

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)										Date: (MONTH/YEAR) FEB 99		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/ Budget Activity 4						R-1 ITEM NOMENCLATURE Tactical Anti-Satellite Program Development - PE 0603892D						
Cost (In Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE 0603892D Cost	37.5	0	0	0	0	0	0	0	0	0	Continuing	Continuing
Kinetic Energy anti-satellite Cost	37.5	0	0	0	0	0	0	0	0	0	Continuing	Continuing

A. Mission Description and Budget Item Justification

(U) **BRIEF DESCRIPTION OF ELEMENT:** The U.S. military has become dependent on satellites as a primary source of information in virtually all of its operations and then looking at the world-wide proliferation of technology which is making this type capability readily available to virtually any country. Today, national defense planners and strategists have to operate with the knowledge that future adversaries will have access to satellite derived intelligence, warning, communications, navigation, weather and other information that can significantly enhance their war-fighting capability and increase the risk to U.S. and allied forces

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		Date: (MONTH/YEAR) FEB 99
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/ Budget Activity 4	R-1 ITEM NOMENCLATURE Tactical Anti-Satellite Program Development - PE 0603892D	

(U) In 1989 the Department of Defense initiated a program to develop a ground-launched, kinetic energy (i.e., hit-to-kill) anti-satellite (KE ASAT) weapon system which would leverage off technologies developed by the U.S. Army Space and Strategic Defense Command in support of the (then) Strategic Defense Initiative Organization. Following a Milestone I Defense Acquisition Board Review in December of 1989, the Army was given responsibility for development of the weapon elements of the system (booster, kill vehicle, launch and ground support systems, and the mission and battery control centers.) The Air Force was given responsibility for development of the command and control elements that would have allowed the Commander-in-Chief, U.S. Space Command (USCINCSpace) to plan and control ASAT engagements.

(U) With the end of the cold war the perceived need for this capability, as well as support for continued funding diminished steadily and the program was restructured several times. The National Defense Authorization Act for fiscal year 1994 (FY 1994) directed that the program be converted to a Tactical ASAT Technology Program as opposed to an acquisition program with a low funding level. Under this current program, the KE ASAT was test fired in September 1994, successfully meeting all requirements. This 94-pound kill vehicle is the critical component of a KE ASAT. The following was accomplished in FY 1998:

- KE Hover Test Completed at National Hover Test Facility, Edwards Air Force Base
- Weapon Control Subsystem (WCS) Demonstrator Software Upgraded and W5 Test Completed
- Graphical Display System (GDS) Added to WCS Screens
- KV Divert and Attitude Control System (DACS) Design Upgraded and Components Fabricated
- KV Flight Software Developed and Testing Initiated on Software Testbed
- KV Avionics Components Fabricated
- KV Digital Flyout Simulation Completed
- Seeker and GN&C Processors Upgraded

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		Date: (MONTH/YEAR) FEB 99
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/ Budget Activity 4	R-1 ITEM NOMENCLATURE Tactical Anti-Satellite Program Development - PE 0603892D	

FY98/99 Plans

INTERCEPTOR COMPONENT	
DEVELOPMENT, INTEGRATION AND TESTING	\$6,750K
INTEGRATED COMMAND AND CONTROL SUBSYSTEM	\$5,500K
KV SYSTEM INTEGRATION AND TESTING	\$6,750K
KILL MECHANISM TECHNOLOGY DEVELOPMENT	\$8,250K
HWIL FACILITY PREPARATION AND TESTING	\$4,000K
PROGRAM MANAGEMENT	\$2,250K
TECHNICAL SIMULATION & SUPPORT (SBIR)	\$4,000K

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		Date: (MONTH/YEAR) FEB 99
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/ Budget Activity 4	R-1 ITEM NOMENCLATURE Tactical Anti-Satellite Program Development - PE 0603892D	

(U) FY 1998 Plans:

