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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)									DATE <b>June 2001</b>										
BUDGET ACTIVITY <b>04 - Demonstration and Validation</b>				PE NUMBER AND TITLE <b>0603438F Space Control Technology</b>					PROJECT <b>2611</b>										
COST (\$ in Thousands)		FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost								
2611	Technology Insertion Planning and Analysis	12,258	7,897	33,022	9,764	9,753	9,742	9,946	10,156	Continuing	TBD								
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0								
<p>FY02: The following new tasks are being initiated with this President's Budget:</p> <ul style="list-style-type: none"> <li>- Counter satellite communications system</li> <li>- Counter surveillance reconnaissance system</li> <li>- Space Range development</li> </ul> <p>FY03-FY07: This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.</p> <p>(U) <b><u>A. Mission Description</u></b>            This program supports a range of activities including technology planning, development, demonstrations and prototyping, as well as modeling, simulations and exercises to support development of tactics and procedures in the Space Control mission area. The types of Space Control activities accomplished are surveillance, protection, prevention, and negation. Surveillance is the monitoring, detecting, identifying, tracking, assessing, verifying, categorizing, and characterizing, objects and events in space for use in the Space Control mission area. Protection includes defensive activities to protect U.S. and friendly space-systems assets, resources, and operations from enemy attempts to negate or interfere. Prevention limits or eliminates an adversary's ability to use U.S. space systems and services for purposes hostile to U.S. national security interests. Negation activities disrupt, deny, degrade or destroy an adversary's space systems, or the information they provide, which may be used for purposes hostile to U.S. national security interests. Consistent with DoD policy, the negation efforts of this program focus only on negation technologies which have temporary, localized, and reversible effects.</p> <p>(U) <b><u>FY 2000 (\$ in Thousands)</u></b></p> <table border="0"> <tr> <td>(U) \$2,000</td> <td>Determined surveillance system deficiencies to meet Space Control requirements and assessed technologies needed to satisfy mission needs.</td> </tr> <tr> <td>(U) \$3,091</td> <td>Determined space system protection deficiencies. Assessed requirements for protection of U.S. space systems and potential technologies to achieve required threat warning and attack reporting.</td> </tr> <tr> <td>(U) \$7,167</td> <td>Continued to develop technologies to counter surveillance, reconnaissance, and communications satellite systems.</td> </tr> <tr> <td>(U) \$12,258</td> <td>Total</td> </tr> </table>												(U) \$2,000	Determined surveillance system deficiencies to meet Space Control requirements and assessed technologies needed to satisfy mission needs.	(U) \$3,091	Determined space system protection deficiencies. Assessed requirements for protection of U.S. space systems and potential technologies to achieve required threat warning and attack reporting.	(U) \$7,167	Continued to develop technologies to counter surveillance, reconnaissance, and communications satellite systems.	(U) \$12,258	Total
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<p>(U) <b><u>A. Mission Description Continued</u></b></p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$2,251      Develop potential technical solutions to address surveillance systems deficiencies and links to space control requirements.</p> <p>(U) \$733         Develop potential technical solutions to address space system protection shortfalls. Develop potential technical solutions to address threat warning and attack reporting shortfalls and determining reporting architecture and most promising technologies to pursue.</p> <p>(U) \$4,913      Continue development of technologies to counter surveillance, reconnaissance, and communications satellite systems.</p> <p>(U) \$7,897      Total</p> <p>The following net transaction is not reflected in the FY01 program total: SBIR = -613K. This transaction is not reflected in other sections of the R-docs where an FY01 total is shown.</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <p>(U) \$6,379      Accomplish threat warning and attack reporting AoA. Continue risk reduction activities, such as threat detection and characterization technology demonstrations, 'red team' vulnerability assessments, system architecture development, acquisition planning and preparation to support a Milestone B decision in FY03.</p> <p>(U) \$9,580      Begin the development and fielding of a small, mobile/transportable system to counter satellite communication systems. Develop and demonstrate advanced counter communications technologies and techniques.</p> <p>(U) \$9,075      Begin development and demonstration of a system to counter surveillance and reconnaissance satellite systems. Participate in exercises and demonstrations of a counter surveillance reconnaissance (SR) system. Complete military utility analysis, risk reduction efforts, and perform pre-concept exploration and concept definition, system architecture development, and planning to support FY02 and early FY03 decisions for system development. Continue to develop advanced counter-SR techniques.</p> <p>(U) \$988         Continue development and demonstration of advanced techniques and technologies for space control prevention systems in the laboratory and field begun in FY99 and not funded in FY00/01.</p> <p>(U) \$7,000      Begin development of the system architecture and acquisition of Space Control elements of the Space range. Begin demonstration of test assets, special test equipment, capabilities and systems required to test, validate, and verify performance of integrated Space Control technologies. Develop the test range assets to exercise, train, and develop tactics for Space Control technologies and systems.</p> <p>(U) \$33,022     Total</p> <p>(U) <b><u>B. Budget Activity Justification</u></b></p> <p>This program is in budget activity 4 - Demonstration and Validation, because it supports the research, demonstration, and validation of Space Control technologies.</p>		
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<b>04 - Demonstration and Validation</b>				<b>0603438F Space Control Technology</b>			<b>2611</b>			
<b>(U) C. Program Change Summary (\$ in Thousands)</b>										
		<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>					
(U)	Previous President's Budget (FY 2001 PBR)	12,621	9,728	9,772	TBD					
(U)	Appropriated Value	12,822	9,728							
(U)	Adjustments to Appropriated Value									
	a. Congressional/General Reductions	-99	-68							
	b. Small Business Innovative Research	-466	0							
	c. Omnibus or Other Above Threshold Reprogram	0	0							
	d. Below Threshold Reprogram	51	-1,746							
	e. Rescissions	-50	-17							
(U)	Adjustments to Budget Years Since FY 2001 PBR	0		23,250						
(U)	Current Budget Submit/FY 2002 PBR	12,258	7,897	33,022	TBD					
(U)	<b>Significant Program Changes:</b>									
	FY01 - BTR to higher priority Air Force programs.									
