



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884



REPORT  
NO. 92-038

January 23, 1992

MEMORANDUM FOR ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL  
MANAGEMENT AND COMPTROLLER)  
COMMANDER IN CHIEF, STRATEGIC AIR COMMAND

SUBJECT: Final Quick-Reaction Audit Report on Peacekeeper  
Missile Follow-on Testing (Project LCD-0040.01)

Introduction

On October 30, 1991, we reannounced the audit of option pricing to include the audit objective for determining the efficiency of the Peacekeeper Operational Test and Evaluation plan. During the audit, we determined that the Strategic Air Command (SAC) plan for testing Peacekeeper missiles can be accomplished without awarding additional production contracts for missile motors. This Quick-Reaction Report is being issued due to the urgency of avoiding award of missile motor contracts. The cancellation of the award can result in potential monetary benefits of \$196 million as of December 31, 1991. The monetary benefits will decrease if the decision to cancel the award is delayed.

Background

In 1971, the SAC began Research Development Test and Evaluation efforts to develop a new Intercontinental Ballistic Missile (ICBM), the Peacekeeper, to be deployed from existing Minuteman silos. The Peacekeeper is the largest missile in the ICBM inventory and is capable of delivering 10 nuclear warheads in excess of 5,000 miles. Peacekeeper production began in FY 1984 with first delivery in September 1986. By December 1988, 50 missiles were delivered to meet the present missile deployment requirement. Initial operational testing included 18 launches of the missile, which was concluded in March 1989. SAC officials stated that the early completion of the test phase was a result of unprecedented success in missile reliability and accuracy.

The Ballistic Missile Office, the Air Force procuring agency for the Peacekeeper, is responsible for procuring adequate numbers of missiles to support the SAC requirement.

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AGI 06-09-2805

## Discussion

Missile requirements. SAC, as program sponsor of the Peacekeeper, established requirements for the Peacekeeper program, which determined the number of missiles needed to carry out the program goals. The present requirement is for the total purchase of 114 missiles to be used as follows:

50 on alert in silos  
49 operational test and evaluation (OT&E) missiles  
15 aging and surveillance missiles

114

The 49 OT&E missiles are being procured to support the SAC requirement of determining system reliability by launching 3 test missiles per year. Aging and surveillance missiles are used during the missile's life to test for age-related degradation.

Current missile inventory. The Air Force has awarded contracts that will provide a total of 102 missiles with final delivery by the end of FY 1993. The Air Force has also obtained five Peacekeeper missiles from the recently canceled Rail Garrison program, which will be added to the Peacekeeper program. There is also 1 additional missile that was excess due to the early conclusion of the Peacekeeper OT&E program that, when added to the 102 missiles under contract, will bring the total Peacekeeper inventory to 108 missiles. In addition to the 50 missiles on alert and 15 missiles for aging and surveillance, the 108 missile inventory will allow for the launch of 3 test flights per year through the year 2003.

Missile motors. The Air Force plans to procure additional motors to assemble another 12 missiles by the end of FY 1994. This action will increase the missile inventory to 120 and represents the last missile motors to be manufactured for the Peacekeeper missile program. Historically, motors have been the weakest link in missile life, requiring motor remanufacture in order to extend the service life. Motors provided in FY 1991 contracts will be 10 years old before they are needed in the year 2004.

Monetary benefits. Potential monetary benefits of about \$196 million can be realized by not procuring the additional missile motors. These monetary benefits are determined as follows:

| <u>Motor Stage</u> | <u>Request for Proposal</u> | <u>Total Contract Value</u> | <u>Long Lead Funds</u> | <u>Total Savings</u> |
|--------------------|-----------------------------|-----------------------------|------------------------|----------------------|
| Stage I            | F-04704-90-G-0021           | \$92,500,000                | \$12,100,000           | \$80,400,000         |
| Stage II           | F-04704-90-R-0022           | 81,500,000                  | 12,900,000             | 68,600,000           |
| Stage III          | F-04704-90-R-0023           | 54,200,000                  | 15,600,000             | 38,600,000           |
| Stage IV           |                             | 13,600,000                  | 5,000,000              | <u>8,600,000</u>     |
|                    |                             |                             |                        | <u>\$196,200,000</u> |

These monetary benefits reflect cost data as of December 31, 1991.

