PE NUMBER: 0604421F

PE TITLE: Counterspace Systems

	Ex	hibit R-2, I	RDT&E Bu	ıdget Item	Justifica	tion			DATE	DATE February 2005			
	T ACTIVITY stem Development and Demons	tration (SDD))			BER AND TITLE 1F Counters			•				
	Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total		
	Total Program Element (PE) Cost	70.729	26.053	24.651	30.503	30.690	75.005	76.745	78.027	Continuing	TBD		
A001	Counter Satellite Communications System	13.094	6.140	6.372	6.640	6.815	7.042	7.211	7.316	Continuing	TBD		
A002	Counter Surveillance Reconnaissance System	49.479	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	49.694		
A003	Rapid Identification Detection and Reporting System (RAIDRS)	8.156	16.224	18.279	23.863	23.875	67.963	69.534	70.711	Continuing	TBD		
A005	Offensive Counterspace (OCS) C2	0.000	3.474	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.474		

(U) A. Mission Description and Budget Item Justification

This program supports the conduct of critical planning, technology insertion, and system acquisition in support of Air Force space control systems and associated command and control development to meet current and future military space control needs. Development and acquisition of counterspace systems will be conducted, capitalizing on the technology development and risk reduction efforts of PE 0603438F, Space Control Technology. This funding supports all phases of the acquisition process: concept development, risk reduction, design, demonstration, and production. Space control systems include both offensive counterspace (OCS) and defensive counterspace (DCS) systems. OCS systems include the means to 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. DCS systems include both active and passive measures to protect U.S. and friendly space related capabilities (satellites, communications links, and supporting ground systems) from enemy attack or interference. This includes development efforts to prevent adversarial ability to use U.S. space systems and services for purposes hostile to U.S. national security interests.

This program is in Budget Activity 5, System Development and Demonstration, because it supports the demonstration, engineering and manufacturing development of counterspace and space control systems.

B. Program Change Summary (\$ in Millions)

	<u>FY 2004</u>	FY 2005	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	81.629	75.863	27.753	32.746
(U) Current PBR/President's Budget	70.729	26.053	24.651	30.503
(U) Total Adjustments	-10.900	-49.810		
(U) Congressional Program Reductions		-53.310		
Congressional Rescissions				
Congressional Increases		3.500		
Reprogrammings	-9.427			
SBIR/STTR Transfer	-1.473			
(U) Significant Program Changes:				

Exhibit R-2, RDT&E Budget Item	Justification	DATE February 2005
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604421F Counterspace Systems	
FY 2005: -\$53.000, Counter Surveillance Reconnaissance System (CSRS) not fun FY 2005: \$3.500 Congressional Add for OCS C2 (Space Control Test Capability) FY 2006: -\$4.971 CSRS deletion; Rapid Attack Identification and Reporting System program requirements FY 2007: -\$14.156 CSRS deletion; RAIDRS transferred \$11.546 of its OPAF fundaments	nded by Congress) em (RAIDRS) transferred \$1.737 of its OPAF funding to R	PDT&E to meet redefined
R-1 Shopping Lis	st - Item No. 75-3 of 75-20	Exhibit R-2 (PE 0604421F)

	E	DATE	February 2005								
	BUDGET ACTIVITY D5 System Development and Demonstration (SDD)					BER AND TITLE 1F Counters	≣ space Syste	OJECT NUMBE 001 Counter of Ommunication			
	Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
A001	Counter Satellite Communications System	13.094	6.140	6.372	6.640	6.815	7.042	7.211		•	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

This effort supports concept exploration and follow-on system development of mobile/transportable counter satellite communications capabilities and associated command and control, derived from technologies examined in PE 0603438F, Space Control Technology, in the area of Offensive Counter Space. It includes architecture engineering, system hardware design and development, software design and integration, testing and procurement of capabilities to provide disruption of satellite communications signals in response to USSTRATCOM requirements.

Budget Activity Justification:

This program is in Budget Activity 5, System Development and Demonstration, because it supports the demonstration, engineering and manufacturing development of counterspace and space control systems.

