

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603617F Command Control and Communication Applications					
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	7,368	0	0	0	0	0	0	0	75,272
2314 Tactical Air Surveillance	444	0	0	0	0	0	0	0	8,989
2317 Tactical Air Information Production & Distribution	3,068	0	0	0	0	0	0	0	18,501
2321 Tactical Battle Information Management	3,635	0	0	0	0	0	0	0	45,054
3804 Tactical Air Forces Systems Integration	221	0	0	0	0	0	0	0	2,728
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
Program terminated in FY02. (U) A. Mission Description This program is designed to rapidly transition development efforts in the science and technology base directly to warfighting commands. Projects are directly responsive to operational requirements for improved battle management, communications, theater missile defense (TMD), and surveillance capability. This program takes advantage of advanced information technology developments throughout the Services and industry as well as off-the-shelf technology. The program develops, integrates and supports fielding of joint mission critical software applications to the Theater Battle Management Core Systems (TBMCS) and the Air Force Global Command and Control System (GCCS). The program develops, integrates and validates information distribution and assurance technologies in the areas of enterprise network management and control, defensive information warfare, and communications connectivity required for modernization and improvement of the Air Force Global Grid.									

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BUDGET ACTIVITY 04 - Demonstration and Validation		PE NUMBER AND TITLE 0603617F Command Control and Communication Applications			
(U) B. Budget Activity Justification This program is in Budget Activity 4, Demonstration and Validation, because its products are primarily advanced development models, rapid prototype efforts, and software developed through evolutionary spiral development acquisition methods.					
(U) C. Program Change Summary (\$ in Thousands)					
		<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>
(U)	Previous President's Budget	7,828	0	0	
(U)	Appropriated Value	7,828	0		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions				
	b. Small Business Innovative Research	-240			
	c. Omnibus or Other Above Threshold Reprogram				
	d. Below Threshold Reprogram	-148			
	e. Rescissions	-72			
(U)	Adjustments to Budget Years Since FY 2002 PBR				
(U)	Current Budget Submit/FY 2003 PBR	7,368	0	0	75,272
(U)	Significant Program Changes: Program terminated in FY02.				

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BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603617F Command Control and Communication Applications	PROJECT 2314
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
2314 Tactical Air Surveillance	444	0	0	0	0	0	0	0	8,989

(U) **A. Mission Description**
 Develops and demonstrates advanced aerospace surveillance technology in support of next generation sensors and sensor signal processing. Investigates non-radar and/or adjunct radar sensors to address the Combat Air Forces (CAF) surveillance, detection, tracking and identification requirements not satisfied by an active radar.

(U) **FY 2001 (\$ in Thousands)**
 (U) \$174 Completed GTACS Bistatic/ESM ground demonstration
 (U) \$270 Completed GTACS Bistatic/ESM Air Target ID Breadboard
 (U) \$444 Total

(U) **FY 2002 (\$ in Thousands)**
 (U) \$0 No Activity
 (U) \$0 Total

(U) **FY 2003 (\$ in Thousands)**
 (U) \$0 No Activity
 (U) \$0 Total

(U) **B. Project Change Summary**
 Not applicable

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002			
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603617F Command Control and Communication Applications				PROJECT 2314		
(U) C. Other Program Funding Summary (\$ in Thousands)										
	<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>Complete</u>		
(U) RDT&E, AF (0603789F, Project 4072)	9,788									
(U) RDT&E, AF (0207412F, Project 485L)	450									
(U) D. Acquisition Strategy										
All contracts in this project are awarded in full competition and are Cost Plus Fixed Fee (CPFF) or Cost Plus Award Fee (CPAF) as appropriate for advanced development.										
(U) E. Schedule Profile										
			<u>FY 2001</u>			<u>FY 2002</u>			<u>FY 2003</u>	
			1	2	3	4	1	2	3	4
(U) Completed Track Before Detect for TMD						*				
(U) Completed GTACS Bistatic/ESM System Definition						*				
(U) Completed GTACS Bistatic/ESM Ground Demo						*				
(U) Completed GTACS Bistatic Air Target ID Breadboard						*				
Note: * represents a completed event; X represents a planned event.										
Project 2314			Page 4 of 20 Pages				Exhibit R-2A (PE 0603617F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
04 - Demonstration and Validation				0603617F Command Control and Communication Applications				2314		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	Primary Hardware Development					414		0		0
(U)	Government Engineering Support					30		0		0
(U)	Total					444		0		0
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) 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 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
Hughes	C/CPFF	June 95	1,179	1,179	1,179	0	0	0	0	1,179
DSA	Tsk Ordr	Apr 97	502	502	502	0	0	0	0	502
	Agmt									
Northrop-Grumman	Tsk Ordr	Aug 98	488	488	0	0	0	0	0	0
	Agmt									
Sensis	TBD	TBD	264	264	0	0	0	0	0	0
TBD	TBD	TBD	0	0	0	390	0	0	0	390
<u>Support and Management Organizations</u>										
AF Research Lab	In-house	n/s	N/A	N/A	6,419	54	0	0	0	6,473
Miscellaneous	Various	Various	N/A	N/A	0	0	0	0	0	0
<u>Test and Evaluation Organizations</u>										