Summary. The FY 1991 motor procurement, the final production buy, will add 12 Peacekeepers to the present 108 missile inventory for a total of 120. The present test rate of three test launches per year will provide adequate missiles to test through FY 2007. The present level of 108 missiles will provide for testing through FY 2003. If test launches beyond year 2003 are deemed necessary, fewer launches per year or alternate year testing are a viable alternative. The current plan to proceed with the FY 1991 procurement results in adding 12 missiles to an aging force. In addition, given the rapidly changing political climate and declining threat of an all out thermonuclear war, there is a very serious question whether the missiles will ever be needed. To continue the FY 1991 motor procurement ignores the realities of current global military conditions, the designed life of the engines, and reasonable testing needs.

### Recommendation for Corrective Action

1. We recommend that the Commander in Chief, Strategic Air Command, review and update the Peacekeeper program requirements and revise the number of annual test launches if the system or tests of the system are needed beyond the year 2003.
2. We recommend that the Air Force Program Executive Officer for Strategic Systems not award the FY 1991 production contracts for Peacekeeper missile motors.

### Management Comments

A draft of this quick-reaction report was provided to the Assistant Secretary of the Air Force (Financial Management and Comptroller), the Commander in Chief, Strategic Air Command, and the Commander, Ballistic Missile Office on December 18, 1991.

The Office of the Assistant Secretary of the Air Force for Acquisition, Deputy Director of Strategic Special Operations Forces and Airlift Programs, provided comments on January 10, 1992, (Enclosure 1). The Deputy Director did not concur with draft report Recommendation 1., that program requirements be adjusted to reflect 108 missiles, and Recommendation 2., that the FY 1991 production contracts for the Peacekeeper missile program not be awarded by the Ballistic Missile Office. The Deputy Director stated that there was a need for a review and update of program requirements without dictating that the results would be 108 missiles and that the Program Executive Officer for Strategic Systems is the authority for award of the 1991 production contracts. Further, the Deputy Director stated that the cost savings in the draft report were not current and should be updated for the final report.

The Chief of Staff, Strategic Air Command provided comments on January 14, 1992, (Enclosure 2). The Chief of Staff concurred with the findings and recommendations of the draft report and stated that they were reevaluating the length of service anticipated for the Peacekeeper missile system. Further, the reduction of missiles from 114 to 102 would support the test program through 2003. The Chief of Staff stated that if the Peacekeeper remains in the force structure beyond 2003, there may be too few missiles to maintain the inventory and accomplish reliability testing with 102 missiles as well as 114 missiles.

The Assistant Secretary of Defense, Program Analysis and Evaluation provided comments on January 10, 1992, (Enclosure 3). The Assistant Secretary stated that it was wrong to recommend the cancellation of the FY 1991 procurement of Peacekeeper missile motors based on the 10 year design life because the service life of the Peacekeeper would probably be

considerably longer than the design life and that the history of other missiles shows that. Also , the Assistant Secretary stated that to reopen production lines would be extremely costly.

#### Audit Response To Management Comments

We revised Recommendation 1. to have the Strategic Air Command review and update the Peacekeeper program requirements and to revise the number of test launches needed annually if there is a need to retain the Peacekeeper system beyond the year 2003. We have redirected Recommendation 2. to not award the FY 1991 production contracts for Peacekeeper missile motors to the Program Executive Officer for Strategic Systems. We believe it is imperative for the Air Force to make an expedited decision on canceling the award of the missile motors contracts before potential contract costs increase further. We also revised the monetary benefits to \$196 million based on the cost data received from the Air Force which reflects the cost data as of December 31, 1991.

The Assistant Secretary of Defense, Program Analysis and Evaluation stated that the central argument was the 10-year design life of the missile. We disagree with the Assistant Secretary because our argument against buying more missiles is based on the current stock and the potential for testing fewer missiles per year. Our reason for raising the 10-year design life was to suggest that these 12 missiles would be old by the time they could be used for testing. The purchase of the 12 missiles would not provide much of an age advantage over the existing missiles and is not cost-effective.

#### Request for Comments

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, we request that the Air Force provide comments to the final report by February 7, 1992. The comments must indicate concurrence or nonconcurrence in the finding and each recommendation addressed to you. If you concur, describe the corrective actions taken or planned, the completion dates for actions already taken, and the estimated completion dates for completion of planned actions. If you nonconcur, state your specific reasons for each nonconcurrence. If appropriate, you may propose alternative methods for accomplishing desired improvements.

If you nonconcur with the estimated monetary benefits (Enclosure 4) or any part thereof, you must state the amount you nonconcur with and the basis for your nonconcurrence. Recommendations and potential monetary benefits are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment.

