

UNCLASSIFIED

PE NUMBER: 0604429F
 PE TITLE: AIRBORNE ELECTRONIC ATTACK

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2007
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604429F AIRBORNE ELECTRONIC ATTACK
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Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	29.833	12.374	20.007	24.684	11.805	11.783	12.006	12.249	Continuing	TBD
5192 Network & Sys -of-Sys Dev	18.368	12.374	20.007	24.684	11.805	11.783	12.006	12.249	Continuing	TBD
5193 B-52 Stand-Off Jammer	11.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	TBD

Project 655193, B-52 Stand-Off Jammer, is terminated in FY 2007.

(U) A. Mission Description and Budget Item Justification

This program element supports the development of the critical electronic attack capabilities, from technology demonstrations through transition to operational capability, for Air Force and joint operations to include the Global Strike and Persistent Global Attack Concepts of Operations (CONOPS). Based on the 2001 Joint Airborne Electronic Attack (AEA) Analysis of Alternatives (AoA) and the follow-on 2002 Joint Suppression of Enemy Air Defenses (Joint SEAD) presentation to OSD(AT&L), the AEA capability will consist of a number of components working together in a joint system of systems. The Joint SEAD presentation identified the Navy AEA components as the EA-6B Improved Capability (ICAP) III and EA-18G modified escort platforms and indicated the Air Force will be responsible for coordinating overall AEA system of systems requirements. AF component capabilities include the Miniature Air Launched Decoy (MALD) and its stand-in jammer variant called MALD-J, the EC-130H Compass Call Baseline 0 (formerly Block 35) configuration and Active Electronically Scanned Array (AESAs) radar equipped aircraft, and potentially, recoverable unmanned stand-in and manned long range stand-off jammer platforms.

This program is included in budget activity 5, System Development and Demonstration, because of the development and/or testing associated with Airborne Electronic Attack.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	119.262	12.421	12.485	12.492
(U) Current PBR/President's Budget	29.833	12.374	20.007	24.684
(U) Total Adjustments	-89.429			
(U) Congressional Program Reductions				
Congressional Rescissions	-92.804			
Congressional Increases				
Reprogrammings	4.000			
SBIR/STTR Transfer	-0.625			

(U) Significant Program Changes:

- FY2006, Airborne Electronic Attack (AEA) efforts were transferred from PE 0604270F, EW Development, into this PE
- FY2007, Project 655193, B-52 Stand-Off Jammer terminates
- FY2008/2009, Funds added to Network & Sys-of-Sys Dev (BPAC 655192) for AEA Technology Maturation efforts

Exhibit R-2a, RDT&E Project Justification

DATE
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604429F AIRBORNE ELECTRONIC ATTACK			PROJECT NUMBER AND TITLE 5192 Network & Sys -of-Sys Dev		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5192 Network & Sys -of-Sys Dev	18.368	12.374	20.007	24.684	11.805	11.783	12.006	12.249	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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

This project concentrates on the overall systems engineering, modeling and simulation, architecture and network requirements development, effectiveness assessment and requirements allocation to component systems of the Airborne Electronic Attack (AEA) System of Systems (SoS). It also includes establishment and use of virtual test capabilities for system of systems effectiveness testing/evaluation for AEA, studies and technology risk mitigation demonstrations for AEA SoS components and AEA SoS battle management, and the development and maintenance of the Air Force electronic warfare capability investment strategy. These efforts are crucial in the development of critical electronic attack capabilities in support of Air Force and joint operations to include Global Strike and Persistent Global Attack Concepts of Operations (CONOPS).

The joint AEA SoS includes the Navy EA-6B and EA-18G core components; the Air Force Miniature Air Launched Decoy (MALD) and its stand-in jammer variant, MALD-J; the EC-130H Compass Call Baseline 0 (formerly Block 35) configuration; Active Electronically Scanned Array (AESA) radar equipped aircraft; and potentially an unmanned recoverable stand-in jamming platform and a low/mid frequency, high power component capable of location and reactive jamming suppression of enemy integrated air defense system (IADS) radars outside the ranges of the associated Surface-to-Air Missiles (SAMs) and non-IADS targets.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) AEA Synchronization Office Support	1.025	1.074	1.250	1.300
(U) AEA System of Systems engineering/architecture development/requirements refinement	5.700	5.800	6.407	6.410
(U) AEA virtual test/modeling & simulation/EW capability investment strategy/technology demonstrations	11.643	5.500	12.350	16.974
(U) Total Cost	18.368	12.374	20.007	24.684

