AIR FORCE BUDGET
Potential Reductions to the Strategic Missile Systems Budget

December 1990

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As requested, we reviewed the Air Force's funding requirements for fiscal years 1989, 1990, and 1991 for the Peacekeeper Rail Garrison, Minuteman, Peacekeeper missile, and Advanced Cruise Missile weapon systems and the Rapid Execution and Combat Targeting program to identify areas for potential budget reductions. We provided the results of our analysis to your offices during briefings in July and August 1990, prior to the time the Senate and House conferees reached agreement on the fiscal year 1991 defense budget. Accordingly, this report does not address actual amounts appropriated for these programs in the Defense Department Appropriations Act for fiscal year 1991. The information we provided is summarized below and discussed in detail in appendix I.

We identified potential budget reductions totaling about $2.138 billion—about $1.8 billion requested in fiscal year 1991, $322.5 million appropriated in fiscal year 1990, and $39.8 million appropriated in fiscal year 1989. These potential reductions result from our suggestions to delay the production decisions for the Peacekeeper Rail Garrison and Rapid Execution and Combat Targeting programs and from our analysis of current contract information and revised program requirements and estimates. Table 1 shows the potential reductions for each program.
Table 1: Summary of Potential Budget Reductions to Air Force Strategic Missile Systems

<table>
<thead>
<tr>
<th>Program</th>
<th>Fiscal year</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1991</td>
<td>1990</td>
<td>1989</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Peacekeeper Rail Garrison</td>
<td>$1,616.3</td>
<td>$207.4</td>
<td>$0</td>
<td>$1,823.7</td>
<td></td>
</tr>
<tr>
<td>Minuteman II</td>
<td>49.7</td>
<td>46.0</td>
<td>0</td>
<td>95.7</td>
<td></td>
</tr>
<tr>
<td>Peacekeeper missile</td>
<td>0</td>
<td>59.7</td>
<td>34.0</td>
<td>93.7</td>
<td></td>
</tr>
<tr>
<td>Advanced Cruise Missile</td>
<td>15.3</td>
<td>9.4</td>
<td>5.8</td>
<td>30.5</td>
<td></td>
</tr>
<tr>
<td>REACT*</td>
<td>94.1</td>
<td>0</td>
<td>0</td>
<td>94.1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,775.4</strong></td>
<td><strong>$322.5</strong></td>
<td><strong>$39.8</strong></td>
<td><strong>$2,137.7</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Rapid Execution and Combat Targeting.

We did not obtain agency comments on this report. However, we discussed its contents with officials from the Office of the Secretary of Defense and the Department of the Air Force and incorporated their comments where appropriate. Our scope and methodology are described in appendix II.

We are sending copies of this report to appropriate congressional committees; the Secretaries of Defense and the Air Force; the Director, Office of Management and Budget; and other interested parties.

This report was prepared under the direction of Nancy R. Kingsbury, Director, Air Force Issues, who may be reached on (202) 275-4268 if you or your staff have any questions concerning this report. Other major contributors to this report are listed in appendix III.

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Assistant Comptroller General
Contents

Letter

Appendix I
Potential Budget Reductions and Recissions to Air Force Strategic Missile Systems

Appendix II
Scope and Methodology

Appendix III
Major Contributors to This Report

Tables

Abbreviations

IMU Inertial Measurement Unit
REACT Rapid Execution and Combat Targeting
Potential Budget Reductions and Recissions to Air Force Strategic Missile Systems

We identified total potential budget reductions and recissions of about $2.138 billion in the Air Force’s procurement, operations and maintenance, and military construction appropriation accounts for its strategic missile systems: $1,775.4 million in the fiscal year 1991 budget request and $322.5 million and $39.8 million in appropriated funds for fiscal years 1990 and 1989, respectively.

Peacekeeper Rail Garrison

The Rail Garrison concept involves placing a force of 50 Peacekeeper missiles, which will be kept in continuous strategic alert, on 25 trains, each carrying two missiles. The trains would be parked inside train alert shelters in secure garrisons at U.S. Air Force bases. In the event of national need, the missiles would move onto the nation's railroad network. If necessary, the missiles could be promptly launched from within the train alert shelters.