(U)	B. Accomplishments/Planned Program (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
(U)	Completed development, integration, test, and fielding of a lightweight, transportable Counter Satellite	11.494			
	Communications System				
(U)	Continue Capability Upgrades		4.650	2.000	2.000
(U)	Begin to develop, integrate, test and field the next Block (Block 20) advanced counter communications			2.799	3.013
	capability				
(U)	Program Office and other Technical Support	1.550	1.440	1.573	1.577
(U)	Developmental Test/Operational Test (DT/OT) support	0.050	0.050	0.000	0.050
(U)	Total Cost	13.094	6.140	6.372	6.640
(U)	C. Other Program Funding Summary (\$ in Millions)				

FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to Total Cost
<u>Actual</u>	Estimate	Complete Total Cost						

(U) None

(U) D. Acquisition Strategy

All contracts funded in this program element will be awarded using competitive procedures to the maximum extent possible, to upgrade existing capabilities as well as to acquire next generation capabilities through incremental acquisitions.

Project A001 R-1 Shopping List - Item No. 75-4 of 75-20

Exhibit R-2a (PE 0604421F)

		Exhib	it R-3, RD	T&E Proj	ect Co	st Ana	lysis					DATE		uary 200)5
	GET ACTIVITY System Development and Demo	nstration	(SDD)					JMBER AND TITLE 421F Counterspace Systems				PROJECT NUMBER AND TITLE A001 Counter Satellite Communications System			
	Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2004 Cost	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Complete	Total Cost	Target Value of Contract
	Product Development Initial System Development & Future Capability Studies	MAPIC CPAF	Northrop Grumman, Redondo Beach, CA	9.424	11.494	Nov-03								20.918	20.918
'	Capability Upgrades	CPAF	Harris Corp, Melbourne, FL				4.650	Nov-04	2.000	Nov-05	2.000	Nov-06	Continuing	TBD	TBD
	Block 20 Capability Development & Future Capability Studies Subtotal Product Development Remarks:	TBD	TBD	9.424	11.494		4.650		2.799 4.799	Nov-05	3.013 5.013	Nov-06	Continuing Continuing	TBD TBD	TBD TBD
(U)	Support System Program Office Support & Architecture Engineering Subtotal Support	Various	SMC, El Segundo, CA	1.190 1.190	1.550 1.550	Oct-03	1.440 1.440	Oct-04	1.573 1.573	Oct-05	1.577 1.577	Oct-06	Continuing Continuing	TBD TBD	TBD TBD
(U)	Remarks: Test & Evaluation DT/OT	MIPR	AFOTEC, Albuquerque,	0.050		Oct-03		Nov-04	0.000			Nov. 06	Continuing		TBD
	Subtotal Test & Evaluation Remarks:		NM	0.050	0.050	061-03	0.050	1101-04	0.000		0.050	NOV-00	Continuing	TBD	TBD
	Management Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000 0.000	TBD TBD
	Remarks: Total Cost			10.664	13.094		6.140		6.372		6.640		Continuing	TBD	TBD
Pro	oject A001			R-1 Sh	nopping Lis	st - Item No	o. 75-5 of 7	5-20					<u>Exhi</u> bi	t R-3 (PE 06	604421F)_

DATE **Exhibit R-4, RDT&E Schedule Profile** February 2005 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT NUMBER AND TITLE 05 System Development and Demonstration (SDD) 0604421F Counterspace Systems A001 Counter Satellite Communications System Counter Communications System Schedule **FY04 FY05** FY06 FY08 **FY11 FY10** Initial Capability (1st Generation Counter Comm.) Delivery Delivery System 1 Systems 2 & 3 ОТ DTAOT Operations & Sustainment 10C FOC Capability Upgrades Build Approval Block 20 Capability (2rd Generation Counter Comm) SRR SDR PDR CDR DIT/OIL TOC Block 30 Capability (3rd Generation Counter Comm) SRR: System Requirements Review CDR: Critical Design Review FOC: Final Operational Capability SDR: System Design Review DT/OT: Developmental Test/Operational Test PDR: Preliminary Design Review IOC: Initial Operational Capability Exhibit R-4 (PE 0604421F) Project A001 R-1 Shopping List - Item No. 75-6 of 75-20