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE February 2002		
BUDGET ACTIVITY	PE NUMBER AND TITLE			PROJECT		
04 - Demonstration and Validation	0603617F Command Control and Communication Applications			2314		
	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development	1,681	390	0	0	0	2,071
Subtotal Support and Management	6,419	54	0	0	0	6,473
Subtotal Test and Evaluation						
Total Project	8,100	444	0	0	0	8,544

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002			
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603617F Command Control and Communication Applications				PROJECT 2317			
COST (\$ in Thousands)			FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
2317	Tactical Air Information Production & Distribution		3,068	0	0	0	0	0	0	0	18,501
<p>(U) <u>A. Mission Description</u> Integrates, demonstrates and transitions advanced information assurance and distribution technologies to acquisition organizations in support of the Integrated Command and Control System (IC2S). The goal is the creation of an assured, Global Information Grid (GIG) to support the warfighter and to support experimentation and demonstration processes (e.g. JEFX) to reduce the risk of transitioning advanced Government or commercial information technologies into military Enterprise systems. In coordinating with the strategic planning activities of AF/SC, AC2ISRC, HQ ESC, AFCA, ACC and AMC this project has been reorganized to more effectively demonstrate/validate the transition of AFRL technology into AF planned product acquisitions. The three program focus areas included in this project are: the AF Communications Enterprise Manager (ACEM), which provides capabilities for enterprise communications network management and control; the AF Enterprise Defense (AFED), which incorporates defensive information assurance capabilities; and the Enterprise Management System (EMS) that integrates the products from ACEM, AFED, and the Master Caution Panel (MCP funded under BPAC 2321) into a prototype enterprise management system, whose capabilities will be incrementally built, and shown at the Network Operations Support Center (NOSC) at Langley AFB, VA.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$1,783 Installed Air Force EnterpriseDefense (AFED) at AMC NOSC (May 01)and for demonstration and evaluation of capabilities (ongoing) (U) \$1,285 Air Force Enterprise Management (ACEM) installed on SIPRNET (Aug 01); under evaluation. Being folded into C2 MCP. Tech transition planning with TBMCS, CITS, TDC, and AFDI. (U) \$3,068 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p>											
Project 2317				Page 7 of 20 Pages				Exhibit R-2A (PE 0603617F)			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002				
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603617F Command Control and Communication Applications				PROJECT 2317			
(U) B. Project Change Summary Project has been restructured to address the focus areas identified by AC2ISRC, specifically 'Enabling the Global Grid'. Three project programs were created to address this: AF Comprehensive Enterprise Management(ACEM), AF Enterprise Defense (AFED), and Enterprise Management System (EMS).											
(U) C. Other Program Funding Summary (\$ in Thousands)											
		<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>Complete</u>		
(U)	RDT&E, AF (0602702F, Project 4519)	13,208								13,208	
(U)	RDT&E, AF (0603789F, Project 2335)	2,557								2,557	
(U)	RDT&E, AF (0603789F, Project 4216)	2,640								2,640	
(U) D. Acquisition Strategy The Information Grid Division of the Air Force Research Laboratory's Information Directorate manages the acquisition of technology to be integrated via ESC's Global Grid and Defensive Information Warfare PAD's into acquisition programs such as Theater Deployable Communications (TDC) and the CITS/BITS programs. All contracts are awarded under full competition and include Cost Plus Fixed Fee (CPFF) and Cost Plus Award Fee (CPAF) as appropriate for advanced development efforts. All contracts use Evolutionary Prototyping, with heavy user participation.											
(U) E. Schedule Profile											
				<u>FY 2001</u>			<u>FY 2002</u>		<u>FY 2003</u>		
				1	2	3	4	1	2	3	4
(U)	Airborne Comm Relay (ACR)										
(U)	-- Multi-Band Antenna Design			*							
(U)	-- Wideband Power Amplifier Design										
(U)	AF Comp Enterprise Mgmt (ACEM)										
(U)	--Validate Cmdr's C2 ACEM tools			*							
(U)	--Show capability upgrade @ NOSC						*				
(U)	--Deliver & install final ACEM version						*				
Project 2317				Page 8 of 20 Pages				Exhibit R-2A (PE 0603617F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
04 - Demonstration and Validation				0603617F Command Control and Communication Applications				2317		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	(U)	Primary Hardware/Software integration				2,595		0		0
(U)	(U)	Government Engineering Support				189		0		0
(U)	(U)	Contractor Engineering Support				284		0		0
(U)		Total				3,068		0		0
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) 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 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
GE Marconi		Sept 98	1,661	1,661	210	0	0	0	0	210
BBN		Sept 96	1,370	1,370		587	0	0	0	587
USAF C2BL	PD				0	0	0	0	0	0
Various	TBD	TBD	TBD	TBD	0	1,970	0	0	0	1,970
<u>Support and Management Organizations</u>										
AF Research Lab	In-house	N/A	N/A	N/A	12,153	222	0	0	0	12,375
MITRE		N/A	N/A	TBD		289	0	0	0	289
<u>Test and Evaluation Organizations</u>										
Not Applicable										
(U) 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 FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
Project 2317										

