

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 1999
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BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0305910F Spacetrack (Space)
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COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	37,977	45,375	54,806	1,178	588	0	0	0	0	201,880
4241 Advanced Electro Optical System (AEOS)	28,267	24,640	21,000	0	0	0	0	0	0	193,927
4791 GEODSS Sustainment	0	0	6,187	1,178	588	0	0	0	0	7,953
4279 Have Stare Radar	9,710	20,735	27,619	0	0	0	0	0	0	*
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

* Prior year data not available; program transferred from the intelligence budget in FY93 at the direction of Congress
 Note: Database correction required to correct FY98 actual for project 4279

(U) A. Mission Description

The SPACETRACK program element represents a worldwide Space Surveillance Network (SSN) of dedicated, collateral, and contributing electro-optical, passive radio frequency (RF) and radar sensors. The SSN is tasked to provide space object identification and cataloging, satellite attack warning, timely notification to U.S. forces of satellite fly-over, space treaty monitoring, and scientific and technical intelligence gathering. The continued increase in satellite and orbital debris populations, as well as the increasing diversity in launch trajectories, non-standard orbits, and geosynchronous altitudes, necessitates continued modernization of the SSN to meet existing and future requirements and ensure their cost-effective supportability. The resources and responsibility for completing the HAVE STARE Radar System development were transferred to SPACETRACK from an intelligence program per Congressional direction in FY93.

The GEODSS Sustainment project, a new effort, will develop and field ten Charge Coupled Device (CCD) Cameras for the Ground-Based Electro-Optical Deep Space Surveillance (GEODSS) System, located at Socorro, NM; Diego Garcia, Indian Ocean; and Maui, Hawaii. In addition, this project will fund the purchase and integration of ten Modular Precision Angular Control Systems (MPACS).

(U) B. Budget Activity Justification:

All of these projects are Budget Activity 7, Operational Systems Development, because they involve development of or modifications to operational sensor network sites.

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BUDGET ACTIVITY 7 - Operational System Development			PE NUMBER AND TITLE 0305910F Spacetrack (Space)		
(U) C. <u>Program Change Summary (\$ in Thousands)</u>					
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY1999 PB)	38,432	39,532	28,121	0	Continuing
(U) Appropriated Value	43,073	45,832			
(U) Adjustments to Appropriated Value					
a. Cong Gen Reductions	-3,679	-457			
b. SBIR	-967				
c. Omnibus or Other Above Threshold Reprogram	-261				
d. Below Threshold Reprogramming	-189				
(U) Adjustments to Budget Years Since FY1999 PB	0	0	26,685	1,178	
(U) Current Budget Submit/FY2000 PB	37,977	45,375	54,806	1,178	Continuing
 (U) Significant Program Changes:					
FY98 reprogramming funded higher priority Air Force requirements.					
FY99: \$1,409 identified as a source for SBIR.					
FY00 increases fund the GEODSS Sustainment and AEOS projects.					
FY01 increases fund the GEODSS Sustainment project.					