Exhibit R-4a, F	RDT&E Schedule Detail	DATE February 2	DATE February 2005		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604421F Counterspace Sy	PROJECT NUMBER AND TITLE A001 Counter Satellite Communications System			
(U) Schedule Profile (U) 1st System Delivery (U) 1st System Development/Operational Test (U) System 2 & 3 Delivery (U) Initial Operational Capability (IOC) (U) Operational Testing (U) Final Operational Capability (FOC)	FY 2004 1Q 1Q 3-4Q 4Q	FY 2005 3-4Q 4Q	FY 2006	FY 2007	
 (U) Capability Upgrades (U) Block 20 SRR (U) Block 20 SDR (U) Block 20 Key Decision Point (KDP B) (U) Block 20 PDR (U) Block 20 Key Decision Point (KDP C) 		2-4Q	1-4Q 1Q 2Q 3Q 4Q 4Q	1-4Q	
(U) Block 20 CDR (U) Block 20 Key Decison Point (Build Approval)				1Q 2Q	
Project A001	R-1 Shopping List - Item No. 75-7 of 75-20		Exhibit R-4a (PE	0604421F)	

	Exhibit R-2a, RDT&E Project Justification Exhibit R-2a, RDT&E Project Justification February 2005													
	T ACTIVITY stem Development and Demons		0604421F Counterspace Systems A002				CT NUMBER AND TITLE Counter Surveillance nnaissance System							
	Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total			
A002	Counter Surveillance Reconnaissance System	49.479	0.215	0.000	0.000	0.000	0.000	0.000		0.000	49.694			
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		<u> </u>			

FY 2005: Congress did not authorize or appropriate funds to continue CSRS development

(U) A. Mission Description and Budget Item Justification

This effort supported concept exploration and follow-on system development of a mobile/transportable counter space based surveillance reconnaissance capability and associated command and control derived from technologies examined in PE 0603438F, Space Control Technology. It included system hardware design and development, software design and integration, and testing and procurement to provide a capability to counter space based imagery systems in response to USSTRATCOM requirements.

CSRS funding/program ended after FY 2004 activity. Congress did not fund the FY 2005 program request for CSRS; however, due to rounding, \$215K remained in this project number. The AF is using these funds to continue development of a Command and Control (C2) capability that is no longer needed for CSRS, but is still needed for the Counter Satellite Communications System (CCS), the remaining Offensive Counterspace capability in this Program Element.

Budget Activity Justification

This program is in Budget Activity 5, System Development and Demonstration, because it supports the demonstration, engineering and manufacturing development of counterspace and space control systems.

(U)	B. Accomplishments/Planned Program (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
(U)	Completed efforts that were preparing for engineering and manufacturing development of a Counter	32.164			
	Surveillance & Reconnaissance System, and associated command and control.				
(U)	Continue developing associated Offensive Counterspace (OCS) command and control (C2) capabilities		0.215		
	separate from CSRS in support of the Counter Satellite Communications System (CCS)				
(U)	Completed specific technology and risk reduction development for the Counter Surveillance &	11.400			
	Reconnaissance System.				
(U)	Completed development and implementation of modeling and simulation codes specific to Counter	2.300			
	Surveillance & Reconnaissance threats. Includeed vulnerability analysis of these threats.				
(U)	Completed support to Component Field Testing	1.300			
(U)	Program Office and Other Technical Support	2.315			
(U)	Total Cost	49.479	0.215	0.000	0.000