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE						
BUDGET ACTIVITY				PROJECT						
04 - Demonstration and Validation				February 2002						
PE NUMBER AND TITLE				PROJECT						
0603617F Command Control and Communication Applications				2317						
(U) Government Furnished Property Continued:										
<u>Item</u>	<u>Contract</u>	<u>Award or</u>		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>	
<u>Description</u>	<u>Method/Type</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>							
<u>Product Development Property</u>										
Not Applicable										
<u>Support and Management Property</u>										
<u>Test and Evaluation Property</u>										
<u>Subtotals</u>				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>	
				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>	
Subtotal Product Development				210	2,557	0	0	0	2,767	
Subtotal Support and Management				12,153	511	0	0	0	12,664	
Subtotal Test and Evaluation										
Total Project				12,363	3,068	0	0	0	15,431	

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BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603617F Command Control and Communication Applications	PROJECT 2321
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
2321 Tactical Battle Information Management	3,635	0	0	0	0	0	0	0	45,054

(U) **A. Mission Description**
 Designs and integrates improvements to system software and Command Control (C2) applications via spiral development, rapid prototyping and maximum user participation in all design activities. Current focus is the functional development of the Joint Defensive Planner (JDP), designated by the Joint Staff (J6V) Joint Standards Air Operations Software Configuration Control Board as a joint application for use by all the Services. JDP will provide the single theater air and missile defense automated system that aids Joint air defense duty officers and the Area Air Defense Commander (AADC) and staff in planning the integrated employment of Defensive Counter-Air and Active and Passive Defenses in conjunction with Offensive Counter-Air, to destroy or neutralize enemy aircraft and theater missiles. Development is compliant with the Defense Information Infrastructure (DII) Common Operating Environment (COE) for integration into Theater Battle Management Core System (TBMCS) and the Global Command and Control System (GCCS). Future efforts respond to evolving concepts advocated by the Aerospace C2 & Intelligence Surveillance Reconnaissance Center (AC2ISRC). Emphasis is on Distributed Collaborative Dynamic Battle Management of Expeditionary Aerospace Forces (EAFs) in areas such as planning, execution management, retasking (mission reflow), Effects-Based-Operations (EBO), campaign assessment, atmospheric and space environmental effects on weapons and surveillance systems, and information warfare in support of Joint, Combined and Coalition Theater Air Operations.

