

# **Acquisition**

Source Selection Decisions for the Air Force Small Diameter Bomb Program (D-2005-091)

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### Acronyms

ACC Air Combat Command

CAD Component Advanced Development CSAF Chief of Staff of the Air Force GAO Government Accountability Office

J&A Justification and Approval SDB Small Diameter Bomb

SDD System Development and Demonstration

SECAF Secretary of the Air Force SSA Source Selection Authority



# INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-4704

July 12, 2005

# MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS

SUBJECT: Report on Source Selection Decisions for the Air Force Small Diameter Bomb Program (Report No. D-2005-091)

We are providing this report for information and use. We conducted the audit in response to a referral from the Defense Criminal Investigative Service. We considered management comments on a draft of this report in preparing the final report. Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. Henry F. Kleinknecht at (703) 604-9324 (DSN 664-9324) or Mr. Patrick J. Nix at (703) 604-9332 (DSN 664-9332). The team members are listed inside the back cover. See Appendix C for the report distribution.

By direction of the Deputy Inspector General for Auditing:

Richard B. Joliffe

Richard B. Jolliffe
Assistant Inspector General
Contract Management

#### **Special Warning**

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#### **Department of Defense Office of Inspector General**

**Report No. D-2005-091** 

July 12, 2005

(Project No. D2004-D000CH-0164.000)

### Source Selection Decisions for the Air Force Small Diameter Bomb Program

### **Executive Summary**

Who Should Read This Report and Why? Acquisition and contracting personnel within DoD and the Military Departments should read this report because it concerns source selection decisions that impacted a competitive procurement strategy for the Small Diameter Bomb weapon system.

**Background.** This audit was performed in response to a referral from the Defense Criminal Investigative Service. The Defense Criminal Investigative Service requested that we review a matter that surfaced during its investigation of a senior official from The Boeing Company (Boeing) and the former Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management.

The source selection strategy for the Small Diameter Bomb (SDB) program employed a downselect process that included a full and open competition wherein three contractors submitted proposals to compete in a limited competition during the Component Advanced Development (CAD) phase. In September 2001, the former Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management selected two contractors, Boeing and Lockheed Martin (Lockheed) to participate in the 2-year limited competition CAD phase. The program contained two weapon variants—one effective against fixed and non-moving relocatable targets (Phase I) with a planned fourth quarter FY 2006 fielding, and a second variant (Phase II) effective against moving targets with a planned fielding date 3 years later. The strategy for developing and fielding different variants progressively based on technology maturation is considered "spiral" or "incremental" development. Boeing and Lockheed each received \$47 million to design their SDB weapon and carriage system, develop and test subsystems, and conduct system-level, risk-reduction efforts for the fixed target SDB variant (Phase I). The contractors were also to design for future integration of a seeker and were to begin developing and testing autonomous target recognition algorithms for use in identifying moving targets (Phase II) for a future spiral or increment. The winning contractor would then continue through to the System Development and Demonstration Phase and into production for both variants of the SDB weapon system. However, due to a shortfall in funding, senior Air Force officials agreed to defer the Phase II program requirements and changed the source selection evaluation criteria. The Air Force also determined that a sole-source justification and approval was necessary to make the downselect to a single contractor because of the limited competition CAD phase.

Based on the source selection decision by the SDB Program Executive Officer, on October 17, 2003, the SDB contracting officer awarded a cost-plus-award-fee-type contract (FA8682-04-C-0019) to Boeing for the Phase I (fixed targets) and carriage system portion of the SDB Program. After the contract was awarded, the Air Force

issued an addendum to the sole-source justification and approval to include the previously deferred Phase II requirements. On November 10, 2004, Lockheed filed a formal protest with the Government Accountability Office concerning the SDB procurement because of the former Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management bias towards Boeing. On February 18, 2005, the Government Accountability Office sustained the Lockheed protest.

**Results.** Senior Air Force officials made decisions during the source selection process that would have resulted in the sole-source award to Boeing of the previously deferred Phase II SDB program requirements (moving targets). Specifically, the senior Air Force officials:

- deferred the Phase II requirements to a future spiral or increment and changed the source selection evaluation criteria during the evaluation period to significantly reduce emphasis on the Phase II requirements during the downselect, and
- provided the contractors (Boeing and Lockheed) with conflicting information on the procurement strategy for the deferred Phase II requirements and failed to adequately document that strategy.

The SDB Program Office stated that the planned procurement strategy mitigated program cost and performance risk because Boeing intended to compete the seeker technology, the key component of the Phase II technology. However, the procurement strategy did not provide Lockheed an opportunity to compete as the prime contractor for the Phase II program requirements and mitigating any potential bias by Boeing in the selection of a subcontractor may be difficult. On February 18, 2005, the Government Accountability Office sustained the Lockheed SDB procurement protest because the former Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management was involved in the decision making process. Further, the Government Accountability Office recommended that the Air Force conduct a competitive procurement for the SDB Phase II requirements.

The Under Secretary of Defense for Acquisition, Technology, and Logistics needs to provide oversight for and require that the Air Force procure the previously deferred Phase II requirements competitively as required by the General Accountability Office decision. In addition, the Under Secretary of Defense for Acquisition, Technology, and Logistics needs to develop guidance relating to spiral or incremental development programs for critical products and technologies to ensure the acquisition strategy complies with the "Competition in Contracting Act of 1984" and provides fairness and best value for DoD. See the Finding section of the report for the detailed recommendations.