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							

(U) None

(U) **D. Acquisition Strategy**

Project 5192 "Network and System of Systems Development" plans to use existing ASC, AFRL, and other contracts and instruments to provide engineering, architecture development, and other support for the AEA System of Systems.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT NUMBER AND TITLE				
05 System Development and Demonstration (SDD)				0604429F AIRBORNE ELECTRONIC ATTACK						5192 Network & Sys -of-Sys Dev				
<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 Prior to FY 2006 Cost</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>(U) Product Development</u>														
AEA system of systems engineering	MIPR & CPFF	Various		4.650	Jan-06	4.750	Dec-06	5.300	Dec-07	5.110	Dec-08	Continuing	TBD	
Subtotal Product Development			0.000	4.650		4.750		5.300		5.110		Continuing	TBD	0.000
Remarks:	Includes system of systems engineering; architecture development; network requirements development; EW assessments; working group support; engineering, test planning, and milestone preparation assistance for AF AEA SoS components													
<u>(U) Support</u>														
AEA requirements support	MIPR	Various		1.050	Jan-06	1.050	Dec-06	1.107	Dec-07	1.300	Dec-08	Continuing	TBD	
Subtotal Support			0.000	1.050		1.050		1.107		1.300		Continuing	TBD	0.000
Remarks:	Requirements support includes contracted requirements refinement support for ACC and AF/A5R													
<u>(U) Test & Evaluation</u>														
AEA Virtual test/AFEWICS/Technology Demonstrations	Various	Various		11.643	Nov-05	5.500	Nov-06	12.350	Nov-07	16.974	Dec-08	Continuing	TBD	
Subtotal Test & Evaluation			0.000	11.643		5.500		12.350		16.974		Continuing	TBD	0.000
Remarks:	AEA virtual test element includes modeling and simulation for SoS EW assessments, conducting technology risk mitigation demonstrations, DoD scenario initiation & distribution, SoS test planning/rehearsal, and supports Air Force Electronic Warfare Capability Investment Strategy (AFEWCIS) roadmap development, maintenance, & assessments													
<u>(U) Management</u>														
ASC/XR (AEA Synch office)	Various	Various		1.025	Oct-05	1.074	Oct-06	1.250	Oct-07	1.300	Oct-07	Continuing	TBD	
Subtotal Management			0.000	1.025		1.074		1.250		1.300		Continuing	TBD	0.000
Remarks:	Element includes miscellaneous administrative costs incurred in the day-to-day operations by program offices. Costs include travel, office equipment, office supplies, printing, contract services, program management administrative and communications expenses.													
<u>(U) Total Cost</u>			0.000	18.368		12.374		20.007		24.684		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

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BUDGET ACTIVITY
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE
0604429F AIRBORNE ELECTRONIC
ATTACK