We appreciate the cooperation and courtesies extended to the audit staff during this segment of our audit. If you have any questions concerning this final quick-reaction report, please contact Mr. James J. McHale at (703) 614-6257 (DSN 224-6257) or Ms. Macie Rubin on (703) 614-6273 (DSN 224-6273). Activities visited or contacted are listed in Enclosure 5, and planned distribution of this report is listed in Enclosure 6.



Robert J. Lieberman  
Assistant Inspector General  
for Auditing

Enclosures

cc:

Under Secretary of Defense for Acquisition  
Comptroller of the Department of Defense  
Secretary of the Air Force  
Air Force Program Executive Office for  
Strategic Systems



DEPARTMENT OF THE AIR FORCE  
WASHINGTON DC 20330-1000

OFFICE OF THE ASSISTANT SECRETARY

10 JAN 1992

MEMORANDUM FOR DODIG

SUBJECT: Draft Quick-Reaction Audit Report on Peacekeeper Missile Follow-on Testing (Project 1CD-0040.01) - INFORMATION MEMORANDUM

The Air Force has been requested to provide comments to your office on the subject report.

We do not concur with the first recommendation. While it is appropriate to request that the Commander in Chief, Strategic Air Command review and update Peacekeeper program requirements, it is inappropriate to dictate what the results of that review should be. We also do not concur with the second recommendation. The Program Executive Officer for Strategic Systems (AF PEO/ST) is the authority for award of the 1991 production contracts for the Peacekeeper missile motors. Finally, we do not concur with the monetary benefits (Enclosure 1). The cost savings in the report are not current and should be updated by the AF PEO/ST in time to support the final report. Also, the report needs to reflect the reality that the amount of savings will decrease over time if the decision to cancel the FY91 Peacekeeper buy is delayed.

The Air Force is currently staffing a package to evaluate the 1991 Peacekeeper production contract and will base its decision on a number of factors not addressed in the report. It is very important that the current efforts to thoroughly evaluate long term requirements for Peacekeeper be completed. The subject report should support continuation and completion of these on going actions as the basis for a future decision on Peacekeeper inventory requirements.

My action officer for this project is LtC Charley Pugsley, SAF/AQQS, DSN 227-8123/4.

*William F. Moorn*

William F. Moorn, Colonel, USAF  
Deputy Director of Strategic  
SOF, and Airlift Programs  
Assistant Secretary for Acquisition

ENCLOSURE 1



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS STRATEGIC AIR COMMAND  
OFFUTT AIR FORCE BASE, NEBRASKA 68113 5001



REPLY TO  
ATTN OF:

CS

14 JAN 1992

SUBJECT:

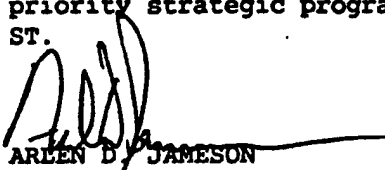
Comments Requested by Draft Quick-Reaction Audit Report on Peacekeeper Missile  
Follow-on Testing (Project 1CD-0040.01) 18 Dec 91

TO:

DOD IG

1. SAC concurs with the findings and recommendations of the draft report. As warranted by the changing world order, we are reevaluating the length of service anticipated for the Peacekeeper missile system. At this point in time, however, we believe this action of curtailing the Peacekeeper missile buy is a calculated risk since we have not planned to phase the system out of the force structure due to age. In the event that Peacekeeper does remain in the force structure beyond the year 2003, we may have too few missiles to maintain the inventory and accomplish reliability testing at the appropriate level; but that may be true with 114 missiles as well.

2. Since the Peacekeeper program has been augmented by transfer of six assets from the Rail Garrison and developmental test programs, the missile procurement quantity can be curtailed from 114 to 102 and still support our test requirements through 2003. If this reduction is approved, we will work through the program executive officer and the system program office to effect necessary contracting and reprogramming adjustments. It is imperative that the savings realized be used to correct funding deficiencies in other high priority strategic programs which SAC will work with the Air Staff and AF/PEO ST.