Management Comments. The Director, Defense Systems of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics concurred with the first recommendation and partially concurred with the second recommendation. The Director stated the Air Force was executing a revised acquisition strategy, subject to Office of the Secretary of Defense's review, based on results of the sustained GAO protest. The Director also stated that existing regulations and policy address spiral development for program managers and the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (Defense Procurement and Acquisition Policy) would review the guidance for completeness and clarity. See the Finding section of the report for a discussion of the management comments and the Management Comments section of the report for the complete text of the comments.

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## **Background**

This audit was performed in response to a "Referral for Audit Review" from the Defense Criminal Investigative Service relating to procurement irregularities that surfaced during its investigation of a senior official from The Boeing Company (Boeing) and the former Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management (former Principal Deputy). The procurement irregularities related to the award of the Small Diameter Bomb (SDB) contract to the McDonnell Douglas Corporation, a wholly owned subsidiary of Boeing. Representatives from Lockheed Martin (Lockheed) claimed that the Phase II (moving targets) portion of the SDB Program had been eliminated from the source selection process, providing Boeing an advantage in winning the contract.

**SDB Weapon System.** The SDB weapon system will provide the warfighter with a 250-pound class weapon and smart carriage that is common across a wide spectrum of fighter and bomber platforms. The SDB Phase I weapon uses Global Positioning System/Inertial Navigation System guidance to reduce collateral damage and is combat-effective in adverse weather to achieve battlefield effectiveness against fixed targets—covered, concealed, hardened, or relocatable. Figure 1 shows the SDB Phase I weapon and four-place carriage system.

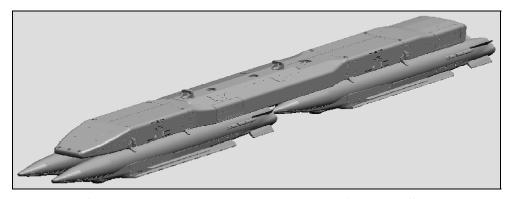


Figure 1. SDB Phase I Weapon and Four-Place Carriage System

SDB Program Costs. The SDB Program is an evolutionary Acquisition Category 1D Program currently in the System Development and Demonstration (SDD) Phase of the acquisition cycle. The source selection strategy for the SDB Program employed a downselect process that included a full and open competition wherein three contractors submitted proposals to compete in a limited competition during the Component Advanced Development (CAD) phase. In September 2001, the former Principal Deputy selected two contractors, Boeing and Lockheed, to participate in the 2-year limited competition CAD phase. The program contained two weapon variants—one effective against fixed and non-moving relocatable targets (Phase I) with a planned fourth quarter FY 2006 fielding, and a second variant (Phase II) effective against moving targets with a planned fielding date 3 years later. The strategy for developing and fielding different variants progressively based on technology maturation is considered "spiral" or "incremental" development.

On October 17, 2003, based on the source selection decision by the SDB Program Executive Officer, the SDB contracting officer awarded a cost-plus-award-feetype contract (FA8682-04-C-0019) worth approximately \$151 million to Boeing for the Phase I portion (fixed targets and carriage system) of the SDB Program. Boeing advanced to the SDD Phase of the SDB Program and will continue to develop and produce a 250-pound precision-guided weapon that can be launched from fighters, bombers, or unmanned aerial vehicles at fixed targets more than 40 miles away. The costs shown in the FY 2004 Selected Acquisition Report, when combined with the military construction and support costs, place the total value of the Phase I program at \$2.59 billion if the Air Force procures the 24,000 Phase I weapons and 2,000 carriages planned for the next 16 years. The cost estimates briefed to senior Air Force leadership for incorporation into the FY 2004 Program Objective Memorandum showed the total value of the program at about \$4.27 billion when quantities originally identified for the program (12,000 Phase I and 12,000 Phase II) were included. Table 1 shows a breakout of the program costs in then-year dollars with and without Phase II.

Table 1. SDB Program Costs (in millions)					
	Phase I &	Phase I, II &			
Cost Categories	<u>Carriage</u>	<u>Carriage</u>			
Development	\$ 380.3	\$ 681.3			
Production	1,436.2	2,814.8			
Military Construction	47.7	47.7			
Operational Support	723.6	723.6			
Total Price	\$2,587.8	\$4,267.4			

**Lockheed Protests Phase II Sole-Source Award to Boeing.** On November 10, 2004, Lockheed filed a protest with the Government Accountability Office (GAO) relating to the SDB SDD contract award to Boeing (RFP No. F08635-03-R-0038).

In regard to that procurement, Lockheed Martin protests (i) the Air Force's evident intention to reinstate a particular scope of work (known as Phase II) to a Boeing contract where that scope was removed from the SDB SDD competition under [the former Principal Deputy's] corrupt direction, as well as (ii) the underlying award of the SDB contract because it now appears that the work scope for the SDD competition was defined not by the Agency's legitimate needs, but through [the former Principal Deputy's] corrupt dealings with Boeing. Based on the facts that recently came to light, one must surmise that the deletion and reinstatement of Phase II are rooted in [the former Principal Deputy's] corrupt relationship with Boeing, which necessarily taints the procurement. . .

On February 18, 2005, GAO sustained Lockheed's protest and stated:

the record showed that [the former Principal Deputy] was involved in the decisionmaking process that culminated in changes made to evaluation factors-including deletion of specific technical requirements. The record further showed that the Air Force currently intends to amend Boeing's contract on a sole-source basis to add those previously deleted requirements. GAO recommended that, rather than making this sole-source addition to Boeing's contract, the Air Force conduct a competition for those requirements.

