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Briefing Report to the Chairman, Committee on Armed Services, U.S. Senate

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STRATEGIC FORCES

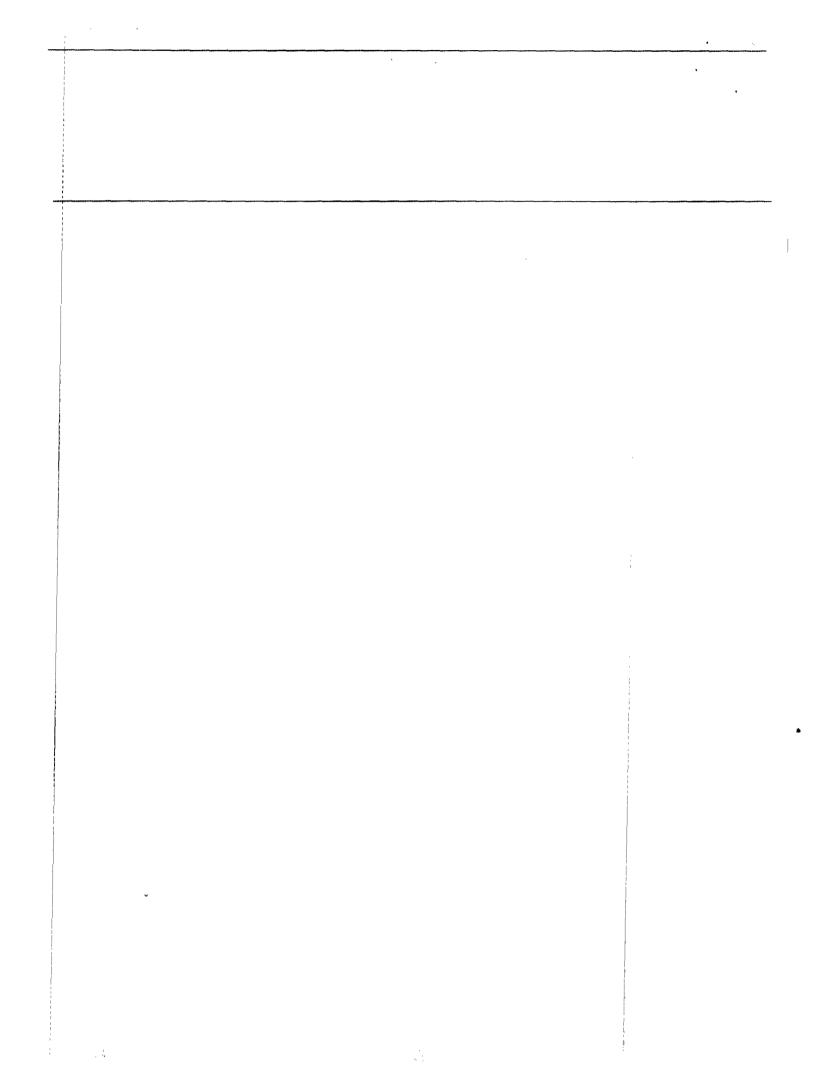
Justification for the Short Range Attack Missile II





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United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

B-229227

December 31, 1987

The Honorable Sam Nunn Chairman, Committee on Armed Services United States Senate

Dear Mr. Chairman:

On March 17, 1987, we briefed your office on the interim results of our work on the Short Range Attack Missile (SRAM) II program. This report provides our final results. As requested, our review addressed

- -- Air Force justifications for replacing SRAM A with SRAM II,
- -- our evaluation of the Department of Defense's (DOD's) SRAM II reports to the Committees on Armed Services, and
- -- the potential impact of delaying the SRAM II program 4 or 5 years.

A more detailed classified report (GAO/C-NSIAD-88-10) is being provided to you.

AIR FORCE JUSTIFICATION FOR SRAM A REPLACEMENT

The Air Force believes that, even with modifications, the SRAM A--which achieved an initial operational capability in August 1972--will not continue to meet strategic penetrating bomber needs. Therefore, it plans to develop and procure the SRAM II as a replacement missile with improved capabilities. The Air Force justifies replacing the SRAM A on the basis that

- -- the SRAM A inventory has declined and will continue to do so because of test requirements,
- -- the effects of aging could further reduce inventory and degrade effectiveness and safety,
- -- SRAM A's warhead does not meet current criteria for nuclear safety design, and

-- a more capable missile is needed because enemy defenses have improved and target characteristics have changed since SRAM A became operational.

