

November 1993

# B-2 BOMBER

## Assessment of DOD's Response to Mandated Certifications and Reports



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

National Security and  
International Affairs Division

B-249989

November 3, 1993

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

The Honorable Daniel K. Inouye  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Ronald V. Dellums  
Chairman, Committee on Armed Services  
House of Representatives

The Honorable John P. Murtha  
Chairman, Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

Department of Defense Authorization Acts for fiscal years 1990, 1992, and 1993 required the Secretary of Defense to deliver to the Congress, certain certifications and reports concerning the B-2 bomber program. The Congress restricted the Air Force's use of about \$2.3 billion appropriated in fiscal years 1992 and 1993 for procurement of B-2 aircraft until those certifications and reports are delivered and an act of the Congress is passed authorizing release of the funds. The authorization acts also call for our office to report to the Congress concerning the certifications and reports submitted by the Secretary. This is an interim report in response to that legislation. A detailed classified report will be issued shortly.

## Background

The 1990, 1992, and 1993 Defense Authorization Acts require the Secretary of Defense to meet certain B-2 reporting and certification requirements before the last 5 of 20 planned aircraft can be procured<sup>1</sup> and the funds restricted by those acts can be obligated. The intent of the legislation is to control B-2 procurement decisions by requiring the Secretary to deliver certain assurances prior to procurement of additional B-2s. Collectively, the provisions required completion of certain demonstrations and flight

<sup>1</sup>Use of the term procured, in this instance, means award of a definitized contract providing prices, terms and conditions, and requiring delivery of the aircraft on a negotiated schedule.

tests, assurance of compliance with standards for fiscal management controls and quality assurance practices, and submission of a cost report.

The authorization act for fiscal year 1990 was passed when the planned B-2 program quantity was 132 aircraft, and the act for fiscal year 1992 was passed after the program quantity had been reduced from 132 to 75 aircraft. The act for fiscal year 1993 was passed after the program quantity had been reduced to 20 aircraft. The current program remains at 20 operational aircraft, and the Air Force has awarded contracts for production of 15 of those aircraft. Accordingly, the restrictions in the acts now apply only to procurement of the last five aircraft.

Long lead activities on the last five B-2s began in October 1989, and the Congress provided continued funding for these aircraft in fiscal years 1991 through 1993. The five aircraft were 60 percent to 70 percent assembled as of September 1993. Air Force officials advised us that prices for the aircraft have been negotiated with the contractor, but a definitized contract for the aircraft has not been signed. In July 1993, we reported<sup>2</sup> that the potential savings available at September 30, 1993, by not completing procurement of the last five aircraft would be about \$1.2 billion and would decrease as long as long lead activities continued beyond that date. Air Force officials believed the savings would have been about \$600 million. The total cost of development and procurement for 20 aircraft is estimated at \$44.4 billion in then-year dollars.

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## Results in Brief

The Secretary of Defense, on October 14, 1993, certified that 28 legislative requirements associated with B-2 performance, fiscal controls and quality practices, and submission of a cost report had been met. The Department of Defense provided us with evidence that indicated that the requirements involving B-2 performance and fiscal controls and quality practices had been met. The requirement concerning submission of a cost report, however, has not been met.

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## Performance Certifications

Although the requirements concerning performance appear to have been met, we believe the data supporting one requirement concerning the offensive and defensive avionics is barely sufficient. In our opinion, more complete integration and flight testing of offensive and defensive avionics in a B-2 is needed to provide convincing evidence that the Secretary's high confidence in the B-2's offensive and defensive avionics is warranted.

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<sup>2</sup>B-2 Costs, GAO/NSIAD-93-253R, July 23, 1993.