Change in Milestone Decision Authority. On March 25, 2005, the Acting Under Secretary of Defense for Acquisition, Technology, and Logistics notified the Secretary of the Air Force that:

Effective immediately, all Air Force ACAT [Acquisition Category] 1C programs are hereby designated as ACAT 1D programs. This change is necessary given the vacancies in the Air Force and the uncertainties in the planned management structure. My staff and I are happy to work with you as these important vacancies are filled to ensure that the organization of Air Force acquisition oversight provides adequate checks and balances to guarantee the integrity of the system.

## **Objective**

The overall audit objective was to evaluate the Phase I and Phase II procurement strategy used by the Air Force for the SDB weapon system and the decision to award the Phase II contract sole-source to Boeing. See Appendix A for a discussion of the scope, methodology, and prior coverage related to the objective.

# Source Selection Decisions for Small Diameter Bomb Program

Senior Air Force officials made decisions during the source selection process that would have resulted in the sole-source award to Boeing of the previously deferred Phase II SDB program requirements (moving targets). Specifically, the senior Air Force officials:

- deferred the Phase II requirements to a future spiral or increment and changed the source selection evaluation criteria during the evaluation period to significantly reduce emphasis on the Phase II requirements during the downselect; and
- provided the contractors (Boeing and Lockheed) with conflicting information on the procurement strategy for the deferred Phase II requirements and failed to adequately document that strategy.

The SDB Program Office stated that the planned procurement strategy mitigated program cost and performance risk because Boeing intended to compete the seeker technology, the key component of the Phase II technology. However, the procurement strategy did not provide Lockheed an opportunity to compete as the prime contractor for the future Phase II program requirements. Further, mitigating any potential bias by Boeing in the selection of a subcontractor may be difficult. On February 18, 2005, GAO sustained the Lockheed SDB procurement protest because the former Principal Deputy was involved in the decision making process. Also, GAO recommended that the Air Force conduct a competitive procurement for the SDB Phase II requirements.

## Spiral or Incremental Development and Source Selection Process

Senior Air Force officials made decisions during the source selection process that would have resulted in the sole-source award to Boeing of the previously deferred Phase II SDB program requirements (moving targets). The following summarizes the key decisions made by Air Force officials. Appendix B provides the timeline of when those decisions occurred.

**Directed Use of Spiral or Incremental Development.** The Chief of Staff of the Air Force (CSAF) mandated that an SDB capable of defeating "fixed targets" be fielded in the fourth quarter of FY 2006 and supported fielding the "80 percent" solution with a spiral or increment (evolutionary acquisition) to the full capability (moving targets). DoD Instruction Number 5000.2, "Operation of the Defense Acquisition System," May 12, 2003, defines both "Spiral" and "Incremental" Development.

**Spiral Development.** In this process a desired capability is identified, but the end-state requirements are not known at program initiation. Those requirements are refined through demonstration and risk management; there is continuous user feedback; and each increment provides the user the best possible capability. The requirements for future increments depend on feedback from the user and technology maturation.

**Incremental Development.** In this process, a desired capability is identified, an end-state requirement is known, and that requirement is met over time by developing several increments, each dependent on available mature technology.

On April 10, 2001, an Acquisition Strategy Panel, chaired by the former Principal Deputy, met and developed a strategy for acquiring the SDB. To meet the warfighter's need, the Acquisition Strategy Panel adopted a program that contained two weapon variants—one effective against fixed and non-moving relocatable targets (Phase I) with a fourth quarter FY 2006 fielding, and a second variant (Phase II) effective against moving targets with a fielding date 3 years later. The strategy called for developing both weapon variants concurrently to provide the warfighter with the lower risk capability (Phase I) as soon as possible, while allowing the higher risk capability (Phase II) to mature prior to being fielded.

**Downselect Source Selection Process.** The Air Force employed a downselect process to select the source for producing the SDB weapon system. On June 29, 2001, the SDB Program Office issued a solicitation requesting proposals for the CAD Phase of the SDB Program. The former Principal Deputy was the Source Selection Authority (SSA). The Request for Proposal stated the Government intended to award two contracts as a result of the competition. On September 28, 2001, based on evaluation of the competing proposals, the former Principal Deputy selected Boeing and Lockheed to advance to the CAD Phase and participate in a limited competition (initial downselect).

Boeing and Lockheed each received \$47 million to design their SDB weapon and carriage system, develop and test subsystems, and conduct system-level, risk-reduction efforts for the fixed target SDB variant and carriage system. The contractors were also required to design for future integration of a seeker and to begin developing and testing autonomous target recognition algorithms for moving targets (Phase II). The contractors were to be evaluated through periodic evaluations to enable each contractor to see the strengths and weaknesses of its program when evaluated against the source selection criteria. The winning contractor would then continue through SDD, and into production for both variants of the SDB weapon system (final downselect).

# **Deferred Requirements and Changes to Source Selection Evaluation Criteria**

Senior Air Force officials deferred the Phase II requirements to a future spiral or increment and changed the source selection evaluation criteria during the evaluation period to significantly reduce emphasis on the Phase II requirements during the downselect.

**Funding Shortfall.** In December 2001, representatives from the Air Combat Command (ACC), Langley Air Force Base, Virginia, determined that due to real world events (the need to sustain the current capability in support of the Global War on Terrorism and Homeland Defense), it was unable to fully fund the SDB Program in the FY 2004 Program Objective Memorandum. Thus, ACC, in conjunction with the SDB Program Office, started exploring the options available for the SDB Program.