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0305910F Spacetrack (Space)					PROJECT 4241	
COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4241 Advanced Electro Optical System (AEOS)	28,267	24,640	21,000	0	0	0	0	0	0	193,927
<p>*Note: FY98 funding includes Air Force Maui Optical Station (AMOS) efforts.</p> <p>(U) A. <u>Mission Description</u> The Advanced Electro-Optical System (AEOS) is a 3.67 meter telescope addition to the Maui Space Surveillance System (MSSS). The AEOS program was initiated in FY91 per Congressional direction. Congress continued to appropriate funding for this project in FY93, FY94, FY95, and FY96. DoD/ budgeted for the continuation of AEOS in FY97, FY98, FY99 and in FY00. This project is in Budget Activity 7, Operational Systems Development, because it involves sustained engineering support for development of, or modifications to, an operational SPACETRACK network site. Beginning in FY01, the Air Force Research Laboratory (AFRL) will assume management of AEOS and the MSSS, and the budget will appear in Budget Activity 2, Applied Research.</p> <p>(U) <u>FY 1998</u></p> <ul style="list-style-type: none"> - (U) \$ 16,782 Continued development of adaptive optics, sensors, and integration of the telescope system - (U) \$ 1,385 Purchased pre-operational spares - (U) \$ 4,800 Continued development of AEOS and the MSSS observatory control system - (U) \$ 5,300 Continued R&D upgrades to MSSS - (U) \$ 28,267 Total <p>(U) <u>FY 1999</u></p> <ul style="list-style-type: none"> - (U) \$ 13,792 Continue integration & test of Radiometer, Longwave Infrared Imager (LWIR) and Adaptive Optics (A/O) System - (U) \$ 1,565 Complete the MSSS Observatory Control System (OCS) - (U) \$ 7,301 R&D upgrades to the MSSS, operational transition of AEOS, and visitor programs - (U) \$ 1,217 University of Hawaii (UH) spectrograph and atmospheric characterization research - (U) \$ 765 Identified as a source for SBIR - (U) \$ 24,640 Total 										
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BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0305910F Spacetrack (Space)	PROJECT 4241
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(U) FY 2000 (\$ in Thousands):

- (U) \$ 10,515 Complete site testing and integration of the adaptive optics system; procurement of spares; transition of system from AFSPC to AFRL
- (U) \$ 2,685 Complete integration and test upgrade to MSSS Observatory Control System
- (U) \$ 7,800 Continue R&D and upgrades to MSSS (P3I items) such as AEOS/OCS enhancements to instrumentation and coude beam; advanced daylight imaging techniques and tool development
- (U) \$ 21,000 Total

(U) FY 2001 (\$ in Thousands):

- (U) \$ 0 Not Applicable

(U) **B. Project Change Summary - Description of Significant Changes:**

None

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

Not applicable

(U) **D. Acquisition Strategy:**

All major contracts were awarded after full and open competition.

(U) **E. Schedule Profile**

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(U) AEOS telescope/facility																
(U) Radiometer Acceptance							X									
(U) Long Wave Imager Acceptance							X									
(U) Observatory Control Sys Acceptance													X			
(U) Adaptive Optics System Acceptance													X			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0305910F Spacetrack (Space)					PROJECT 4241	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	Congressionally directed level of effort for AEOS Maui facilities expansion				28,267	23,875	21,000	0			
(U)	Identified as a source for SBIR				0	765	0	0			
(U)	Total				28,267	24,640	21,000	0			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
<u>Contract 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 FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
Identified as a source for SBIR	N/A	N/A	N/A	N/A	0	0	765	0	0	0	765
<u>Product Development Organization</u>											
Kiewit Pacific Co Kapolei, HI	C/FFP/AF	Aug 94	21,000	21,302	21,302	0	0	0	0	0	21,302
Contraves USA Pittsburgh, PA	C/FFP/AF	Dec 91	23,000	23,618	22,933	685	0	0	0	0	23,618
ROSI Danbury, CT	C/CPAF/AF	Aug 94	31,000	37,368	19,188	10,015	8,167	3,985	0	0	41,355
COMSAT RSI, Inc Clarksburg, MD	C/FFP/AF	Aug 95	7,000	7,250	7,250	0	0	0	0	0	7,250
Mission Research Corp Santa Barbara, CA	C/CPIF/AF	Jul 95	4,000	5,085	4,010	850	325	370	0	0	5,555
Raytheon El Segundo, CA	C/CPIF/AF	Sep 95	5,000	6,804	3,945	2,664	1,400	375	0	0	8,384
RTS Kihei, Maui, HI	C/CPAF/AF	Sep 95	N/A	24,569	5,956	10,684	10,041	13,955	0	0	40,636
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0305910F Spacetrack (Space)					PROJECT 4241	
<u>Contract 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 FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
RPS Kihei, Maui, HI	C/CPAF/AF	Oct 90	N/A	12,933	12,933	0	0	0	0	0	12,933
UH* Maui, HI	C/CR/AF	Oct 96	3,400	1,700	1,700	0	1,217	0	0	0	2,917
*Congressionally directed Spectrograph Research											
<u>Support and Management Organizations</u>											
Logicon RDA Albuquerque, NM	C/CPAF/AF	Oct 95	N/A	N/A	1,877	580	400	350	0	0	3,207
Logicon RDA Albuquerque, NM	C/CPAF/AF	Oct 93	N/A	N/A	3,360	0	0	0	0	0	3,360
MIT/LL Cambridge, MA	SS (Sole Source)	Oct 93	N/A	N/A	2,266	300	300	200	0	0	3,066
S. Systems Corp Albuquerque, NM	C/CPFF/AF	Jul 93	N/A	N/A	2,976	0	0	0	0	0	2,976
ARMY COE Haleakala, Maui, HI	SS (Sole Source)	Jan 95	N/A	N/A	1,617	0	0	0	0	0	1,617
WJS Albuquerque, NM	SS (Sole Source)	Oct 97	N/A	N/A	0	259	150	150	0	0	559
Program Office	Various	N/A	N/A	N/A	8,707	2,230	1,875	1,615	0	0	14,427
<u>Test and Evaluation Organizations</u>											
Not applicable											