Only 30 percent of the flight test program, primarily developmental testing, has been completed. Satisfaction of the legislative requirements concerning B-2 performance does not ensure that all the risks related to the B-2 program have been eliminated. There are risks that problems with B-2 performance will be discovered as the remaining 70 percent of the flight test program is completed. In particular, flight tests to demonstrate performance have not been completed for several aircraft characteristics that are closely related to the certification. These include

- flight tests with a full complement of integrated B-2 offensive and defensive avionics incorporated in a B-2;
- flight tests to demonstrate detection and survivability of a B-2 configured in its currently planned final design (Block 30), demonstration that B-2 low observable design is repeatable, and flight tests in an operational environment against threat radars or simulators;
- integration and flight tests of precision weapons needed for successful accomplishment of the conventional mission; and
- flight tests demonstrating the full range and payload capabilities of the B-2, including resolution of issues involving aerodynamic loads being experienced that exceed the predictions that were used to design the aircraft's wing structure and perform ground tests.

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## Fiscal Controls and Quality Practices Certification

Although the Secretary certified that fiscal management controls and quality assurance practices of the B-2 contractor and major subcontractors met government standards, he noted that the Department was closely monitoring the prime contractor's discipline in implementing the fiscal management control system. The applicable system is the cost, schedule, and control system required by the contract. The objective of the system is to provide for budgetary and schedule control of the effort on contract, and to calculate cost and schedule variances from the planned baseline. The Air Force, in 1989, determined that the system design met the requirements of the contract. However, the contractor has had difficulty in implementing changes to cost and schedule baselines needed to reflect changes to program schedules. Since the system design has been determined to meet the standards required by the contract, the requirement of the act has essentially been met; however, the Air Force is closely monitoring the contractor's implementation of the system.

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## Cost Report

The Secretary submitted to the Congress the December 1992 B-2 Selected Acquisition Report (SAR) to fulfill the requirement for a B-2 cost report

imposed by section 151(f) of the 1993 Defense Authorization Act. We recognize that some of the information required by the act may be included in the B-2 SAR. However, we do not believe that the Department's submittal of the B-2 SAR satisfies the statutory requirement because it does not contain the specificity required by the legislation.

The act stipulates that the Secretary describe the total acquisition costs associated with a B-2 program resulting in 20 deployable aircraft, including all costs associated with development and procurement. It further specifies that the description of procurement costs should include cost estimates for all planned modifications, improvements, tooling, support equipment, interim contractor support, initial spares, termination, and other government costs.

A SAR is a standard report submitted to the Congress on all major defense acquisition programs. It has a standard format that does not include detailed cost estimates as specifically required by the act for the B-2. Therefore, we conclude that a different type of cost report was required by section 151(f) of the act.

The legislative history of section 151(f) supports this interpretation. The conference report indicates that the language that was adopted was based on provisions of the House Bill. The explanation of the House Armed Services Committee indicates that the committee imposed the requirement for a report because of its concern about the quality and accuracy of the cost information it had previously received from the Air Force.

We found the B-2 SAR describes changes to the development and procurement cost estimates in general. It briefly discusses costs associated with those areas specified in the act if those areas had undergone any changes to cost in the past year. However, it does not adequately describe cost estimates for B-2 development and procurement programs and does not specifically describe cost estimates for elements specified by legislation.

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## Recommendation

Because the B-2 SAR submitted by the Department does not meet the requirement of section 151(f) of the 1993 act, we recommend that the Secretary of Defense issue a revised report with the information required by the Congress.

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## Scope and Methodology

We reviewed the certification package submitted by the Secretary to the Congress, as well as earlier drafts of portions of the package, and supporting documentation provided by the Air Force. We interviewed officials of the B-2 Systems Program Office, Wright-Patterson Air Force Base, Ohio; the Combined Test Force, Edwards Air Force Base, California; the Departments of Defense and the Air Force, Washington, D.C.; and the Northrop B-2 Division, Pico Rivera, California.

We performed our work from November 1992 to October 1993. We have not obtained comments on this interim report from the Air Force or Department of Defense.