Results of Analysis

We identified potential reductions of $1,823.7 million for this system: $1,616.3 million requested in fiscal year 1991 and $207.4 million appropriated in fiscal year 1990 (see table 1.1). These reductions relate to implementing our prior recommendation, which resulted from the lack of operational test and evaluation of the completed system.

Table 1.1: Potential Budget Reductions and Recissions to Peacekeeper Rail Garrison

<table>
<thead>
<tr>
<th>Program activity</th>
<th>Fiscal year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1991</td>
</tr>
<tr>
<td>Advanced procurement</td>
<td>$133.9</td>
</tr>
<tr>
<td>Procurement</td>
<td>1,055.1</td>
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<tr>
<td>Initial spares</td>
<td>158.7</td>
</tr>
<tr>
<td>Military construction</td>
<td>268.6</td>
</tr>
<tr>
<td>Total</td>
<td>$1,616.3</td>
</tr>
</tbody>
</table>

According to the Air Force’s acquisition milestones, no operational test and evaluation of the complete Rail Garrison weapon system will have been conducted at the time the initial production decision is scheduled to be made in February 1991. Also, current program office plans indicate that the majority of missile launch cars will be purchased in connection with the initial production decision rather than at the final full-rate production decision, as intended by Department of Defense directives.
Appendix I  
Potential Budget Reductions and Recissions  
to Air Force Strategic Missile Systems

In December 1989, we recommended¹ that the Secretary of Defense delay the initial production decision until the Air Force has conducted some operational test and evaluation of the complete weapon system. Later, during congressional testimony, we suggested² that funds appropriated in fiscal year 1990 for advanced procurement and military construction should be rescinded pending completion of some operational test and evaluation.

Minuteman II

The current Minuteman force structure consists of 450 single-warhead Minuteman II missiles and 500 three-warhead Minuteman III missiles deployed in underground silos at various U.S. Air Force bases. In submitting the Department of Defense fiscal year 1991 budget request, the Secretary of Defense announced that an outcome of ongoing Strategic Arms Reduction Talks could be the retirement of the Minuteman II force.

Results of Analysis

We identified potential reductions of $95.7 for this system: $49.7 million requested in fiscal year 1991 and $46 million appropriated in fiscal year 1990 (see table 1.2). The potential reductions are based primarily on funding adjustments made by the Minuteman System Program Office in anticipation of the Minuteman II force’s retirement.

Table 1.2: Potential Budget Reductions and Recissions to Minuteman II

<table>
<thead>
<tr>
<th>Program activity</th>
<th>Fiscal year 1991</th>
<th>Fiscal year 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement equipment (3020 Appropriation)</td>
<td>$6.4</td>
<td>$16.7</td>
</tr>
<tr>
<td>Replenishment spares (3020 Appropriation)</td>
<td>26.4</td>
<td>15.7</td>
</tr>
<tr>
<td>Depot repairs and modifications (3400 Appropriation)</td>
<td>16.9</td>
<td>13.6</td>
</tr>
<tr>
<td>Total</td>
<td><strong>$49.7</strong></td>
<td><strong>$46.0</strong></td>
</tr>
</tbody>
</table>

Replacement Equipment

Program office documents show that $50.7 million of the total amount appropriated for Air Force missile procurement in fiscal year 1990 was for Minuteman replacement equipment. For fiscal year 1991, the Air Force requested $21.2 million for this equipment.

¹ICBM Modernization: Rail Garrison Production Decision and Launch Car Acquisition Should be Delayed (GAO/NSIAD-90-19, December 7, 1989).

Appendix I
Potential Budget Reductions and Recissions
to Air Force Strategic Missile Systems

The program office provided us with updated estimates of funding requirements as of April 1990 for fiscal years 1990 and 1991. Those estimates were $34 million for fiscal year 1990 and $14.8 million for fiscal year 1991. These revised requirements resulted in an excess over program needs of $16.7 million in appropriated funds and $6.4 million in requested funds for fiscal years 1990 and 1991, respectively. Program officials agreed with our calculation and stated the potential retirement of Minuteman II has reduced the need for replacement equipment funding.