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BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0305910F Spacetrack (Space)				PROJECT 4241		
Government Furnished Property:										
Item	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	FY 2000	FY 2001	Budget to Complete	Total Program
Identified as a source for SBIR				0	0	765	0	0	0	765
Subtotal Product Development				99,217	24,898	21,150	18,685	0	0	163,950
Subtotal Support and Management				20,803	3,369	2,725	2,315	0	0	29,212
Subtotal Test and Evaluation				0	0	0		0	0	0
Total Project				120,020	28,267	24,640	21,000	0	0	193,927

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BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0305910F Spacetrack (Space)					PROJECT 4791	
<i>COST (\$ In Thousands)</i>	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4791 GEODSS Sustainment	0	0	6,187	1,178	588	0	0	0	0	7,953
<p>(U) A. <u>Mission Description and Budget Item Justification</u> The GEODSS Sustainment project, a new effort, will develop and field ten Charge Coupled Device (CCD) Cameras for the Ground-Based Electro-Optical Deep Space Surveillance (GEODSS) System, located at Socorro, NM; Diego Garcia, Indian Ocean; and Maui, Hawaii. In addition, this project will fund the purchase and integration of ten replacement Modular Precision Angular Control Systems (MPACS) and development of logistical data and training. This effort, when coupled with the current GEODSS Modification Program, will result in more than double the throughput and search rate of the current system. Without CCD camera replacement, the entire GEODSS system will be unusable in the FY02 time-frame, as mission critical Ebsicon tubes are no longer manufactured or supported by any vendor and the current supply of spares will run out by the end of 2001. This would result in loss of geosynchronous space situational awareness and inability to adequately monitor friendly/enemy intent in that regime.</p> <p>(U) <u>FY 1998 (\$ in Thousands):</u> - (U) \$ 0 Not applicable</p> <p>(U) <u>FY 1999 (\$ in Thousands):</u> - (U) \$ 0 Not applicable</p> <p>(U) <u>FY 2000 (\$ in Thousands):</u> - (U) \$ 3,587 Begin CCD design - (U) \$ 2,600 Begin camera design - (U) \$ 6,187 Total</p> <p>(U) <u>FY 2001 (\$ in Thousands):</u> - (U) \$ 400 Continue CCD design - (U) \$ 778 Continue camera design - (U) \$ 1,178 Total</p> <p>(U) B. <u>Program Change Summary (\$ in Thousands) - Description of Significant Changes</u> This is a new start in FY00.</p>										
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BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0305910F Spacetrack (Space)	PROJECT 4791
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(U) **C. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 1998</u>	<u>FY 1999</u>	<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>To Compl</u>	<u>Total Cost</u>
(U) Other Procurement (Space Modifications BA 83, P-)	0	0	0	9,159	8,859	2,464	0	0	0	20,482

* Space modifications for the GEODSS Sustainment project only

(U) **D. Acquisition Strategy**

The contract for the GEODSS Sustainment project will be awarded after full and open competition.