Because the last SRAM A was produced in 1976 and there is no production of the missile, the number of missiles in the inventory will continue to decline as they are used to meet testing needs. For example, SRAM A missiles allocated to meet test requirements could be depleted within 2 years. Once these missiles are used, further testing will cause corresponding reductions in the operational force and spare missile inventory. Also, SRAM A testing and inspection have identified various effects of aging, such as higher motor case pressures and component failure rates, primarily with avionics. These effects could also have an impact on the number of missiles available to the operational force.

SRAM A's warhead meets all nuclear safety standards. However, according to the Department of Energy, it does not meet all modern criteria for nuclear safety design. We also found that intelligence information concerning enemy defenses and strategic target characteristics supported the Air Force's justification for a more capable missile.

DOD REPORTS REGARDING SRAM II ALTERNATIVES

The Committees on Armed Services have twice requested that DOD study and report on potentially less costly alternatives to SRAM II. Initially, DOD was asked to provide a report comparing the Air Force's proposed SRAM II design with a more "austere" version based on the SRAM A. Instead, DOD presented an analysis of the least costly SRAM II design capable of meeting the minimum essential requirements.

Since the first report did not provide the requested comparison, DOD was directed to submit a second report, this time comparing the cost effectiveness of procuring SRAM II versus minimal modifications to the existing SRAM A inventory.

In April 1987, DOD submitted the second report which presented an analysis comparing SRAM II with two SRAM A modification options. DOD stated that modifying SRAM A would cost less than SRAM II, but providing sufficient missiles to meet long-term requirements could only be met by a new missile production line. DOD also reiterated its prior conclusions that only the SRAM II meets stated

requirements, that problems would be encountered if SRAM A were remotored, and that the SRAM A warhead must be replaced. DOD concluded that SRAM II was the most cost effective alternative and recommended it to the Committees.

We agree with DOD's conclusions, no single SRAM A modification or combination of modifications can overcome the basic limitations imposed by the declining inventory of an out-of-production missile. We also believe that the inventory issues, safety concerns, effects of aging, logistics support problems, and the apparent need for improved missile capabilities are legitimate concerns, which support replacement of the SRAM A.

EFFECT OF DELAYING THE SRAM II PROGRAM

Delaying the SRAM II program for 4 or 5 years would have some disadvantages and some benefits. It would compound the SRAM A problems discussed above. Also, according to the SRAM II program office and Boeing officials, if the SRAM II program were delayed, much of the development progress would be lost because (1) a new design effort and competition would probably be required, (2) experienced personnel would be reassigned, and (3) regaining program impetus and financial support could lengthen the delay. Further, a delay could reduce the effectiveness of the penetrating bomber force because using the shorter range SRAM A would require a closer approach to targets, thereby increasing the bomber's exposure to enemy defenses. Finally, a delay in the SRAM II program could increase costs to the government because program restart costs would be required.

There could be some benefits from an extended delay. The SRAM II could be redesigned if technological breakthroughs were made by the United States or the enemy during the delay period, and an extended delay could help to reduce current budget reduction pressures.

Our review, conducted from September 1986 to July 1987, included work at the Department of Energy, the Office of the Secretary of Defense, Air Force Headquarters, and the Defense Intelligence Agency in Washington, D.C.; the Strategic Air Command in Omaha, Nebraska; the Aeronautical Systems Division in Dayton, Ohio; the Ogden Air Logistics Center in Ogden, Utah; the Oklahoma City Air Logistics

Center in Oklahoma City, Oklahoma; Boeing Aerospace in Seattle, Washington; Hercules, Inc., in Magna, Utah; and McDonnell Douglas, in St. Louis, Missouri.

We interviewed agency and contractor officials regarding SRAM A capabilities and status, strategic needs used to justify the SRAM II, warhead requirements, threat, and SRAM II program status. We reviewed and analyzed pertinent documentation concerning these issues, including SRAM A test reports and logistics data; SRAM II requirements documents and test and logistics plans; threat briefings; and two reports requested by the Congress to compare procuring SRAM II with either upgrading SRAM A or procuring an "austere" SRAM II. Our review was conducted in accordance with generally accepted government auditing standards.

We discussed this report with officials at the Office of the Secretary of Defense, the Aeronautical Systems Division and Air Force Headquarters and have included their comments as appropriate. As requested, we did not obtain official Department of Defense comments.

As arranged with your office, unless you publicly announce its contents earlier, we will not distribute this report until 10 days after its issue date. At that time, copies will be made available to appropriate congressional committees; the Secretaries of Defense and the Air Force; the Director, Office of Management and Budget; and other interested parties. If you have any questions, please contact me at 275-4268.

Sincerely yours,

Harry R. Finley

Senior Associate Director

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