Boeing Proposal for Early Downselect and Contractor Teaming. On January 25, 2002, Boeing presented a proposal to the former Principal Deputy, the SSA at the time, advocating for early downselect in its favor to provide the warfighter an SDB capability much earlier than originally planned. When the SDB Program Office learned of the discussions, the SDB Program Office conveyed its concern that Boeing's technology was not sufficiently mature at that point and that there was no reason for an early downselect decision "except to reduce emphasis on [Phase II] at downselect." After the brief, the former Principal Deputy directed the SDB Program executive officer to determine whether both contractors had strategies to accelerate delivery of an SDB capability and directed the SDB Program Office to prepare a brief proposing possible alternatives for accelerating the fielding of the Phase I weapon.

On March 6, 2002, Boeing and Lockheed presented their acceleration strategies to the former Assistant Secretary of the Air Force for Acquisition (former Assistant Secretary) and the former Principal Deputy. In its briefing, Boeing again advocated for an early downselect decision, stating its Phase I technology was mature and that it was willing to cooperate with Lockheed and incorporate the best value components. Boeing also stated it was able to conduct the seeker competition between Lockheed and Northrop Grumman and select the best solution for the warfighter.

On March 8, 2002, the SDB program manager presented a brief to the former Assistant Secretary and the former Principal Deputy on the "Small Diameter Bomb (SDB) Acceleration Potential," that showed Lockheed was "stronger" in the Phase II program requirements. The briefing also mentions "exploring partnership opportunities," that "there [was] no clear winner at [that] point," and although "Boeing Report[ed] They Can Deliver Now—They Cannot." On March 12, 2002, and March 18, 2002, the CSAF and the Secretary of the Air Force (SECAF) were presented the same brief. On March 19, 2002, the SDB program manager stated the outcome of the SECAF meeting was that the SECAF believes in competition and that he made it "crystal clear . . . we are in this for the competition benefits." A "Winner Take All Downselect remains at [the] end of Sep[tember] [20]03."

**Program Options.** On April 5, 2002, the Commander, ACC sent an e-mail to the CSAF that identified a \$385.5 million funding shortfall, after deferring about \$100 million in "wish list" requirements to later program spirals or increments. The e-mail further stated that:

My staff engaged with the acquisition community to develop options to work within, or close to, the [FY 2003] funding profile. They have identified a restructured option which defers additional requirements and reduces the \$385.5 disconnect to \$10M. This restructured program offers a more capable Phase I weapon, along with a growth path to a Phase II capability. While the words say "Defer Phase II", the Phase II capability against mobile targets is actually still achievable (using an Affordable Moving Surface Target Engagement {AMSTE} concept) and can conceivably be attained with in the restructured program.

**Legal Issues Associated With the Program Options.** As a part of this restructuring effort, the Air Force evaluated how to continue the source selection process because the requirement changes were a significant departure from the original program. A March 11, 2002, background paper requested by the former Assistant Secretary from the Air Force General Counsel discussed contract and legal issues relating to the proposed changes to the SDB program. The paper provided an opinion on the legal grounds for a possible protest if requirements were deferred and the SDB downselect criteria were changed to reflect emphasis on new requirements:\*

**Approach for Continuing the Source Selection Process.** The former Assistant Secretary and the former Principal Deputy selected the approach for continuing the source selection process. According to e-mails obtained from an Air Force General Counsel representative discussing the approach, the plan called for notifying the contractors of the change in the requirements and evaluation criteria, giving them the opportunity to comment on the proposed revised evaluation criteria, obtaining their agreement with the new criteria, and proceeding with the current schedule. In April 2002 and early May 2002, the Directorate of Requirements briefed the Commander, ACC; the CSAF; and the SECAF on the revised program that deferred the Phase II requirements. The SDB program manager stated, in an e-mail, that the SECAF briefing resulted in "crystal clear decisions." The SECAF directed developing a common four-place carriage system, deferring the seeker work (Phase II) and integrating the bomb onto the B-1B aircraft, and supported developing the fixed target version of the weapon first with enhanced precision. The SECAF also "made [it] clear he wants to NOT har[d]link the fy03 sdb winner with the eventual choice of prec[ision] versus movers [Phase II weapon] solution."

Changes to Evaluation Criteria. According to the SDB program manager, the Air Force met with both contractors and negotiated changes to the source selection criteria. The changes added new requirements for precision and a four-place carriage and significantly reduced the emphasis that Phase II had during downselect. The original source selection evaluation criteria gave equal

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<sup>\*</sup> This section of the report contains source selection sensitive, contractor proprietary, or attorney/client privilege information that has been omitted.

weighting to the Phase I and Phase II weapon, and the carriage system. The revisions that the Program Executive Officer, the new SSA, approved in August 2002 to the evaluation criteria, and that were incorporated through modifications into the Boeing and Lockheed contracts, shifted emphasis from Phase II tasks to Phase I tasks. As Table 2 shows, the weightings of the new criteria dedicated to Phase I and the carriage system increased to 40 percent and 25 percent respectively, while the weighting of criteria dedicated to Phase II tasks decreased from 23 percent to 2 percent.

