DOCUMENT RESUME

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[Cost Estimates of the B-1 Aircraft Program]. PSAD-77-116, 197-121; B-163058. Hay 25, 1977. 3 pp.

Report to Sen. John C. Stennis, Chairman, Senate Committee on Armed Services; Sen. Edmund S. Huskie, Chairman, Senate Committee on Budget; Rep. George H. Mahon, Chairman, House Committee on Appropriations; Rep. Melvin Price, Chairman, House Committee on Armed Services; Rep. Robert M. Giaimo, Chairman, House Committee on Budget; Sen. John L. McClellan, Chairman, Senate Committee on Appropriations: Defense Subcommittee; by Elmer B. Staats, Comptroller General.

Issue Area: Federal Procurement of Goods and Services: Notifying the Congress of Status of Important Procurement Programs (1905).

Contact: Procurement and Systems Acquisition Div.
Budget Punction: National Defense (050); National Defense:
Weapon Systems (057).

Organization Concerned: Department of Defense; Department of the Air Force.

Congressional Relevance: House Committee on Appropriations;
House Committee on Armed Services; Senate Committee on Armed
Services; Senate Committee on Budget; House Committee on
Budget; Senate Committee on Appropriations: Defense
Subcommittee.

Two independent cost analyses of the B-1 aircraft program prepared by the Air Force resulted in estimates that showed an appreciable difference from the Systems Program Office (SPO) estimate of \$22.8 billion for 244 aircraft. Finlings/Conclusions: One of the analyses used current and projected cost data from the F-15, F-16, and A-10 programs, while the second was based or historical data from about 20 different aircraft programs. In both cases, the actual B-1 cost data available as of June 30, 1976, were included. The estimate based on historical data was 4% higher than the SPO estimate, while the estimate based on current data was 20% higher. The major reasons for the differences between the independent estimates and the SFO estimate were: (1) different learning curves (improvements in production costs) that are anticipated to be achieved during the production of 240 aircraft; (2) the amount of production experience that can be retained from the four research and development aircraft; and (3) a difference of two percentage points in the amount of fee that contractors are expacted to earn. A cost review team from the Office of the Secretary of Defense was of the opinion that the independent hir Force estimate based on current data was the most reasonable, and even that estimate appeared somewhat low. Recommendations: The Department of Defense should present and discuss the various estimates with the Congress because of the significant differences in the estimates and the congressional interest in

786 4-1 PROGRAM (St)



B-163058

The Honorable John C. Stennis Chairman, Committee on Armed Services United States Senate

MAY 2 5 1977

Dear Mr. Chairman:

In our report titled "Status of the B-l Aircraft Program," (PSAD-77-35, dated February 16, 1977) we stated that independent cost estimates were prepared for the B-l program in 1976 but were not available to GAO because the Department of Defense considered the estimates internal documents being used at that time for decisionmaking purposes. The estimates, recently made available for our review, are discussed below.

In preparation for the Defense Systems Acquisition Review Council (DSARC) III in December 1976 and as a check on reasonableness of the Systems Program Office (SPO) estimate, two independent cost analyses were made by the Air Force. were first completed in September 1976 and revised in January 1977. In the first case, the analysis used current and projected cost data from the F-15, F-16, and A-10 programs. the second case, the analysis was based on historical data from about 20 different aircraft programs. In both cases, the actual B-1 cost data available as of June 30, 1976, was included. The resulting estimates showed an appreciable difference from the SPO estimate of \$22.8 billion for 244 aircraft. The estimate based on historical data was 4 percent higher and the estimate based on the current data was 20 percent higher. Air Force team that prepared the independent cost analyses concluded that the SPO estimate for production is optimistic.

- 1. Different learning curves (improvements in production costs) that are anticipated to be achieved during the production of 240 aircraft.
- 2. The amount of production experience that can be retained from the four research and development aircraft.

