

UNCLASSIFIED

PE NUMBER: 0604329F
 PE TITLE: Small Diameter Bomb

Exhibit R-2, RDT&E Budget Item Justification								DATE February 2004	
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604329F Small Diameter Bomb					
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	56.292	125.373	76.489	85.525	87.257	77.760	56.490	0.000	378.360
5006 Small Diameter Bomb	56.292	125.373	76.489	85.525	87.257	77.760	56.490	0.000	378.360

(U) **A. Mission Description and Budget Item Justification**

Small Diameter Bomb (SDB) is an Air Force ACAT 1D program providing increased kills per sortie on current and future aircraft platforms. SDB addresses the following warfighter requirements: multiple kills per pass; multiple ordnance carriage; adverse weather operations, near-precision munitions capability; capability against fixed targets; reduced munitions footprint; increased weapons effectiveness; minimized potential for collateral damage; and reduced susceptibility of munitions to countermeasures. Threshold aircraft is the F-15E. Objective aircraft include the B-1, B-2, Joint Strike Fighter (JSF), F/A-22, F-117, F-16, B-52, Predator B, and the Unmanned Combat Air Vehicle (UCAV). SDB is currently in System Development Demonstration (SDD) phase with Milestone C planned for the third quarter of 2005. SDB will continue multiple incremental development to attack moving targets and pursue network CENTRIC interoperability (Increment 2,3). SDB is a key component of the Air Force's Global Strike Task Force CONOPS.

The government is buying the SDB based on a contractor-developed, government-approved System Performance Specification (SPS) which became contractually binding at contract award. The contractor will assume performance responsibility as defined in the SPS and warrants system performance for 20 years. Accordingly, the contractor is responsible not only for the design of the missile system, but also for planning and executing the seamless verification program to verify the system performance. In its role as facilitator and advisor to the contractor, the government formally arranges and funds the use of government flight test support for testing. Although funded by the government, flight test support funds are part of the negotiated commitment between the contractor and the government ensuring the contractor is able to execute the test program according to the scope of the SDD contract.

This program is in Budget Activity 5 - System Development and Demonstration (SDD) because this RDT&E effort develops the Small Diameter Bomb weapon system.

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2004

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604329F Small Diameter Bomb

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	53.118	126.447	67.685
(U) Current PBR/President's Budget	56.292	125.373	76.489
(U) Total Adjustments	3.174	-1.074	
(U) Congressional Program Reductions	0.000	0.000	
Congressional Rescissions	0.000	-1.074	
Congressional Increases	0.000	0.000	
Reprogrammings	3.999	0.000	
SBIR/STTR Transfer	-0.825	0.000	

(U) **Significant Program Changes:**

FY05-09: Adjustment takes advantage of a successful competitive downselect that acquires SDB at a less expensive cost. SDB is an incremental development weapon program that entered System Development and Demonstration phase of its first increment in FY04. This adjustment transferred procurement funding savings into R&D, funding development of the program's next increment. It also added \$9M to the baseline program in FY05, funding early and aggressive testing.

Exhibit R-2a, RDT&E Project Justification

DATE
February 2004

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0604329F Small Diameter Bomb			PROJECT NUMBER AND TITLE 5006 Small Diameter Bomb		
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
5006 Small Diameter Bomb	56.292	125.373	76.489	85.525	87.257	77.760	56.490	0.000	378.360
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

Small Diameter Bomb (SDB) is an Air Force ACAT 1D program providing increased kills per sortie on current and future aircraft platforms. SDB addresses the following warfighter requirements: multiple kills per pass; multiple ordnance carriage; adverse weather operations, near-precision munitions capability; capability against fixed targets; reduced munitions footprint; increased weapons effectiveness; minimized potential for collateral damage; and reduced susceptibility of munitions to countermeasures. Threshold aircraft is the F-15E. Objective aircraft include the B-1, B-2, Joint Strike Fighter (JSF), F/A-22, F-117, F-16, B-52, Predator B, and the Unmanned Combat Air Vehicle (UCAV). SDB is currently in System Development Demonstration (SDD) phase with Milestone C planned for the third quarter of 2005. SDB will continue multiple incremental development to attack moving targets and pursue network CENTRIC interoperability (Increment 2,3). SDB is a key component of the Air Force's Global Strike Task Force CONOPS.

The government is buying the SDB based on a contractor-developed, government-approved System Performance Specification (SPS) which became contractually binding at contract award. The contractor will assume performance responsibility as defined in the SPS and warrants system performance for 20 years. Accordingly, the contractor is responsible not only for the design of the missile system, but also for planning and executing the seamless verification program to verify the system performance. In its role as facilitator and advisor to the contractor, the government formally arranges and funds the use of government flight test support for testing. Although funded by the government, flight test support funds are part of the negotiated commitment between the contractor and the government ensuring the contractor is able to execute the test program according to the scope of the SDD contract.