PROJECT NUMBER AND TITLE
5192 Network & Sys -of-Sys Dev



AEA SoS Synchronization Schedule

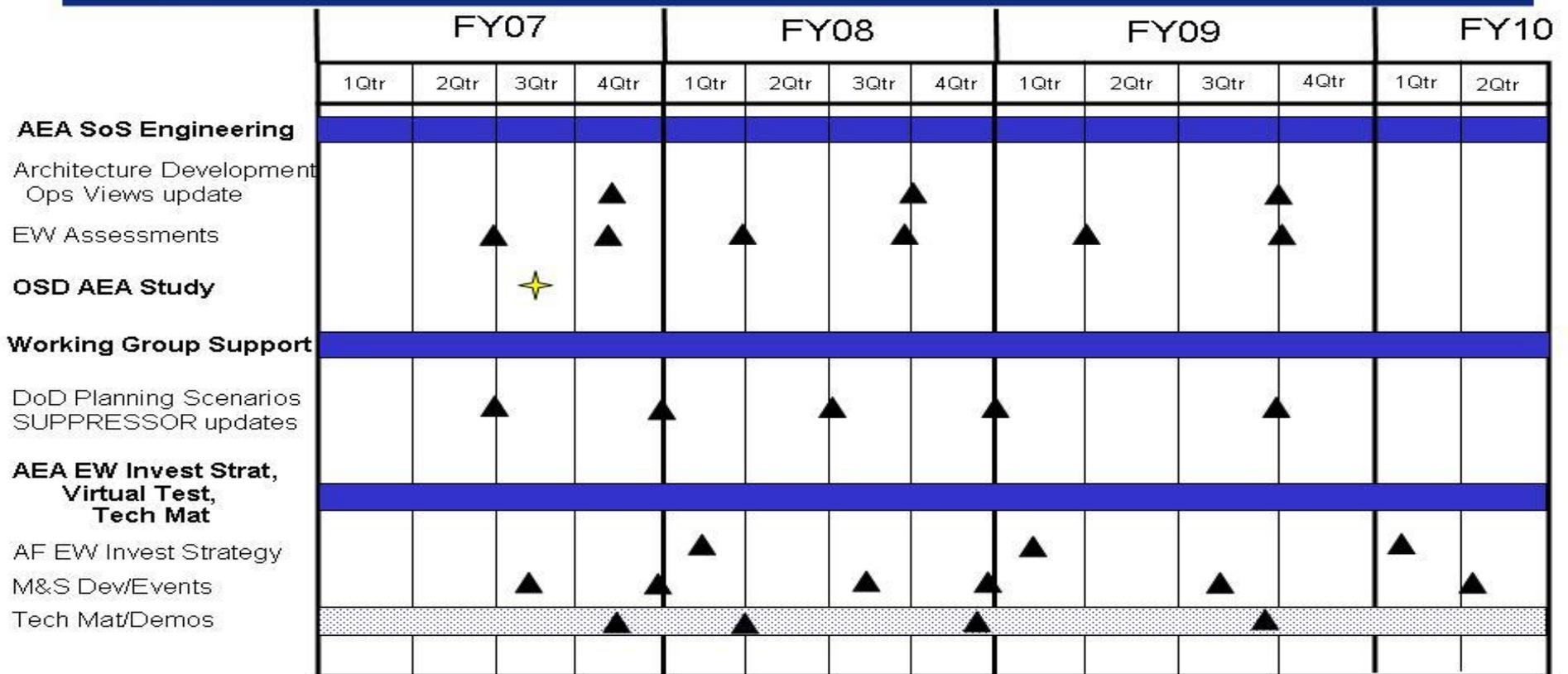


Exhibit R-4a, RDT&E Schedule Detail

DATE

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604429F AIRBORNE ELECTRONIC
ATTACK

PROJECT NUMBER AND TITLE

5192 Network & Sys -of-Sys Dev

(U) Schedule Profile

FY 2006

FY 2007

FY 2008

FY 2009

(U) Continuing to support ongoing AEA systems engineering efforts

1-4Q

1-4Q

1-4Q

1-4Q

Exhibit R-2a, RDT&E Project Justification

DATE
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0604429F AIRBORNE ELECTRONIC ATTACK			PROJECT NUMBER AND TITLE 5193 B-52 Stand-Off Jammer		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5193 B-52 Stand-Off Jammer	11.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

In FY 2006, Project 655193, B-52 Stand-Off Jammer, efforts were transferred from PE 0604270F, Electronic Warfare Development, Project 658462, Miniature Air Launched Decoy.

(U) A. Mission Description and Budget Item Justification

This program is terminated in FY07. The Air Force is continuing to perform studies and mature technologies to a level needed to provide an electronic attack capability for reactive jamming suppression of enemy integrated air defense systems (IADS) and IADS component radars from stand-off distances.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) B-52 SOJ Pre-SDD Contract				
(U) B-52 SOJ SDD Contract				
(U) Tech Demo	7.728			
(U) Mission and Test Support	0.500			
(U) Program Office Support	3.237			
(U) Total Cost	11.465	0.000	0.000	0.000

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) PE 0207442F (AEA procurement)									0.000	0.000