Pre-SECAF Directed Restructuring Factor						
<u>Factor</u>	Phase I	Phase II	Carriage	<u>Other</u>	Weighting	
Proposal Risk	10	10	10	-	30	
Affordability	8	8	8	2	26	
Contractor Performance	-	-	-	26	26	
Mission Capability	_5	<u>5</u>	<u>5</u>	3	<u>18</u>	
Total	23	23	23	31	100%	
Post-SECAF Directed Restructuring Factor						
Factor	Phase I	Phase II	Carriage	<u>Other</u>	Weighting	
Proposal Risk	20	-	10	-	30	
Affordability	10	-	10	6	26	
Contractor Performance	-	-	-	26	26	
Mission Capability	<u>10</u>	<u>2</u>	_5	<u>1</u>	<u>18</u>	
Total	40	2	25	33	100%	

## **Conflicting Information and Inadequate Documentation**

The SDB program manager and contracting officer provided the contractors (Boeing and Lockheed) with conflicting information on the procurement strategy for the deferred Phase II requirements and failed to adequately document that strategy. Specifically, the SDB contracting officer notified Boeing and Lockheed that "Winning development and production of the SDB Program does not guarantee award of follow-on work for precision against moving targets [Phase II requirements]." According to the contracting officer, the Air Force prepared a sole-source Justification and Approval (J&A) as required by Federal Acquisition Regulation to make the downselect to a single contractor. The SDB Program Executive Officer, the program manager, and the contracting officer then signed an addendum to the original sole-source J&A for the program that either clarified the existing authorizations or reinstated the previously deferred Phase II SDB program requirements after the fixed targets and carriage System Development and Demonstration contract (Phase I) had been awarded to Boeing.

**Stop-Work and Choice for Phase II.** On May 13, 2002, the SDB contracting officer sent letters to Boeing and Lockheed that directed them to "stop work on all tasks unique to the development of the Phase II SDB, including the seeker and

ATR [Autonomous Target Recognition] algorithm tasks." The letters further stated that "due to possible changes in requirements identified by ACC leading to subsequent reprioritization of the program's objectives, it may become necessary to modify the scope of the program."

On May 23, 2002, the SDB contracting officer sent additional letters notifying Boeing and Lockheed that the Phase II choice was uncertain and that the SECAF directed the following changes:

Develop a Phase I weapon system capable of being highly effective against the SDB targets[;]

Design the SDB weapon system architecture to be as open as reasonable to allow incorporation of future technologies to allow precision attack against moving targets. Expend no further effort on any other current and planned "Phase II" activities[; and]

Winning development and production of the SDB Program does not guarantee award of follow-on work for precision against moving targets. [emphasis added]

Different Positions on Phase II Requirements. On June 7, 2002, the SDB program manager briefed Boeing and Lockheed on the SECAF-directed changes and reiterated the Air Force's solution for Phase II was uncertain. According to the SDB program manager, SECAF recognized there were multiple technologies under development to address moving targets and that they required additional maturation before it became apparent which one was best at defeating moving targets. As such, SECAF did not want to tie the Phase I SDB winner to the eventual choice of "precision versus movers." The briefing charts state that the Phase I weapon should be interoperable with multiple potential solutions and indicate that the Air Force had not yet determined if or how the Phase II capability would be obtained in the future.

Lockheed Position. Lockheed representatives stated that once the Air Force deferred the Phase II requirements, the company considered dropping out of the competition. The representatives stated the company felt its position was disadvantaged because the deferral eliminated the area in which they believed they possessed a competitive advantage. The representatives also stated the only reason that Lockheed decided to remain in the competition was because the Air Force told them they would have the opportunity to compete for the Phase II requirement in the future.

**SDB Program Manager Position.** The SDB program manager stated that at a November 2002 General Manager's Conference, he informed various Lockheed personnel that the program's intent was to have the winning SDB contractor perform potential follow-on variants of the SDB. The SDB program manager further stated the SDB weapon was a vehicle that would satisfy the Phase I objective of a fixed target kill, but given the requirement to create an

Interface Control Document<sup>†</sup> to allow integration of future avionics, would also offer the ability to augment Phase I with a moving target kill. Hence, according to the SDB program manager, the competition was very important to both Boeing and Lockheed due to the program's future business potential.

**Sole-Source J&A.** On June 5, 2003, the SDB Program Office prepared a sole-source J&A for the program as required by Federal Acquisition Regulation to make the downselect to a single contractor. The J&A was signed by the Program Executive Officer, the program director, the program manager, the contracting officer, a legal reviewer, and the competition advocate; and approved by the former Assistant Secretary. The J&A authorized the following actions:

- downselect to a single contractor for the SDD Phase of the SDB Program from one of the two incumbent CAD contractors;
- sole-source award for acquisition of the SDB weapon system to the winning SDB contractor and for SDB sustainment efforts; and
- sole-source award of future spiral development activities assuming that
  the SDB contractor is meeting contractual commitments and that spiraling
  the SDB fixed target variant represents the best value to the Government.
  Spirals may include additional requirements due to new users and
  upgraded performance capabilities.

It is unclear as to whether the future spiral activities discussed in this initial J&A related specifically to the Phase I weapon or whether the J&A also included the "multiple potential solutions" for the Phase II weapon.