This program is in Budget Activity 5 - System Development and Demonstration (SDD) because this RDT&E effort develops the Small Diameter Bomb weapon system.

(U) B. Accomplishments/Planned Program (\$ in Millions)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Complete Component Advanced Development (CAD) phase with two competing contractors.	45.388	0.000	0.000
(U) Continue CAD test support.	0.672	0.000	0.000
(U) Continue aircraft integration.	6.486	5.367	2.233
(U) Continue program office support.	3.048	3.742	4.936
(U) Continue mission support.	0.698	1.218	0.634
(U) Continue System Development and Demonstration (SDD) phase for fixed target variant.	0.000	105.605	61.504
(U) Continue SDD testing and continue test support.	0.000	9.441	7.182
(U) Total Cost	56.292	125.373	76.489

Exhibit R-2a, RDT&E Project Justification

DATE

February 2004

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604329F Small Diameter Bomb

PROJECT NUMBER AND TITLE

5006 Small Diameter Bomb

(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E (Lab 0603601F) App 3600	8.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.028
(U) Missile Procurement, AF, 0207327F, App 3020	0.000	0.000	29.257	59.011	112.075	102.864	138.385	994.577	1,436.169

(U) **D. Acquisition Strategy**

All major contracts within this Program Element have been awarded through full and open competition. Two contractors were selected for the 24 month CAD phase using Firm Fixed Price contracts. The Air Force downselected to Boeing in August 2003. SDD will be a fixed target variant with near precision and significant weapon effectiveness. SDD is a Cost Plus Award Fee contract.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2004

BUDGET ACTIVITY			PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
05 System Development and Demonstration (SDD)			0604329F Small Diameter Bomb					5006 Small Diameter Bomb				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total</u>	<u>FY</u>	<u>FY</u>	<u>FY</u>	<u>FY</u>	<u>FY</u>	<u>FY</u>	<u>Cost to</u>	<u>Total</u>	<u>Target</u>
			<u>Prior to FY</u>	<u>2003</u>	<u>2003</u>	<u>2004</u>	<u>2004</u>	<u>2005</u>	<u>2005</u>	<u>Complete</u>	<u>Cost</u>	<u>Value of</u>
			<u>2003</u>	<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>			<u>Contract</u>
			<u>Cost</u>		<u>Date</u>		<u>Date</u>		<u>Date</u>			
(U) <u>Product Development</u>												
CAD Contract 1	FFP	Lockheed Martin, Orlando FL	31.533	22.522	Sep-01	0.000	N/A	0.000	N/A	0.000	54.055	54.055
CAD Contract 2	FFP	Boeing, St Louis MO	31.189	22.866	Sep-01	0.000	N/A	0.000	N/A	0.000	54.055	54.055
SDD Baseline Contract	CPAF	Boeing, St Louis MO	0.000	0.000	N/A	105.605	Oct-03	61.504	Oct-03	27.684	194.793	194.793
SDD Follow-on Increments	TBD	Boeing, St Louis MO	0.000	0.000	N/A	0.000	N/A	0.000	N/A	365.119	365.119	365.119
Subtotal Product Development			62.722	45.388		105.605		61.504		392.803	668.022	668.022
Remarks:												
(U) <u>Support</u>												
F-15 SPO	PO (In-House)	Wright Patterson AFB, OH	0.106	6.401	N/A	5.300	N/A	2.100	N/A	0.000	13.907	13.907
Other A/C SPOs	PO (In-House)	Wright Patterson AFB, OH	1.040	0.085	N/A	0.067	N/A	0.133	N/A	0.273	1.598	1.598
Sverdrup Inc.	C/CPAF	Eglin AFB, FL	1.871	2.132	Jun-01	1.684	Jun-01	2.058	Jun-01	8.727	16.472	16.472
Other	Misc	various	1.338	1.197	N/A	2.552	N/A	2.777	N/A	12.699	20.563	20.563
Subtotal Support			4.355	9.815		9.603		7.068		21.699	52.540	52.540
Remarks:												
(U) <u>Test & Evaluation</u>												
46 TW	PO (In-House)	Eglin AFB, FL	0.160	0.672	N/A	9.441	N/A	7.182	N/A	1.060	18.515	18.515
Subtotal Test & Evaluation			0.160	0.672		9.441		7.182		1.060	18.515	18.515
Remarks:												
(U) <u>Management</u>												
Madison Research	C/CPAF	Eglin AFB, FL	0.189	0.417	Jun-01	0.724	Jun-01	0.735	Jun-01	3.070	5.135	5.135
Subtotal Management			0.189	0.417		0.724		0.735		3.070	5.135	5.135
Remarks:												
(U) Total Cost			67.426	56.292		125.373		76.489		418.632	744.212	744.212