  
ARLEN D. JAMESON  
Major General, USAF  
Chief of Staff

cc: AF PEO/ST  
BMO/CC  
HAF/XOO  
SAF/AQQ/  
FMB/TEP

ENCLOSURE 2





PROGRAM ANALYSIS  
AND EVALUATION

## ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1800



January 10, 1992

*Acting*  
MEMORANDUM FOR THE INSPECTOR GENERAL

SUBJECT: Draft Quick Reaction Audit Report on Peacekeeper Missile Follow-On-  
Testing (Project 1CD-0040.01)

*Quick* —

Your report recommends canceling the FY91 procurement of 12 sets of Peacekeeper rocket motors, because the present inventory of 108 missiles is adequate to test the Peacekeeper missile system through FY 2003, and any additional missiles that are procured would exceed their ten-year design life before they would be needed for testing in the 2004-2007 timeframe.

The report's argument concerning the ten-year design life of Peacekeeper is not correct. The system was first deployed in December 1986, and according to logic used in the report, all 50 sets of rocket motors in deployed missiles would need to be replaced by 1999. There is, however, no plan to replace these motors, and experience shows the actual service life to be considerably longer than the design life for ICBM systems and their motors. For example, the Minuteman III Stage I motor has never been refabricated, and the Stage II and Stage III motors have demonstrated a 17-year service life. The Minuteman III system as a whole, with a ten-year design life when procured, has already been deployed for 29 years, and the Air Force now estimates that it can be reliably maintained for another 20 years.

The report does correctly state that the fate of the Peacekeeper is uncertain, given the rapidly changing political environment and declining threat. Certainly, additional missiles need not be procured if we decide to retire the Peacekeeper system before 2003, but such a decision has not yet been made. Force structure decisions should lead procurement decisions; a decision to cancel FY91 procurement, however, anticipates a decision to retire Peacekeeper early. Furthermore, it would be extremely costly to reopen the Peacekeeper line once it is closed if additional test missiles are required.

Since the central argument of the report is faulty, I recommend that the report be withdrawn.

David S. C. Chu

ENCLOSURE 3

SUMMARY OF POTENTIAL  
BENEFITS RESULTING FROM AUDIT

| <u>Recommendation<br/>Reference</u> | <u>Description of Benefit</u>                                               | <u>Amount and/or<br/>Type of Benefit</u>                                                               |
|-------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1.                                  | Economy and Efficiency.<br>Adjust requirements for<br>Peacekeeper missiles. | Nonmonetary                                                                                            |
| 2.                                  | Economy and Efficiency.<br>Cancel plans to award<br>FY 1991 motor buy.      | Funds put to better<br>use of \$196 million.<br>Air Force Missile<br>Procurement funds<br>for FY 1991. |

ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition,  
Washington, DC  
Assistant Secretary of Defense (Production and Logistics),  
Washington, DC  
Deputy Assistant Secretary of Defense (Strategic Programs),  
Washington, DC

Department of the Air Force

Assistant Secretary of the Air Force for Acquisition,  
Washington, DC  
Ballistic Missile Office, Norton Air Force Base, CA  
Air Logistics command, Hill Air Force Base, UT  
90th Strategic Missile Wing, Francis E. Warren Air Force Base, WY  
576th Test Squadron, Vandenberg Air Force Base, CA  
Air Force Audit Agency, Norton Air Force Base, CA

Other Defense Activities

Strategic Air Command, Offut Air Force Base, NE

## FINAL REPORT DISTRIBUTION

### Office of the Secretary of Defense

Under Secretary of Defense for Acquisition  
Assistant Secretary of Defense (Production and Logistics)  
Assistant Secretary of Defense (Program Analysis and Evaluation)  
Director of Defense Procurement  
Comptroller of the Department of Defense

### Department of the Air Force

Secretary of the Air Force  
Assistant Secretary of the Air Force (Acquisition)  
Assistant Secretary of the Air Force (Financial Management and  
Comptroller)  
Air Force Audit Agency  
Commander, Ballistic Missile Office

### Other Defense Activities

Strategic Air Command, Offut Air Force Base, NE

### Non-DoD

Office of Management and Budget  
U.S. General Accounting Office, NSIAD Technical Information  
Center

### Congressional Committees:

Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
Senate Ranking Minority Member, Committee on Armed Services  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Ranking Minority Member, Committee on Armed Services  
House Committee on Armed Services  
House Committee on Government Operations  
House Subcommittee on Legislation and National Security,  
Committee on Government Operations

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Final Quick-Reaction Audit Report on Peacekeeper Missile Follow-On Testing

**B. DATE Report Downloaded From the Internet:** 06/20/99

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801).  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
**DTIC-OCA, Initials:** \_\_VM\_\_ **Preparation Date** 06/20/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.