**Boeing Winner of Limited Competition.** On August 28, 2003, the Source Selection Decision Document signed by the SSA (the Program Executive Officer) directed the award to Boeing and on October 17, 2003, the SDD Phase contract was awarded to Boeing for Phase I. The SSA concluded that "Boeing is superior based on my integrated assessment of all four factors, Risk, Affordability, Contractor Performance, and Mission Capability."\*

Addendum to Sole-Source J&A. According to an Air Force General Counsel representative after the decision was made to award the Phase I and carriage system contract to Boeing, the Office of the Secretary of Defense General Counsel nonconcurred with the SDB acquisition strategy as described in the original J&A.\* In a show of good faith, the SDB Program Office attempted to change the disputed wording to something more amenable. Although the Office of the Secretary of Defense General Counsel still remained concerned about the breadth of the sole-source J&A, the matter was within the purview of the Air Force. On November 25, 2003, the former Assistant Secretary approved an addendum to the sole-source J&A. This supplement to the J&A either redefined

<sup>&</sup>lt;sup>†</sup> The Interface Control Document defines the requirements for the logical, physical, and electrical interfaces that can allow future growth and integration of subsystems that allow for precision against moving targets.

<sup>\*</sup> This section of the report contains source selection sensitive, contractor proprietary, or attorney/client privilege information that has been omitted.

or clarified the future spiral development activities as "the presently-deferred moving target variant and the capability for employment of the weapon by other services."

## **Competition for Deferred Requirements**

On November 26, 2003, Lockheed sent a letter to the SDB Program Office stating that they were "surprised to learn of the referenced Justification and Approval document that changed the future spiral development activities for the SDB program to sole-source." The letter further stated that "Lockheed is interested in competing as a prime contractor for the spiral development capability, including spirals addressing moving targets" and asked if the "spiral will be open for competition." In response to the Lockheed inquiry, the SDB contracting officer stated "[i]f and when the Government decides to proceed with a moving target capability, I will comply with the requirement of FAR [Federal Acquisition Regulation 5.201(b)(1) to synopsize the proposed action. In accordance with note 22 of the notice, it will be my intent to solicit and negotiate with only one source, McDonnell Douglas [Boeing] under the Authority of FAR 6.302." The Air Force planned to have Boeing hold a competition for the Phase II unique requirements. Air Force officials stated that the Air Force was developing criteria that would provide sufficient incentives to Boeing to make the "right choice." Under the approach, Boeing would integrate the winning contractor's seeker and guidance system into the Phase I vehicle and carriage system.

Lockheed representatives did not share these feelings and stated the probability of a bid was unlikely if Boeing were the SSA. Lockheed representatives stated the company was reluctant to participate in a "Boeing-Run" seeker competition because it does not believe they would receive fair consideration. The representative also stated that Lockheed has historically won a very low percentage of the competitions it entered where Boeing was the SSA. In addition, the representative stated Lockheed does not want to share its seeker and guidance technology with Boeing because of another lawsuit with Boeing over the misuse of its intellectual property. Mitigating any potential bias by Boeing in the selection of a subcontractor would be difficult and the Air Force had not provided Lockheed a fair opportunity to compete as the prime contractor for the SDB Phase II program requirements. On November 10, 2004, Lockheed protested the Air Force's decision to award the Phase II requirements sole-source to Boeing. On February 18, 2005, GAO sustained the Lockheed SDB protest and recommended that the Air Force conduct a competitive procurement for the Phase II requirements.

The Under Secretary of Defense for Acquisition, Technology, and Logistics needs to require that the Air Force conduct a competitive procurement for the Phase II (seeker technology) requirements and provide oversight of the competition to ensure that all competitors receive a fair opportunity to compete in order to obtain the most innovative and cost-effective technology solutions.

## **Spiral or Incremental Development**

The Air Force adopted an acquisition strategy that developed the full SDB capability over two phases (spiral or incremental development). However, faced with a funding shortfall, the Air Force deferred the requirements relating to moving targets (Phase II) and changed the evaluation criteria, despite having legal advice indicating that there were sufficient legal grounds for a protest. The Air Force also notified the competing contractors that winning did not guarantee their award of the Phase II requirements. After contract award, the Air Force issued an addendum to the sole-source J&A to reinstate or clarify the previously deferred requirements. Lockheed, the losing contractor, filed a formal protest to the Air Force's decision because of the former Principal Deputy's involvement in the decision making process. GAO sustained the Lockheed protest and recommended that the Air Force conduct a competitive procurement for the Phase II requirements.

Competitive hurdles exist with selecting a source for developing a capability or product over a number of spirals or increments. The "Competition in Contracting Act of 1984" requires "full and open competition" in Government procurements, as obtained through the competitive procedures. In B-276659.2, September 29, 1997, GAO stated:

[i]n determining whether a modification triggers the competition requirements in CICA [Competition in Contracting Act], we look to whether there is a material difference between the modified contract and the contract that was originally awarded. Neil R. Gross & Co., Inc., supra, 90-1 CPD ¶ 212 at 2-3; see AT&T Communications, Inc. v. Wiltel, Inc., supra, at 1205. Evidence of a material difference between the modification and the original contract is found by examining any changes in the type of work, performance period, and costs between the contract as awarded and as modified. Neil R. Gross & Co., Inc., supra, 90-1 CPD ¶ 212 at 3. We also consider whether the solicitation for the original contract adequately advised offerors of the potential for the type of change found in the modification, CAD Language Sys., Inc., B-233709, Apr. 3, 1989, 89-1 CPD ¶ 342 at 4, or whether the modification is of a nature which potential offerors would reasonably have anticipated at the time of the original award. American Air Filter Co.--DLA Request for Recon., 57 Comp. Gen. 567, 573 (1978), 78-1 CPD ¶ 443 at 9-10.