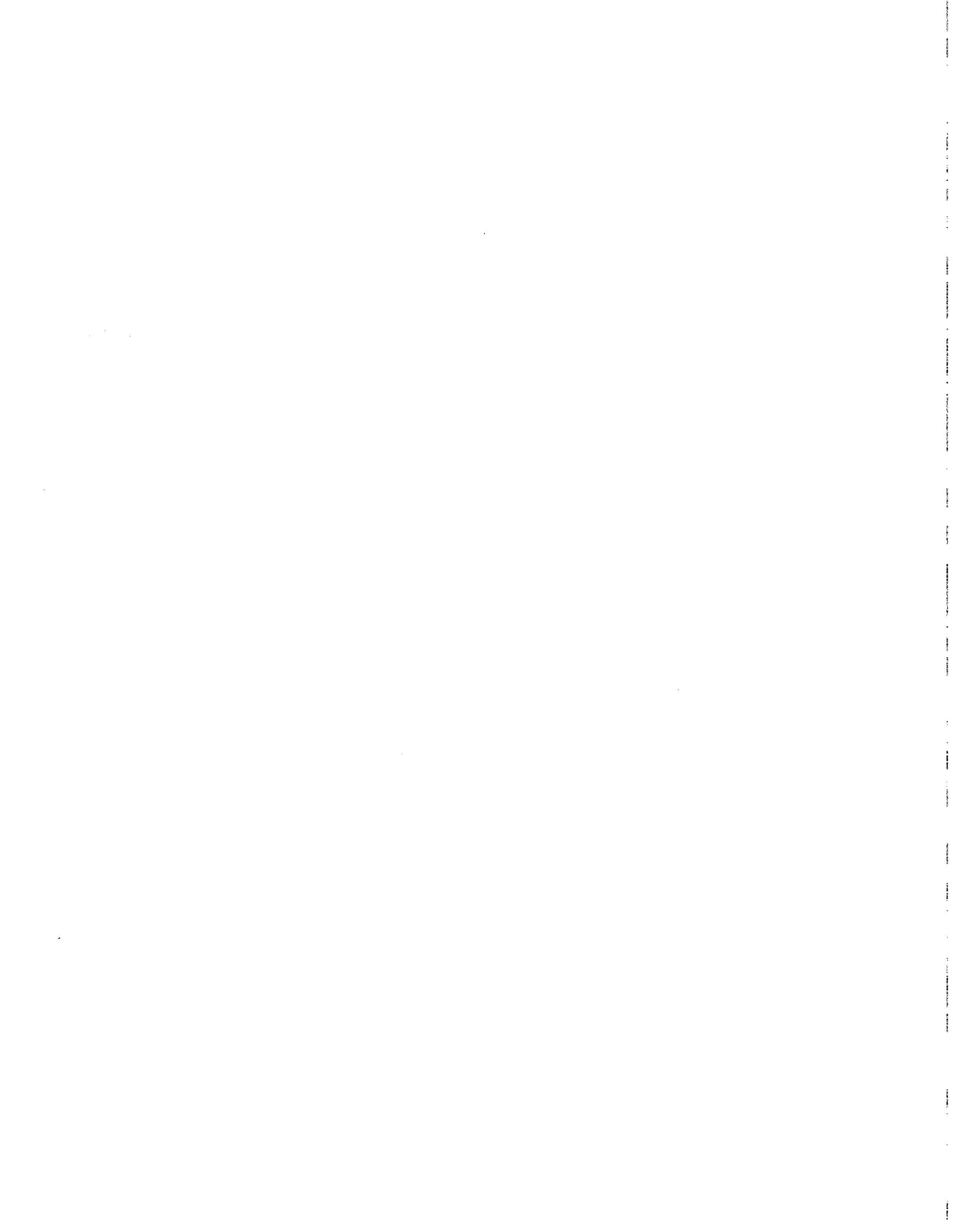
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We are sending copies of this report to the Ranking Minority Members of your committees; other appropriate congressional committees; the Secretaries of Defense and the Air Force; and the Director, Office of Management and Budget. We will also make copies available to others upon request.

This report was prepared under the direction of Louis J. Rodrigues, Director, Systems Development and Production Issues, who may be reached at (202) 512-4841 if you or your staff have any questions concerning this report.



Frank C. Conahan  
Assistant Comptroller General



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