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2004

BUDGET ACTIVITY
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE
0604329F Small Diameter Bomb

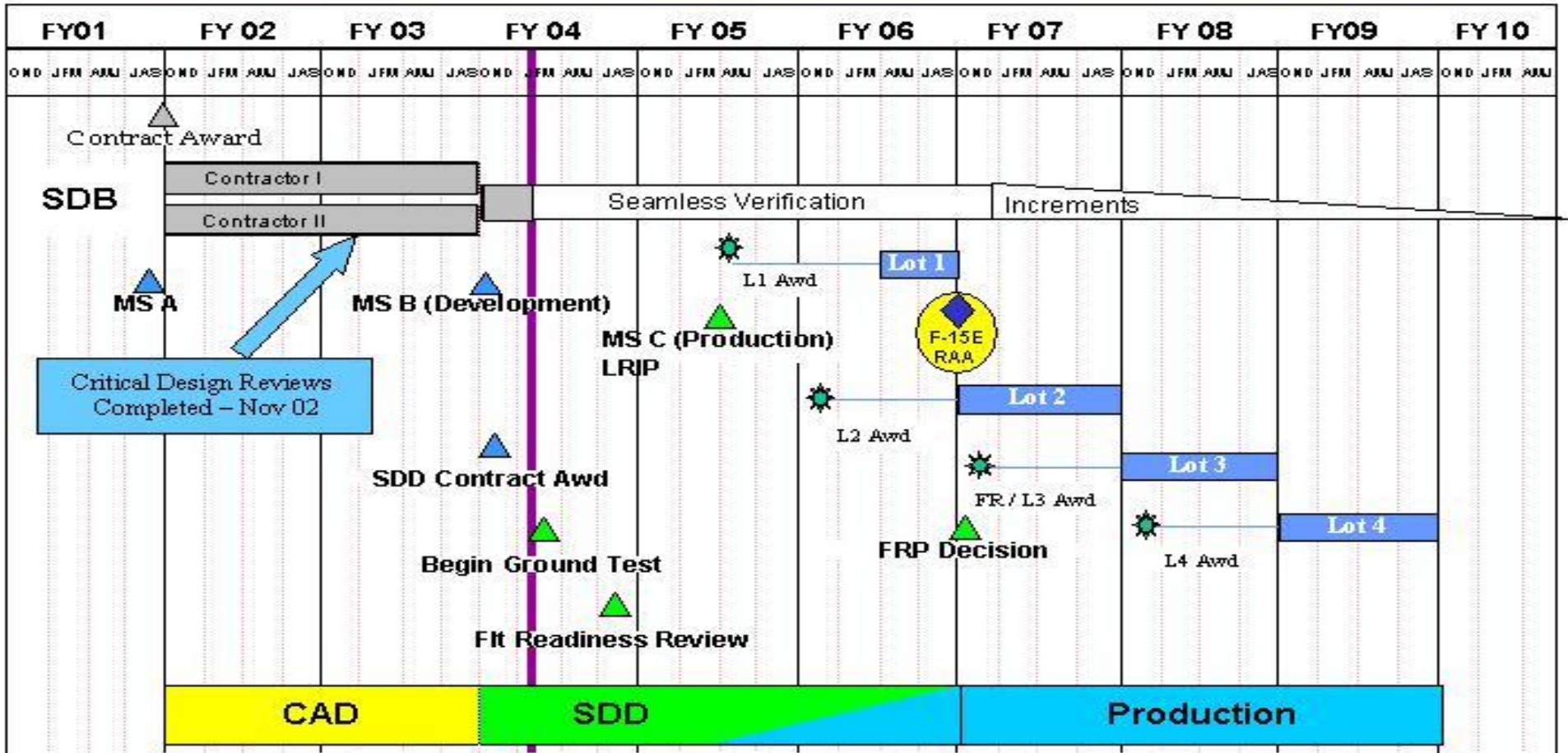
PROJECT NUMBER AND TITLE
5006 Small Diameter Bomb

SDB Program

Commander's Intent: You Will Deliver Small Diameter Bomb (SDB) to the Warfighter in FY06. Schedule Is Paramount



Small Diameter Bomb



UNCLASSIFIED

Exhibit R-4a, RDT&E Schedule Detail		DATE February 2004
--	--	------------------------------

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604329F Small Diameter Bomb	PROJECT NUMBER AND TITLE 5006 Small Diameter Bomb
---	--	---

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Schedule Profile			
(U) Milestone B (Enter System Development Design (SDD))		1Q	
(U) SDD Contract Award		1Q	
(U) Begin Ground Testing		2Q	
(U) Flight Readiness Review		4Q	
(U) Milestone C			3Q
(U) Low Rate Initial Production (LRIP) Contract Award			3Q