The decisions the Air Force made during the source selection process for the SDB Program highlight the potential for problems with Spiral and Incremental Development Acquisition Programs. The reinstatement of the Phase II requirements constitutes a significant change in the scope of the original contract. Not only does Phase II represent the more difficult work, but it also represents the majority of the dollars associated with the program. After deferring Phase II, the Air Force notified the competing contractors that winning Phase I did not guarantee their award of the deferred requirements. Thus, it is unlikely that the Phase II reinstatement could reasonably have been anticipated at the time of the original award. The Under Secretary of Defense for Acquisition, Technology,

and Logistics needs to develop guidance relating to spiral or incremental development programs for critical products and technologies to ensure the acquisition strategy complies with the "Competition in Contracting Act of 1984" and provides fairness and best value for DoD.

## **Recommendations and Management Comments**

We recommend the Under Secretary of Defense for Acquisition, Technology, and Logistics:

1. Provide oversight for and require that the Air Force conduct a competitive procurement for the Phase II requirements as recommended by the GAO decision.

**Management Comments.** The Director, Defense Systems of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics concurred and stated that the Air Force is already executing a revised acquisition strategy, subject to the Office of the Secretary of Defense review, based on results of the sustained GAO protest.

2. Develop guidance relating to spiral or incremental development programs for critical products and technologies to ensure the acquisition strategy complies with the "Competition in Contracting Act of 1984" and provides fairness and best value for DoD.

**Management Comments.** The Director, Defense Systems of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics partially concurred, stating that existing regulations and policy address spiral development for program managers. The Director stated the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (Defense Procurement and Acquisition Policy) would review the guidance by December 2005 for completeness and clarity.

## Appendix A. Scope and Methodology

We reviewed the procedures and documentation used to support the Air Force decision to award the SDB weapon system contract to Boeing. The evaluation was performed at the Air Armament Center, ACC, and various components of the Office of the Secretary of the Air Force. The dates of the documentation reviewed ranged from October 1997, the date of the ACC Mission Need Statement for a miniaturized munitions capability through March 2005, the date that the Under Secretary of Defense for Acquisition, Technology, and Logistics became the milestone decision authority for all Air Force Acquisition Category 1C programs. We reviewed the Phase I and Phase II procurement strategy used by the Air Force for the SDB weapon system. Further, we interviewed representatives from the SDB and Joint Strike Fighter Program Office; ACC; various components of the Office of the Secretary of Defense and the Office of the Secretary of the Air Force; the Office of the Chief of Naval Operations; and relevant DoD contractors.

We performed this audit from June 2004 through April 2005 in accordance with generally accepted government auditing standards.

We did not review the management control program because our scope was limited to reviewing the award of the SDB contract requested by the Defense Criminal Investigative Service.

**Use of Computer-Processed Data.** We did not use computer-processed data to perform this audit.

**Use of Technical Assistance.** We did not use technical assistance to perform this audit.

Government Accountability Office High-Risk Area. GAO has identified several high-risk areas in DoD. This report provides coverage of the Defense Contract Management area.