Program documents show that $85.3 million of the total amount appropriated for Air Force missile procurement in fiscal year 1990 was for Minuteman replenishment spares. The program office provided us with updated fiscal year 1990 funding requirements as of April 1990. We compared updated fiscal year 1990 funding requirements of $69.6 million with the amount appropriated and identified an excess of $15.7 million. Program officials agreed with our calculation and stated that these funds exceed program needs due to cancellations and modifications of some Minuteman II life-extension programs.

Beginning in fiscal year 1991, the Air Force will implement a new concept of management for replenishment spares, which will transfer funding responsibility from this central procurement account to the Air Force stock fund. We identified potential reductions of $26.4 million in the amount requested for fiscal year 1991 from this stock fund. These excess funds resulted from the cancellation of three Minuteman II life-extension programs: $15.9 million for Minuteman II Stage III motor replacement, $10.1 million for Stage I nozzle replacement, and $0.4 million for Stage I propellant replacement. According to Air Force officials, funding for these programs still remains in the stock fund.

The Air Force had planned to begin a program to refurbish the Minuteman II Stage I propulsion motor beginning in fiscal year 1990. Program officials informed us that $13.6 million in appropriated funds had been budgeted for this refurbishment in fiscal year 1990, but funds are no longer needed since the Air Force decided to cancel the program in anticipation of the retirement of the Minuteman II force. The program office provided us with updated fiscal year 1991 funding requirements, which were $16.9 million less than the amount requested: $10.5 million due to the cancellation of the Stage I propulsion motor refurbishment program and $6.4 million due to other miscellaneous reductions. Program officials stated that the fiscal year 1990 and 1991 amounts are excess and available for reduction.
Appendix I
Potential Budget Reductions and Recissions
to Air Force Strategic Missile Systems

Peacekeeper Missile

The Peacekeeper missile is a four stage intercontinental ballistic missile, which has been designed to deliver 10 reentry vehicles to independent targets at ranges usually greater than 5,000 miles. The mission of the Peacekeeper weapon system is to enhance the deterrent posture of U.S. strategic forces. Should deterrence fail, the Peacekeeper missile must be able to effectively attack the full spectrum of designated targets with nuclear weapons.

Results of Analysis

We identified potential Peacekeeper missile procurement budget (3020 Appropriation) reductions of $93.7 million: $34 million in fiscal year 1989 appropriations and $59.7 million in fiscal year 1990 appropriations. These potential reductions resulted from the procurement of Peacekeeper Inertial Measurement Units (IMUs) for less than expected amounts.

In December 1989, the program office approved the fiscal years 1989 and 1990 production buys of IMUs for the Peacekeeper missile’s guidance and control systems. It set aside (committed) fiscal year 1989 funds in the amount of $67.1 million for 12 IMUs and fiscal year 1990 funds in the amount of $106.6 million for 17 IMUs.

An IMU procurement contract for both fiscal years was awarded to Rockwell International Corporation on March 5, 1990. The amount of the contract (target price and warranty provisions) was $33.1 million for fiscal year 1989 and $46.9 million for fiscal year 1990. The differences between the amounts committed and the amounts obligated for the IMU procurements are excess and could be rescinded.

Program office officials agreed with our calculations but did not agree that the reductions should be made because they planned to use the savings for other unfunded contingencies and requirements.

Advanced Cruise Missile

The Advanced Cruise Missile began in 1982 as a highly classified, presidentially directed program. It is being developed by the Air Force to enhance the long-term effectiveness of the bomber leg of the strategic triad with a capability of defeating projected Soviet defenses through the 1990s. As of May 1990, the Air Force planned to buy 1,461 missiles.

Since 1986, this missile program has encountered setbacks and delays due to test failures, production problems, and other program changes. For example, as of May 1990, production was being delayed because of...
Appendix I
Potential Budget Reductions and Recissions
to Air Force Strategic Missile Systems

fuel leak problems. Air Force officials said production could not resume until the fuel leak problems are resolved.

Results of Analysis

We identified potential reductions of $30.5 million in the initial spares account (3020 Appropriation): $15.3 million requested in fiscal year 1991 and $9.4 million and $5.8 million appropriated in fiscal years 1990 and 1989, respectively. These potential reductions are based on the Air Force not adjusting its initial spares budget request.