(U) D. Acquisition Strategy

Maturation of high risk technologies will continue via AFRL contracts with applicable vendors. This effort will mature technologies that are applicable to the AEA System of Systems requirements. The Air Force will not award a prime contract for the B-52 SOJ due to termination of program.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604429F AIRBORNE ELECTRONIC ATTACK	PROJECT NUMBER AND TITLE 5193 B-52 Stand-Off Jammer
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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2006</u> <u>Cost</u>	<u>FY 2006</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2009</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
				<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>			
					<u>Date</u>		<u>Date</u>		<u>Date</u>		<u>Date</u>			
(U) <u>Product Development</u>														
B-52 SOJ Pre-SDD Contract				0.000									0.000	0.000
B-52 SOJ SDD Contract												0.000	0.000	0.000
Low Band Phased Array Tech Development				7.728									7.728	7.728
Subtotal Product Development			0.000	7.728		0.000		0.000		0.000		0.000	7.728	0.000
Remarks:														
(U) <u>Support</u>														
SOJ Program Support				3.237								Continuing	TBD	
Government Furnished Equipment				0.000								Continuing	TBD	
Subtotal Support			0.000	3.237		0.000		0.000		0.000		Continuing	TBD	0.000
Remarks:		Studies and Analysis includes modeling and simulation												
(U) <u>Test & Evaluation</u>														
Test Support				0.000								Continuing	TBD	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000		Continuing	TBD	0.000
Remarks:		Funds for test planning support from various organizations												
(U) <u>Management</u>														
Management Support				0.100									0.100	
Studies and Analysis				0.400								Continuing	TBD	
Subtotal Management			0.000	0.500		0.000		0.000		0.000		Continuing	TBD	0.000
Remarks:		Includes support of Acquisition and Sustainment wings at Wright-Patterson AFB and Tinker AFB, studies, analysis modeling and simulation												
(U) Total Cost			0.000	11.465		0.000		0.000		0.000		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE
**0604429F AIRBORNE ELECTRONIC
ATTACK**

PROJECT NUMBER AND TITLE
5193 B-52 Stand-Off Jammer



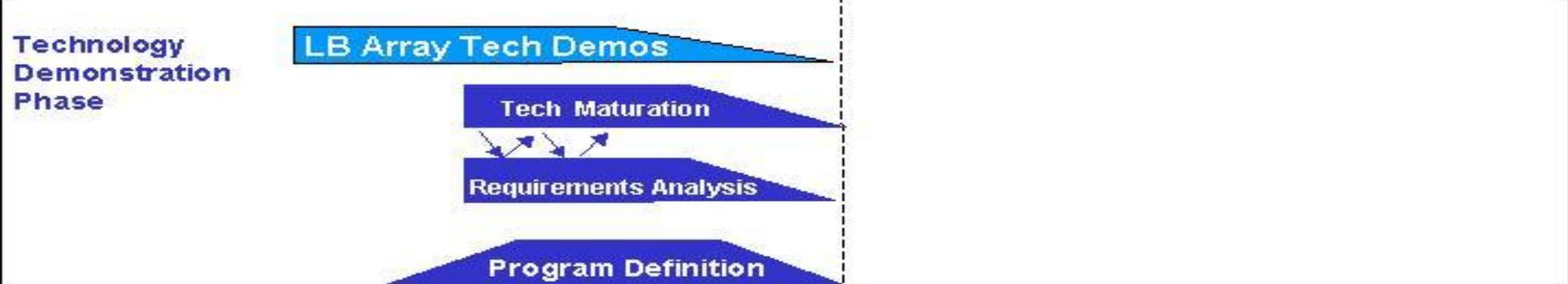
Schedule



Dominant Air Power: Design For Tomorrow... Deliver Today

FY: **2005** **2006** **2007** **2008**

Milestones: **Program Termination**
Capabilities Documents: 
 **ICD**



LEGEND
 ICD: Initial Capabilities Document

Exhibit R-4a, RDT&E Schedule Detail

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February 2007

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604429F AIRBORNE ELECTRONIC
ATTACK

PROJECT NUMBER AND TITLE

5193 B-52 Stand-Off Jammer

(U) Schedule Profile

FY 2006

FY 2007

FY 2008

FY 2009

(U) Program termination

1Q