(U) **E. Schedule Profile**

	<u>FY 1998</u>			<u>FY 1999</u>			<u>FY 2000</u>			<u>FY 2001</u>		
GEODSS Sustainment	1	2	3	4	1	2	3	4	1	2	3	4
(U) Contract Award								X				
(U) Preliminary Design Review									X			
(U) Critical Design Review											X	

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 1999				
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0305910F Spacetrack (Space)				PROJECT 4791			
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U) System Development					0	0	4,487	1,178			
(U) MITRE					0	0	840	0			
(U) TEMS/SETA					0	0	760	0			
(U) Other Support					0	0	100	0			
(U) Total					0	0	6,187	1,178			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Product Development Organizations</u>											
Prime Contractor	TBD	Dec 99	TBD	TBD	0	0	0	4,487	1,178	588	6,253
<u>Support and Management Organizations</u>											
MITRE	TBD	Dec 99	TBD	TBD	0	0	0	840	0	0	840
TEMS/SETA	TBD	Dec 99	TBD	TBD	0	0	0	760	0	0	760
Other Support	TBD	Dec 99	TBD	TBD	0	0	0	100	0	0	100
<u>Test and Evaluation Organizations</u>											
Not applicable											
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 1999			
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0305910F Spacetrack (Space)				PROJECT 4791		
(U) B. <u>Budget Acquisition History and Planning Information Continued (\$ in Thousands)</u>										
Government Furnished Property:										
Not applicable										
<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 1998</u>	<u>Budget FY 1998</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Property</u>										
Not applicable										
<u>Support and Management Property</u>										
Not applicable										
<u>Test and Evaluation Property</u>										
Not applicable										
Subtotal Product Development				0	0	0	4,487	1,178	588	6,253
Subtotal Support and Management				0	0	0	1,700	0	0	1,700
Subtotal Test and Evaluation				0	0	0	0	0	0	0
Total Project				0	0	0	6,187	1,178	588	7,953

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BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0305910F Spacetrack (Space)	PROJECT 4279
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COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
4279 Have Stare Radar	9,710	20,735	27,619	0	0	0	0	0	0	*

* Prior year data not available; program transferred from the intelligence budget in FY93 at the direction of Congress

(U) A. Mission Description

The HAVE STARE radar (FPS-129) was transferred from the intelligence budget in FY93 at the direction of Congress. The Air Force has identified a requirement for the HAVE STARE system and has programmed funding in this program element to complete development and to deploy the system. The radar is a high resolution X-band tracking and imaging radar with a 27 meter mechanical dish antenna. The system will be deployed to Vardø, Norway, as a dedicated space surveillance sensor to support the mission of space object catalog maintenance and mission payload assessment. While at the Vandenberg AFB test site, the radar has supported, in an ABM treaty compliant mode, NMD X-band radar technology studies, hardware prototyping and demonstrations. System dismantling began in October 1998. The system's Initial Operating Capability (IOC) is currently scheduled for late fourth quarter FY00. The radar will not be a fully integrated element of the Missile Warning Space Surveillance System. The radar will only be integrated with the Space Control Center and the Alternate Space Control Center.

(U) FY 1998

- (U) \$ 3,400 Continued radar development incremental funding
- (U) \$ 2,882 Continued preparations for deployment
- (U) \$ 3,428 Conducted X-band radar technology prototyping, studies, and demonstrations
- (U) \$ 9,710 Total

(U) FY 1999

- (U) \$ 1,300 Continue radar development incremental funding
- (U) \$ 5,700 Continue facility preparations
- (U) \$ 12,191 Deploy and install program equipment
- (U) \$ 900 Logistics and training
- (U) \$ 644 Identified as a source for SBIR
- (U) \$ 20,735 Total