As has been the practice for the past several years, the Air Force independent estimates were reviewed by a cost review team from the Office of the Secretary of Defense (OSD) in preparation for the DSARC III. Accordingly, in making the decision on December 2, 1976, authorizing the Air Force to proceed with production of the B-l aircraft, the Secretary of Defense had a number of opinions on the probable cost of the program. These included (1) the SPO estimate which was the official Air Force estimate, (2) the Air Force independent estimates, and (3) results of the evaluation of the Air Force independent estimates by the OSD cost review team.

The OSD team was of the opinion that the independent Air Force estimate based on current data was the most reasonable. Further, the review team did not agree with a credit taken in the independent estimate of about \$1 billion (then-year dollars) which was based on the assumption that savings in production costs could be achieved through better engineering effort. The review team also noted two other items that could have a future impact on costs: (1) defensive avionics was not well defined and costs were uncertain, and (2) the weight given to experience on the research and development aircraft and the use of this data in establishing a starting point for a learning curve. Thus, to the review team, the highest estimate presented appeared somewhat low.

The Department of Defense Instructions recognize that estimates prepared by different groups will most likely differ. The instructions leave it up to the Secretary of Defense to decide which is the most reasonable estimate and use it for official purposes. In this case, after consideration of facts and opinions which were provided, the Secretary of Defense accepted the SPO estimate of \$22.8 billion as the December 1976 approved acquisition funding plan for the B-1 program. estimate may be somewhat optimistic in view of the independent estimates and the conclusions reached by the OSD cost review However, GAO recognizes that at this point in a life cycle it is difficult to determine a correct estimate. the past, GAO has recommended that a range of estimates on major programs be presented to the Congress. We believe it would be appropriate in this case to present and discuss the various estimates because of the significant differences in estimates and the congressional interest in the 3-1 program.

We are also sending this report to the Chairman of the House Armed Services Committee, the Chairman of the House Appropriations Committee, the Chairman of the Senate Appropriations Subcommittee on Defense, and the Chairman of the House and Senate Budget Committees. Copies are being sent to the Secretary of Defense and the Secretary of the Air Force.

Sincerely yours,



B-163058

MAY 2 5 1977

The Honorable Edmund S. Muskie Chairman, Committee on Budget United States Senate

Dear Mr. Chairman:

In our report titled "Status of the B-1 Aircraft Program," (PSAD-77-35, dated February 16, 1977) we stated that independent cost estimates were prepared for the B-1 program in 1976 but were not available to GAO because the Department of Defense considered the estimates internal documents being used at that time for decisionmaking purposes. The estimates, recently made available for our review, are discussed below.

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The OSD team was of the opinion that the independent Air Force estimate based on current data was the most reasonable. Further, the review team did not agree with a credit taken in the independent estimate of about \$1 billion (thenyear dollars) which was based on the assumption that savings in production costs could be achieved through better engineering effort. The review team also noted two other items that could have a future impact on costs: (1) defensive avionics was not well defined and costs were uncertain, and (2) the weight given to experience on the research and development aircraft and the use of this data in establishing a starting point for a learning curve. Thus, to the review team, the highest estimate presented appeared somewhat low.

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We are also sending this report to the Chairman of the House Budget Committee, the Chairman of the House and Senate Armed Services Committees, the Chairman of the House Appropriations Committee, and the Chairman of the Senate Appropriations Subcommittee on Defense. Copies are being sent to the Secretary of Defense and the Secretary of the Air Force.

Llenge A. Alaile

B-163058

AY 2 5 1977

The Honorable George H. Mahon Chairman, Committee on Appropriations House of Representatives

Dear Mr. Chairman:

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The major reasons for the differences between the independent estimates and the SPO estimate were:

- Different learning curves (improvements in production costs) that are anticipated to be achieved during the production of 240 aircraft.
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PSAD-77-117

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We are also sending this report to the Chairman of the Senate Appropriations Subcommittee on Defense, the Chairman of the House and Senate Armed Services Committees, and the Chairman of the House and Senate Budget Committees. Copies are being sent to the Secretary of Defense and the Secretary of the Air Force.

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B-163058

MAY 25 1977

The Honorable Melvin Price Chairman, Committee on Armed Services House of Representatives

Dear Mr. Chairman:

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B-163058

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