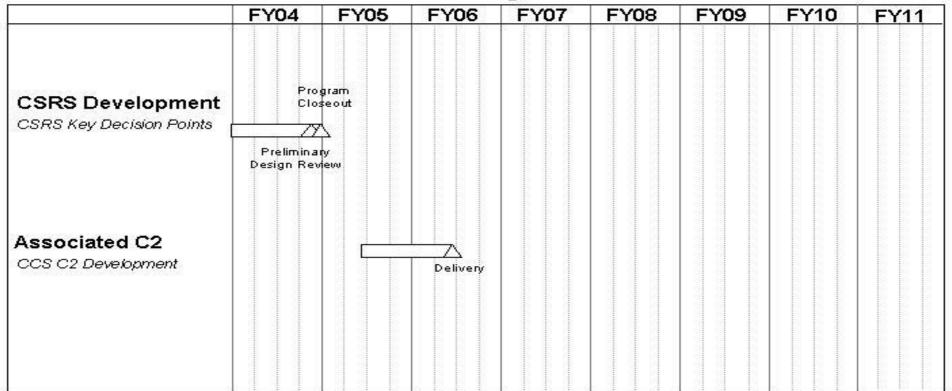
Project A002 R-1 Shopping List - Item No. 75-8 of 75-20

	Exhibi	t R-2a, RD	T&E Projec	ct Justifica	ition			DATE	February 2005
BUDGET ACTIVITY 05 System Development and Dem	nonstration	(SDD)			UMBER AND TI		ems A	ROJECT NUMBE 002 Counter (econnaissan	R AND TITLE Surveillance
(U) C. Other Program Funding Sum	ımary (\$ in I	Millions)							
	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete Total Cost
(U) None									
(U) D. Acquisition Strategy N/A									
Project A002			R-1 Shopp	ing List - Item No	o. 75-9 of 75-20				Exhibit R-2a (PE 0604421F)

		Exhib	it R-3, RD	T&E Proj	ect Co	st Ana	lysis					DATE		uary 200)5
	OGET ACTIVITY System Development and De	monstration	(SDD)				IUMBER A 4421F C			PROJECT NUMBER AND TITLE A002 Counter Surveillance Reconnaissance System					
	Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions) Product Development	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2004 Cost	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
` ′	System Development	MAPIC CPAF	Northrop Grumman, Redondo Beach, CA	13.509	32.164	Nov-03								45.673	48.798
	CCS C2 Development	MAPIC CPAF	Northrop Grumman, Redondo Beach, CA				0.215	Mar-05						0.215	
	Technology & Risk Reduction	Various	AFRL, Alberquerque , NM	5.080	13.700	Nov-03								18.780	
	Subtotal Product Development Remarks: Support		, 1 1111	18.589	45.864		0.215		0.000		0.000		0.000	64.668	48.798
,	Program Office Support for CSRS	Various	SMC, El Segundo, CA	0.775		Nov-03								1.615	
	Independent Program Assessment Program Office Support for CSRS	TBD MIPR	TBD AFRL, Albuquerque,	0.591	0.500 0.975	Nov-03								0.500 1.566	
	Subtotal Support Remarks:		NM	1.366	2.315		0.000		0.000		0.000		0.000	3.681	0.000
(U)	Test & Evaluation AFRL Subtotal Test & Evaluation Remarks:	MIPR		0.500 0.500	1.300 1.300		0.000		0.000		0.000		0.000	1.800 1.800	0.000
	Management Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000 0.000	0.000
	Remarks: Total Cost			20.455	49.479		0.215		0.000		0.000		0.000	70.149	48.798
Pr	oject A002			<u>R-1 Sh</u>	opping Lis	t - Item No	. 75-10 of 7	75-20					<u>Exhi</u> bi	t R-3 (PE 06	604421F)

Exhibit R-4, RDT&E Schedule P	Profile	February 2005
		 NUMBER AND TITLE
05 System Development and Demonstration (SDD)	- - - - - - - -	ounter Surveillance aissance System

Counter Surveillance & Reconnaissance System Schedule



Project A002

R-1 Shopping List - Item No. 75-11 of 75-20

Exhibit R-4 (PE 0604421F)

	UNCLASSIFIED						
Exhibit R-4a, RI	DT&E Schedule Detail			DATE Februar	y 2005		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AN 0604421F C o	PE NUMBER AND TITLE PF 0604421F Counterspace Systems AG					
(U) Schedule Profile (U) Preliminary Design Review (U) Program Closeout	FY 2	2004 FY 2005 4Q 4Q		FY 2006	FY 2007		
(U) CCS C2 Development		3-4Q		1-2Q			
Project A002	R-1 Shopping List - Item No. 75-12 of 7	5-20		Exhibit R-4	a (PE 0604421F)		