Due to delays and slippages in the Advanced Cruise Missile program's delivery schedules, the Air Force has requested and received more initial spares funds than required. However, the Air Force has not adjusted the missile's initial spares budget request to recognize that (1) $13.2 million of missile procurement funds was used to buy initial spares, (2) $6.8 million in excess quantities is on order, and (3) $5.8 million of fiscal year 1989 funds reprogrammed from other programs and $9.4 million of fiscal year 1990 funds remain unobligated. As a result, until the program resumes production and the Air Force can justify a need for additional spares funds, funding for the initial spares could be reduced by $15.3 million in the fiscal year 1991 budget request and by $15.2 million in rescissions to appropriated funds for fiscal years 1990 and 1989.

Rapid Execution and Combat Targeting

The Rapid Execution and Combat Targeting (REACT) program is a Class V modification\(^3\) designed to modernize the 100 launch control centers used for the Minuteman and Peacekeeper intercontinental ballistic missile weapon systems. The program consists of two elements—a weapon system control element and a higher authority communication and rapid message processing element. Under the weapon system control element, launch control center consoles and processors will be replaced and workstations will be restructured to increase the efficiency of launch control center operations. The higher authority communication and rapid message processing element will reduce, through automation, the time it takes launch control center crew members to process emergency action messages from the National Command Authorities, which are currently processed manually by crew members.

Concept definition of the REACT modification began in fiscal year 1987, full-scale development began in fiscal year 1989, and production is

\(^3\)Class V modifications are those which provide a new or improved operational capability or which remove an existing capability that is no longer required.
scheduled to begin in fiscal year 1991. The Air Force has directed that First Asset Delivery\textsuperscript{4} be achieved in calendar year 1993. The program office plans to achieve that milestone in April 1993—the first launch control centers to be modified will be for Minuteman III missiles. The last REACT modified launch control centers are for Minuteman II missiles and are scheduled to be turned over to the Strategic Air Command in December 1994.

Results of Analysis

We identified a potential reduction in the Air Force’s fiscal year 1991 missile procurement budget request (3020 Appropriation) of $94.1 million—the amount intended for REACT production and for other REACT-related purposes. This potential reduction exists because it is possible to delay the beginning of REACT production from fiscal year 1991 to fiscal year 1992 and still meet the Air Force’s need to have all 100 launch control centers modified by the mid-1990s.

The REACT production could be delayed until fiscal year 1992 without jeopardizing the First Asset Delivery date or the completion date for all Minuteman and Peacekeeper launch control centers because the REACT Program Management Directive allows for a First Asset Delivery date anytime during 1993, rather than specifying April 1993 as scheduled by the program office. The December 1989 program office schedule shows a 25-month period between the first production contract award scheduled for March 1991 and the First Asset Delivery date of April 1993. Delaying the production award 8 months until November 1991 would still provide 25 months to achieve a First Asset Delivery date in December 1993, which would comply with the Program Management Directive. Another reason is that the program office plans to complete modifying all centers by December 1994—or about 20 months after First Asset Delivery in April 1993. Extending the First Asset Delivery date by 8 months to December 1993 would still allow completion of the REACT modification by about August 1995 and, in our view, meet the Air Force’s stated need to have all centers modified by the mid-1990s.

\textsuperscript{4}First Asset Delivery for silo-based systems is defined by the Strategic Air Command as two interconnected launch control centers and their associated launch facilities in the same squadron.
This review is one of a series that examines defense budget issues. We reviewed the procurement, operations and maintenance, and military construction appropriation accounts for Peacekeeper, Peacekeeper Rail Garrison, Minuteman, and Advanced Cruise Missile weapon systems and the Rapid Execution and Combat Targeting program.

In our evaluation of the fiscal year 1991 budget requests and prior year appropriations, we (1) reviewed development progress and production plans to determine if planned production is warranted, (2) evaluated unobligated balances and plans to obligate these balances to determine if they are needed, and (3) reviewed those events (i.e., proposals received and contracts awarded) that had occurred since the budgets were presented to the Congress to determine if assumptions used remain valid.

We performed our work at Air Force Headquarters, Washington, D.C.; Ballistic Missile Office, Norton Air Force Base, California; Ogden Air Logistics Center, Hill Air Force Base, Utah; and Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma. We conducted our review from December 1989 to September 1990 in accordance with generally accepted government auditing standards.
Appendix III

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