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational System Development	0305910F Spacetrack (Space)	4279
<p>(U) <u>FY 2000 (\$ in Thousands):</u></p> <ul style="list-style-type: none">- (U) \$ 11,500 Complete facility preparation- (U) \$ 6,998 Complete system installation, integration, and checkout- (U) \$ 6,000 Conduct formal system tests- (U) \$ 2,400 Logistics and training- (U) \$ 721 Demolish test facility and cleanup test site- (U) \$ 27,619 Total <p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none">- (U) \$ 0 Not Applicable <p>(U) B. <u>Project Change Summary - Description of Significant Changes:</u> None.</p>		
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(U) C. Other Program Funding Summary (\$ in Thousands)

	<u>FY 1998</u>	<u>FY 1999</u>	<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>To</u> Compl	<u>Total</u> Cost
(U) Operations and Maintenance AF*	41,950	52,309	48,435	53,436	55,225	57,496	57,883	59,332	Cont	Cont
* Includes other projects in the Spacetrack program element										

(U) D. Acquisition Strategy:

The existing contract with Raytheon was modified in the third quarter of FY98 for the dismantling, shipment, and installation of the radar.

(U) E. Schedule Profile

	<u>FY 1998</u>			<u>FY 1999</u>			<u>FY 2000</u>			<u>FY 2001</u>		
	1	2	3	4	1	2	3	4	1	2	3	4
HAVE STARE Radar (FPS-129)												
(U) Award Deployment Contract Mod			*									
(U) Begin to Dismantle Radar at Test Site (Vandenberg AFB)					*							
(U) Begin to Install at Operational Site (Vardø, Norway)							X					
(U) Begin Formal System Testing									X			
(U) System Initial Operating Capability										X		

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0305910F Spacetrack (Space)					PROJECT 4279	
(U) A. <u>Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	System development				1,529	2,200	1,700	0			
(U)	Site preparation and support				3,557	4,800	10,900	0			
(U)	Deployment, installation and checkout				0	9,687	3,898	0			
(U)	Logistics and training				0	700	2,400	0			
(U)	Formal system testing				0	0	5,100	0			
(U)	X-Band Radar test support				2,472	0	0	0			
(U)	SPO support				2,152	2,704	3,121	0			
(U)	Demolish test facility and cleanup test site				0	0	500	0			
(U)	Identified as a source for SBIR				0	644	0	0			
(U)	Total				9,710	20,735	27,619	0			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
Performing Organizations:											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Identified as a source for SBIR	N/A	N/A	N/A	N/A	0	0	644	0	0	0	644
* Prior year data not available; program transferred from the intelligence budget in FY93 at the direction of Congress											
<u>Product Development Organizations</u>											
Raytheon Elec Sys Sudbury, MA	C/CPIF/AF	Mar 91	29,156	29,156	*	2,956	12,387	11,398	0	0	*
Site Preparation	Various	Various	N/A	N/A	*	2,100	4,700	10,850	0	0	*
AFMC SMC	Various	Various	N/A	N/A	*	1,683	0	0	0	0	*
Misc	Project Order	Various	N/A	N/A	*	440	151	2,091	0	0	*
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0305910F Spacetrack (Space)					PROJECT 4279	
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Support and Management Organizations</u>											
MITRE	SS/PR	Oct 95	N/A	N/A	*	800	700	800	0	0	*
TEMS	C/PR	Various	N/A	N/A	*	423	405	440	0	0	*
SETA	C/PR	Oct 97	N/A	N/A	*	700	575	475	0	0	*
Lincoln Lab	SS/PR	Oct 95	N/A	N/A	*	230	150	0	0	0	*
Program Office	Various	Various	N/A	N/A	*	354	583	1,003	0	0	*
Misc	Various	Various	N/A	N/A	*	24	440	562	0	0	*
<u>Test and Evaluation Organizations</u>											
Not applicable					*	0	0	0	0	0	*
Government Furnished Property:											
Identified as a source for SBIR					0	0	644	0	0	0	644
Subtotal Product Development					*	7,179	17,238	24,339	0	0	*
Subtotal Support and Management					*	2,531	2,853	3,280	0	0	*
Subtotal Test and Evaluation					*	0	0	0	0	0	*
Total Project					*	9,710	20,735	27,619	0	0	*

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