- The Senate Armed Services Committee has authorized \$37.5 million for KE ASAT in the FY 1998 Authorization Bill. The Senate Appropriation bill also included \$37.5 million for KE ASAT. The Joint Authorization (Senate & House) has agreed on \$37.5 million for KE ASAT. The following will be accomplished with FY 1998 funds:
- Complete KV HW/SW Integration
- KV Hardware-In-Loop testing
- Integrated Command and Control Subsystem Integration
- Kill Mechanism Technology Development
- Digital simulations

**Work will not include booster procurement, laser development or space surveillance efforts.

(U) B. Program Change Summary

	<u>FY1998</u>	<u>FY1999</u>	<u>FY2000</u>	<u>Total Cost</u>
Previous President's Budget	0	0	0	0
Appropriated Value	37500K	0	0	
Adjustments to Appropriated Value *	0	0	0	0
Current Budget Submit/President's Budget	37500K	0	0	0

UNCLASSIFIED

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		Date: (MONTH/YEAR) FEB 99
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/ Budget Activity 4	R-1 ITEM NOMENCLATURE Tactical Anti-Satellite Program Development - PE 0603892D	

(U) C. Other Program Funding Summary:

The original PE0603392A was established in 1989. By FY1996 Congressional action, this PE was transferred to OSD under PE0603392D. Then, later in 1996, the PE was changed to PE0603892D for more appropriate execution (Budget Activity 4). This is a continuation of the same Anti-Satellite program.

(U) D. Acquisition Strategy

The prime contract was awarded on a competitive basis in 1990 to Rockwell International. FY96 and FY97 funds were obligated on the existing contract. A technical analysis contract was awarded on a competitive basis as a SBIR to DESE Research. Other major activities will be performed in-house and by OGA. Streamline acquisition strategy has been adopted based on DOD 5000.2. Also, an integrated product team approach has been implemented. Commercial specifications have been adopted, and MIL-SPECS are used an exception basis only for acquisition.

(U) E. Schedule Profile

Fiscal year actual and planned events by quarter

<u>Project Milestones</u>	<u>FY 1998</u>				<u>FY 1999</u>			
	1	2	3	4	1	2	3	4
• Kill Mechanism Development					X	X	X	X
• KV Integration							X	X
• Hardware-in-Loop Facility prep						X	X	X
• Digital Simulations					X	X		
• Command & Control integration & Upgrades					X	X	X	X

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)		DATE : (MONTH/YEAR) FEB 99
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE PE NUMBER/PROJECT NUMBER	
RDT&E, Defense-wide/Budget Activity 4	Tactical Anti-Satellite Program Development PE 0603892D -	

A. Project Cost Breakdown (\$ in thousands)

	FY 1998	FY 1999	FY 2000	FY 2001
Project Cost Categories				
Cost Categories:				
a. Demonstration & Validation	35,250			
b. Program Management Support	2,250			
TOTAL	37,500			

UNCLASSIFIED

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)		DATE : (MONTH/YEAR) FEB 99
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/Budget Activity 4	R-1 ITEM NOMENCLATURE PE NUMBER/PROJECT NUMBER Tactical Anti-Satellite Program Development - PE 0603892D	

B. Budget Acquisition History and Planning Information

Performing Organizations

<u>Contractor or Government Performing Activity</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 1998</u>	<u>Budget FY 1998</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
DoD (USASMDC) Prime Contractor Technical Analysis(SBIR) In-House effort (including OGA) Tech Sim/Support	C	Sep 90	-	-	325000	37500 23250 4000 8250 2000				Continuing	Continuing

Government Furnished Property

<u>Item Description</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or obligation Date</u>	<u>Delivery Date</u>	<u>Total Prior to FY1998</u>	<u>Budget 1998</u>	<u>Budget 1999</u>	<u>Budget 2000</u>	<u>Budget to Complete</u>	<u>Total Program</u>
-------------------------	--	---------------------------------	----------------------	------------------------------	--------------------	--------------------	--------------------	---------------------------	----------------------

Product Development Property (list each item separately) N/A
 Support and Management Property (list each item separately) N/A
 Test and Evaluation Property (list each item separately) N/A

Subtotal Product and Development
 Subtotal Support and Management
 Subtotal Test and Evaluation

UNCLASSIFIED

UNCLASSIFIED