	E	DATE	February 2	2005							
BUDGET ACTIVITY 05 System Development and Demonstration (SDD) PE NUMBER AND 0604421F Cou								ms A	OJECT NUMBE 103 Rapid Ide Id Reporting	entification I	
	Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
A003	Rapid Identification Detection and Reporting System (RAIDRS)	8.156	16.224	18.279	23.863	23.875	67.963	69.534			TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

This effort supports mission area architecture development, concept exploration, and engineering and manufacturing development to provide attack warning, threat identification and characterization, and rapid mission impact assessments of U.S. space systems. This effort will investigate and implement the technical architecture, operational concept, support concept, training, verification (test), and deployment of a Rapid Attack Identification Detection and Reporting System (RAIDRS). Incremental capability deliveries are planned.

Budget Activity Justification

This program is in Budget Activity 5, System Development and Demonstration, because it supports the engineering and manufacturing development of counterspace and space control systems.

(U)	B. Accomplishments/Planned Program (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
(U)	Continue concept definition, pre-acquisition architecture development and system development of Rapid	5.690	12.824	14.679	15.113
	Attack Identification Detection and Reporting System (RAIDRS) Spiral 1.				
(U)	Continue concept definition, pre-acquisition architecture development and system development of Rapid	1.662	2.000	2.000	7.100
	Attack Identification Detection and Reporting System (RAIDRS) Spiral 2.				
(U)	Program Office and Other Technical Support	0.804	1.400	1.600	1.650
(U)	Total Cost	8.156	16.224	18.279	23.863

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

	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	$\frac{\text{Cost to}}{\text{Complete}} \ \underline{T}$	<u>'otal Cost</u>
U) OPAF (PE 0604421F), Counterspace Systems				17.131	17.463	25.768	26.505	27.010	Continuing	TBD

(U) D. Acquisition Strategy

All contracts funded in this program element will be awarded using competitive procedures to the maximum extent possible. System will be designed and acquired using a Spiral Acquisition strategy.

Project A003 R-1 Shopping List - Item No. 75-13 of 75-20

Claifor to WBS, or System/Item Method & Activity & Prior to FY Cost Award Cost Date			Exhib	it R-3, RD	T&E Proj	ect Co	st Ana	lysis					DATE		uary 200)5
Crailor to WBS, or System/Item Method & Activity & Prior to FY Cost Award Cost Date Date Date Cost			onstration	(SDD)							stems	A00	3 Rapid Identification Detection			
Architecture Development & Systems Various Various Various Various A.230 5.690 Dec-03 A.499 Oct-04 0.600 Nov-05 0.600 Nov-06 Continuing TBD		(Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Method &	Activity &	Prior to FY 2004		Award		Award		Award		Award	Complete	Total Cost	Target Value of Contract
RAIDRS Spiral 2 Concept Development TBD TB	(U)		Various	Various	4 230	5 690	Dec-03	1 199	Oct-M	0.600	Nov-05	0.600	Nov-06	Continuing	TRD	TBD
Mission Systems, Systems, Redondo Subtotal Product Development Subtotal Product Development Subtotal Product Development Systems S		RAIDRS Spiral 1 System Development		Northrop	4.230	3.070	Dec 03							C		TBD
RAIDRS Spiral 2 Risk Reduction TBD TBD Subtotal Product Development S.355 7.352 14.824 16.679 22.213 Continuing TBD Remarks: (U) Support Program Office Support for RAIDRS Various SMC, El Segundo Segundo Subtotal Support Remarks: (U) Test & Evaluation Subtotal Test & Evaluation Remarks: (U) Management Remarks: (U) Ma				Mission Systems, Redondo	1.125	1.662	Dec-03	2.000	Jan-05	2.000	Jan-06			0.000	6.787	TBD
Program Office Support for RAIDRS Various SMC, El Segundo 0.603 0.804 Oct-03 1.400 Oct-04 1.600 Oct-05 1.650 Oct-06 Continuing TBD T		Subtotal Product Development Remarks:	TBD		5.355	7.352		14.824		16.679			Jan-07	_		TBD
Subtotal Support Remarks: (U) Test & Evaluation Subtotal Test & Evaluation Subtotal Test & Evaluation Subtotal Test & Evaluation O.000 Remarks: (U) Management Subtotal Management Subtotal Management Subtotal Management Subtotal Management O.000 O	(U)		Various		0.603	0.804	Oct-03	1.400	Oct-04	1.600	Oct-05	1.650	Oct-06	Continuing	TBD	TBD
0.000 0.00				Segundo	0.603	0.804		1.400		1.600		1.650		Continuing	TBD	TBD
Remarks: (U) Management	(U)				0.000	0.000		0.000		0.000		0.000		0.000		0.000
Subtotal Management 0.000 <td>(U)</td> <td>Remarks:</td> <td></td> <td></td> <td>0.000</td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td>	(U)	Remarks:			0.000	0.000		0.000		0.000		0.000		0.000		0.000
					0.000	0.000		0.000		0.000		0.000		0.000		0.000
	(U)				5.958	8.156		16.224		18.279		23.863		Continuing	TBD	TBD
Project A003 R-1 Shopping List - Item No. 75-14 of 75-20 Exhibit R-3 (PE 0604421	D,	oiect A003			D_1 Ch	oppina Lie	t - Itam No	75-14 of	75-20					Evhihi	t R-3 (DE 08	:04421E\