	FY02 - Increase addresses the recommendations of the Strategy Review. Supports the critical planning, technology development, and system acquisition in support of space control systems to meet current and future military space control needs.									
<b>(U) D. Other Program Funding Summary (\$ in Thousands)</b>										
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</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>Estimate</u>	<u>Complete</u>	
(U)	Not Applicable									
<b>(U) E. Acquisition Strategy</b>										
	Use the Air Force's modernization planning process to define space control technology priorities for study and for possible development in FY 2002 and beyond. This PE will influence Air Force Research Laboratory technology, Space and Missile System Center systems, and Electronic Systems Center space surveillance investments.									
<b>(U) F. Schedule Profile</b>										
		<u>FY 2000</u>		<u>FY 2001</u>		<u>FY 2002</u>				

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BUDGET ACTIVITY 04 - Demonstration and Validation					PE NUMBER AND TITLE 0603438F Space Control Technology					PROJECT 2611		
<b>(U) F. Schedule Profile Continued</b>												
		<u>FY 2000</u>				<u>FY 2001</u>				<u>FY 2002</u>		
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Air Force Space Control Technology Plan Approved	*											
(U) AFSPC Space Control Mission Area Plan Completion								X				
(U) Counter Communications Technology Demonstration					*							
(U) Potential attack reporting solutions and architecture studies complete									X			
(U) Begin development of threat warning and attack reporting architecture											X	
(U) Begin development of a Counter-Communications system											X	
(U) Complete Counter- Surveillance/Recon Military Utility Analysis								X				
(U) Acquisition decision to enter Counter-SR system development											X	
(U) New start for Counter-SR system development												X
* = Completed Event    X = Scheduled Event												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE June 2001			
BUDGET ACTIVITY <b>04 - Demonstration and Validation</b>					PE NUMBER AND TITLE <b>0603438F Space Control Technology</b>			PROJECT <b>2611</b>		
<b>(U) A. Project Cost Breakdown (\$ in Thousands)</b>										
					<u>FY 2000</u>		<u>FY 2001</u>			<u>FY 2002</u>
(U)	Surveillance technology assessment				2,000		2,251			0
(U)	Protection technology assessment				3,091		733			6,379
(U)	Negation technology development				7,167		4,913			
(U)	Counter Communications system development				0		0			9,580
(U)	Counter Surveillance/Reconnaissance technology and system development									9,075
(U)	Prevention technology development									988
(U)	Space Control Test Range									7,000
(U)	Total				12,258		7,897			33,022
<b>(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)</b>										
<b>(U) Performing Organizations:</b>										
<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 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
SMC	Various				4,862	4,200	7,001	26,221	Continuing	TBD
AFRL	Various				2,220	7,928	800	6,568	Continuing	TBD
<u>Support and Management Organizations</u>										
SMC	Various				130	130	96	233	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
<b>(U) Government Furnished Property:</b>										
<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 FY 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Property</u>										
None										

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<b>(U) <u>Government Furnished Property Continued:</u></b>						
<u>Support and Management Property</u>						
None						
<u>Test and Evaluation Property</u>						
None						
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Complete</u>
						<u>Total</u>
<u>Subtotals</u>						<u>Program</u>
Subtotal Product Development		7,082	12,128	7,801	32,789	TBD
Subtotal Support and Management		130	130	96	233	TBD
Subtotal Test and Evaluation						
Total Project		7,212	12,258	7,897	33,022	TBD