the carrier deployment schedule.

The newest Nimitz–class aircraft carrier, Ronald Reagan (CVN–76), will join the fleet in FY 2003, replacing the Constellation (CV–64). At that point, two conventionally–powered carriers—Kitty Hawk (CV–63), stationed in Yokosuka, Japan, and the J. F. Kennedy—will remain in the fleet. The Kitty Hawk will be retired in FY 2008, when CVN–77 enters service. The first of the Nimitz–class follow–on ships, designated CVNX, will enter construction in FY 2006 and join the fleet around FY 2013, replacing the Enterprise (CVN–65), which will then have seen more than 50 years of service. The second CVNX will replace the J. F. Kennedy about five years later, when that carrier is about 50 years old. Secretary of Defense William S. Cohen, Annual Report to the President and the Congress, 2000, Washington, Department of Defense, 2000, Chapter 5.


26 Armed Forces Journal, June, 1995, p. 46.


28 Ibid.

29 Ibid.

32 USAF briefings and briefing sheets, December, 1994; *Air Force Times*, December 19, 1994, p. 22.
46 See US State Department, *Patterns of Global Terrorism: 1999*, Department of State Publication 10687, Office of the Secretary of State, Office of the Coordinator for Counterterrorism, 2000, Appendix C.
47 This assessment is adapted from US State Department, *Patterns of Global Terrorism: 1999*, Department of State Publication 10687, Office of the Secretary of State, Office of the Coordinator for Counterterrorism, 2000, pp. 15 and 51-58.
48 Unclassified US data compound these uncertainties. ACDA reports that Iran imported an average of over $3 billion a year in constant 1993 dollars. It cut these imports to $1.6 billion in 1989, raised them to $2.0 billion in 1990 and $2.2 billion in 1991, cut them to $369 million in 1992, and spent $1 billion in 1993. These data are scarcely an indication of a massive Iranian build-up.