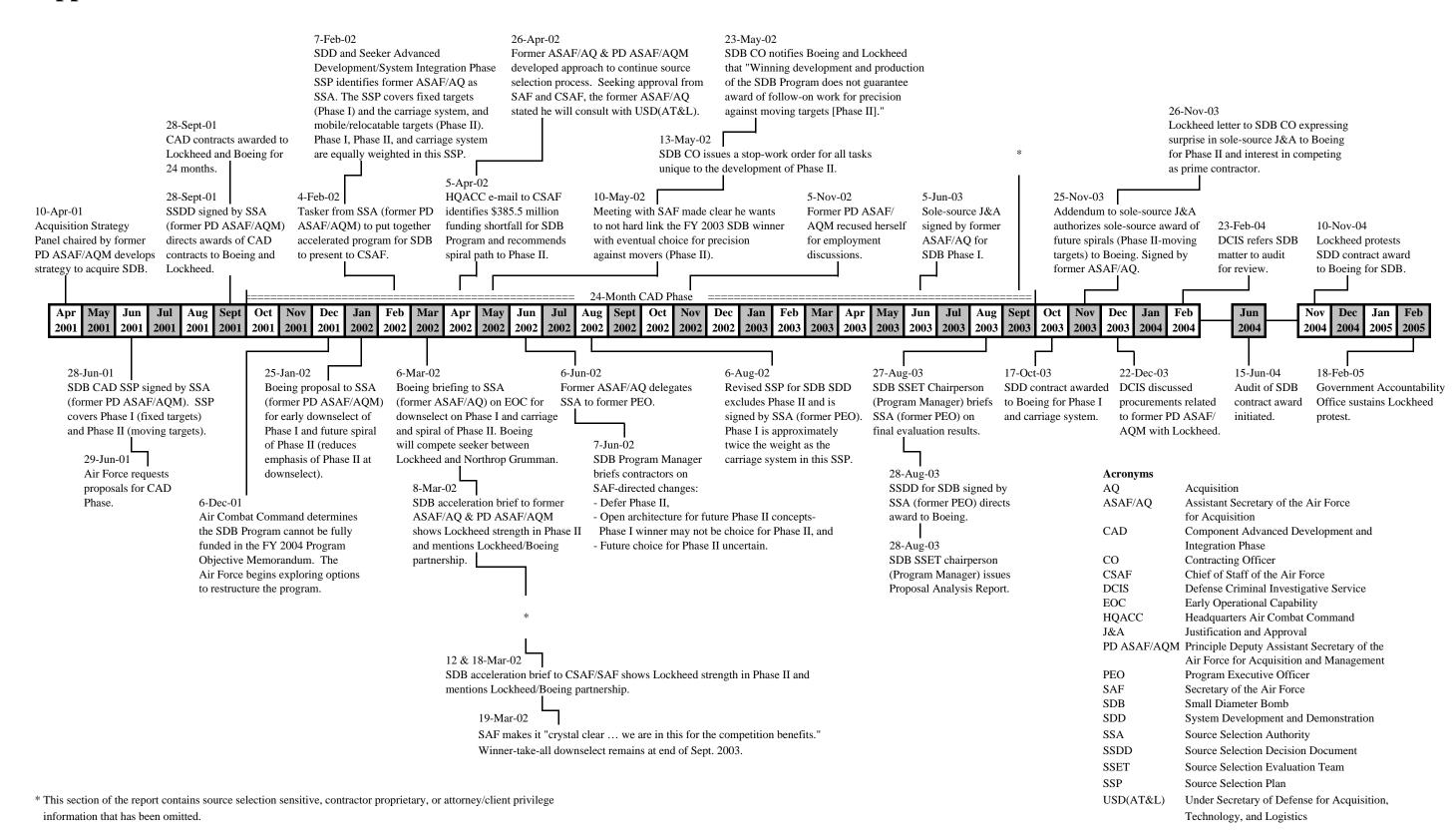
## **Prior Coverage**

During the last 5 years, GAO has issued one report discussing the SDB capabilities and program status. Unrestricted GAO reports can be accessed over the Internet at <a href="http://www.gao.gov">http://www.gao.gov</a>.

#### **GAO**

GAO Report No. GAO-04-248, "Defense Acquisitions: Assessments of Major Weapon Programs," March 31, 2004

## **Appendix B. Timeline of Events**



# **Appendix C. Report Distribution**

### Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
 Under Secretary of Defense (Comptroller)/Chief Financial Officer
 Deputy Chief Financial Officer
 Deputy Comptroller (Program/Budget)
 Director, Defense Procurement and Acquisition Policy

## **Department of the Navy**

Naval Inspector General Auditor General, Department of the Navy

## **Department of the Air Force**

Assistant Secretary of the Air Force (Acquisition)
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force
Commander, Air Combat Command
Commander, Air Armament Center

### **Combatant Command**

Inspector General, U.S. Joint Forces Command

## **Other Defense Organizations**

Director, Defense Contract Audit Agency Director, Defense Contract Management Agency

## **Non-Defense Federal Organization**

Department of Justice Office of Management and Budget Office of Federal Procurement Policy

# Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Homeland Security and Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform

House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform

House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

## **Under Secretary of Defense for Acquisition, Technology, and Logistics Comments**

Final Report Reference



#### OFFICE OF THE UNDER SECRETARY OF DEFENSE 3000 DEFENSE PENTAGON WASHINGTON, DC 20301-3000

JUN 2 9 2005

MEMORANDUM FOR DEPUTY DIRECTOR, CONTRACT MANAGEMENT DIRECTORATE, DODIG

THROUGH: DIRECTOR, ACQUISITION RESOURCES ANALYSIS 4129/05

SUBJECT: Response to DoDIG Draft Report D2004-D000CH-0164.000, "Source Selection Decisions for the Air Force Small Diameter Bomb Program"

As requested, I am providing responses to the general content and recommendations contained in the subject report.

My point of contact for this matter is Mr. Ronald J. Woods, at (703) 697-8183, or ronald.woods@osd.mil.

Glenn F. Lamaryin Director

Defense Systems

#### Enclosures:

1. DOD Comments to the DoDIG Recommendations

2. DOD Comments on the Draft Report

Enclosure 2 was not included in report



#### DoDIG PROJECT NO. D2004-D000CH-0164.000

# "SOURCE SELECTION DECISIONS FOR THE AIR FORCE SMALL DIAMETER BOMB PROGRAM"

# DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATIONS

**RECOMMENDATION 1:** The DoDIG recommended that the Under Secretary of Defense for Acquisition, Technology and Logistics provide oversight for, and require, that the Air Force conduct a competitive procurement for the Phase II requirements as required by the Government Accountability Office (GAO) decision. (Page 13/Draft Report)

**<u>DoD RESPONSE</u>**: Concur. The Air Force is already executing a revised acquisition strategy, subject to OSD review, based on results of the sustained GAO protest.

**RECOMMENDATION 2:** The GAO recommended that the Under Secretary of Defense for Acquisition, Technology and Logistics develop guidance relating to spiral or incremental development programs for critical products and technologies to ensure the acquisition strategy complies with the "Competition in Contracting Act of 1984" and provides fairness and best value for DoD (Page 13/Draft Report)

<u>DoD RESPONSE</u>: Partially Concur. There are existing regulations and policy that address spiral development for program managers. OUSD(AT&L)/Defense Procurement & Acquisition Policy will review the current guidance for completeness and clarity by December 2005.

Enclosure (1)

## **Team Members**

The Department of Defense Office of the Deputy Inspector General for Auditing, Contract Management prepared this report. Personnel of the Department of Defense Office of the Inspector General who contributed to the report are listed below.

Richard B. Jolliffe Henry F. Kleinknecht Patrick J. Nix Kent E. Shaw Jason T. Steinhart Michael B. Vandesteene Jillian M. LaLonde Meredith H. Johnson Jillisa H. Milner