DATE **Exhibit R-4, RDT&E Schedule Profile** February 2005 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT NUMBER AND TITLE 05 System Development and Demonstration (SDD) 0604421F Counterspace Systems A003 Rapid Identification Detection and Reporting System (RAIDRS) RAIDRS Schedule FY04 **FY05 FY07** FY08 FY09 FY06 **FY10 FY11** KDP C& In-Phase Spiral 1 Capability Follow-on Buy Build Approval Review Approval 10C FOC Spiral 1 Key Decision Points Development of : Development RF Interference Detection Initial SDR CDR Contract PDR Delivery Installation Interference Geologation Award Operations Node Production JEFX 04 JEFX 06 Spiral 2 Capability Build Approval Spiral 2 Key Decision Points Development of: Concept Dev Risk Reduction System Development - Expanded RF Coverage Initial Spiral 2 SRR SDR PDR Initial Release Multi-source Data Fusion Studies Contract Architecture Award Force Enhancement System Interfaces Production Space C2 Interface - Decision Support SRR: System Requirements Review IOC: Initial Operational Capability SDR: System Design Review FOC: Final Operational Capability JEFX: Joint Expeditionary Forces Experiment PDR: Preliminary Design Review CDR: Critical Design Review

Project A003

Exhibit R-4 (PE 0604421F)

Exhibit R-4a, RDT&E Sch	edule Detail	DATE February 2005					
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604421F Counterspa	A003	ROJECT NUMBER AND TITLE 003 Rapid Identification Detect nd Reporting System (RAIDRS)				
(U) Schedule Profile (U) Attack reporting solutions and architecture studies (U) Begin development of Attack Warning architecture (PE0603438F) (U) Attack Warning concept definition (Proof-of Concept Experiment) JEFX 04 (U) Attack Warning architecture defined (U) RAIDRS Spiral 1 Key Decision Point (KDP B) (U) System Development and Demonstration Contract Award (U) RAIDRS Spiral 1 System Design Review (U) RAIDRS Spiral 1 Preliminary Design Review (U) RAIDRS Spiral 2 Initial Studies Complete (U) RAIDRS Spiral 1 In-Phase Review (U) RAIDRS Spiral 1 Key Decision Point (KDP C & Build Approval) (U) Attack Warning concept evolution (JEFX-06) (U) RAIDRS Spiral 1 Initial Delivery (U) RAIDRS Spiral 1 Key Decision Point (Follow-on Buy Approval) (U) RAIDRS Spiral 1 Site Installation (U) RAIDRS Spiral 2 Architecture Defined (U) RAIDRS Spiral 1 IOC	FY 2004 2-4Q 1Q 3Q	1Q 1Q 2Q 3Q 4Q 4Q		1Q 2Q 2Q 4Q 4Q 4Q	3Q 3Q 4Q		
Project A003 R-1 Shoppin	ng List - Item No. 75-16 of 75-20			Exhibit R-4	4a (PE 0604421F)		

				UNC	LASSIFIE)						
	Ī	Exhibit R-2	2a, RDT&E	Project J	ustificatio	n			DATE	February 2	2005	
	ET ACTIVITY vstem Development and Demons	tration (SDD))			BER AND TITLE 1 1F Counter	≣ space Syste		05 Offensive	DJECT NUMBER AND TITLE D5 Offensive Counterspace (OCS)		
	Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total	
A005	Offensive Counterspace (OCS) C2	0.000	3.474	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.474	
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			
FY05:	Congressional add: \$3.5M											
(U) ; (U) ; (U) ;	B. Accomplishments/Planned Progra Model, conduct "virtual testing," and a Detection and Reporting System (RAII Command and Control (C2) and opera	am (\$ in Millionalyze archited DRS) and for t	ons) ctural options the Counter Sa	for the Rapid	Attack Identi	fication	FY 200	• ` `	7 2005 3.474	FY 2006	FY 2007	
(U) (U) '	Total Cost						0.00	00	3.474	0.000	0.000	
(U) <u>(</u>	C. Other Program Funding Summar	y (\$ in Million	ns)									
(U) 1	FY A	2004 FY	2005 F			FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost	
' '	D. Acquisition Strategy FY 2005 efforts will be performed usi	ng the Army's	existing Spac	e Control Test	t Capability co	ontracts.						

R-1 Shopping List - Item No. 75-17 of 75-20 Project A005

Exhibit R-2a (PE 0604421F)

	Exhib	it R-3, RD	T&E Proj	ect Co	st Ana	lysis					DATE		ıary 200	5
BUDGET ACTIVITY 05 System Development and Dem	nonstratior	n (SDD)				IUMBER A 4421F C		pace Sy	stems			BER AND ⁻ ive Cou r	TITLE nterspace	(OCS)
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions) (U) Product Development	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2004 Cost	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
C2 Modeling, "virtual test," and analysis	MIPR	Davidson Technology, Huntsville, AL	0.000	0.000		3.474	Mar-05						3.474	
Subtotal Product Development Remarks: (U) Support			0.000	0.000		3.474		0.000		0.000		0.000	3.474	0.000
Subtotal Support Remarks: (U) <u>Test & Evaluation</u>			0.000	0.000		0.000		0.000		0.000		0.000	0.000 0.000	0.000
Subtotal Test & Evaluation Remarks: (U) Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
Subtotal Management Remarks: (U) Total Cost			0.000	0.000		0.000 3.474		0.000		0.000		0.000	0.000 0.000 3.474	0.000
(O) Total Cost			0.000	0.000		3.474		0.000		0.000		0.000	3.474	0.000
Project A005			R-1 Sh	opping List	: - Item No	. 75-18 of 7	75-20					Exhibi	t R-3 (PE 06	04421F)

Exhibit R-4, RDT&E Schedule P	Profile		DATE February 2005
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT	NUMBER AND TITLE
05 System Development and Demonstration (SDD)	0604421F Counterspace Systems	A005 O	ffensive Counterspace (OCS)
		C2	

Offensive Counterspace Command and Control (OCS/C2) Schedule

	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Initial Analysis (Support to RAIDRS and CCS)		Model] ing. "virtual test	t," analysis				

Project A005

R-1 Shopping List - Item No. 75-19 of 75-20

Exhibit R-4 (PE 0604421F)

Exhibit R-4a, RDT8	LE Schedule Detail		DATE		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604421F Countersp	PROJEC A005 C C2	ry 2005 LE erspace (OCS)		
(U) Schedule Profile (U) Modeling, "virtual test," analysis	FY 2004	FY 2005 2-4Q		FY 2006	FY 2007
Project A005	-1 Shopping List - Item No. 75-20 of 75-20			Exhibit R-₄	4a (PE 0604421F)