- (U) **FY 2001 (\$ in Thousands)**
- (U) \$1,322 Completed JDP v 2.0 software development and integration into TBMCS V 1.1; will continue with TBMCS funding
 - (U) \$413 Adapted JDP v 2.0 for GCCS-AF integration; will continue with BMDO funds in FY02.
 - (U) \$510 Completed initial effects based operations for joint aerospace operations
 - (U) \$916 Completed integration activity for coordinated strategy-to-task for offensive, defensive and information operations including atmospheric environment impacts prototypes for TBMCS V2.X
 - (U) \$474 Completed approach for decision aids for space environment impact effects on coordinated strategy-to-task for joint air operations
 - (U) \$3,635 Total
- (U) **FY 2002 (\$ in Thousands)**
- (U) \$0 No Activity
 - (U) \$0 Total

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002		
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603617F Command Control and Communication Applications			PROJECT 2321		
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2003 (\$ in Thousands)</u>									
(U) \$0 No Activity									
(U) \$0 Total									
(U) <u>B. Project Change Summary</u> Not Applicable									
(U) <u>C. Other Program Funding Summary (\$ in Thousands)</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>Complete</u>	
(U) RDT&E, AF (0603789F, Project 2335)	2,557	5,087	0	0	0	0	0	0	7,644
(U) RDT&E, AF (0207438F, Project 4790)	20,439	18,120	0	0	0	0	0	0	38,559
(U) <u>D. Acquisition Strategy</u>									
<p>The Systems Division of the Air Force Research Laboratory's Information Directorate manages the acquisition of technology under the direct guidance of the AC2ISRC. The objective is to integrate into the Theater Battle Management Core Systems (TBMCS) through a Memorandum of Understanding (MOU) entitled 'Shared management of TBMCS Technology Development' with the TBMCS System Program Office (SPO). As nominated by the Air Staff, some applications are designed for integration into the Air Force Global Command and Control System (GCCS-AF). All contracts are awarded under full competition and include Cost Plus Fixed Fee (CPFF) and Cost Plus Award Fee (CPAF) as appropriate for advanced development efforts. All contracts use the Spiral Development Model and Evolutionary Prototyping, with heavy user participation from all the Services; and produce joint software applications, as designated by the JCS Joint Standard Air Operations Software Configuration Control Board.</p>									
(U) <u>E. Schedule Profile</u>									
	<u>FY 2001</u>			<u>FY 2002</u>				<u>FY 2003</u>	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)										DATE February 2002			
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT			
04 - Demonstration and Validation					0603617F Command Control and Communication Applications					2321			
(U) E. Schedule Profile Continued													
		<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	
(U) Joint Defensive Planner sw development & integration - EP #2/3													
(U) - Functional Validation Model #1 & 2	*		*										
(U) - TBMCS v 1.1 integration tested				*									
(U) Coordinated Strategy-to-task Spiral 2				*									
(U) Completed Effects Based Operations Spiral 1				*									
Note: * represents a completed event; X represents a planned event													
Project 2321				Page 14 of 20 Pages				Exhibit R-2A (PE 0603617F)					

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
04 - Demonstration and Validation				0603617F Command Control and Communication Applications				2321		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>		
(U)	Software Development					2,674	0	0		
(U)	Government Engineering Support					728	0	0		
(U)	Contractor Engineering Support					233	0	0		
(U)	Total					3,635	0	0		
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) 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 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
Logicon	C/CPFF	June 94	9,782	9,782	9,114		0	0	0	9,114
PRB Assoc.	C/CPAF	Feb 97	7,435	7,435	1,496	922	0	0	0	2,418
TBD						1,672	0	0	0	1,672
<u>Support and Management Organizations</u>										
AF Research Lab	In-house	N/A	N/A	TBD	27,423	837	0	0	0	28,260
Lockheed Martin						110	0	0	0	110
Litton/TASC						94	0	0	0	94
Miscellaneous	Various	Various	N/A	TBD			0	0	0	0
<u>Test and Evaluation Organizations</u>										
Not Applicable										
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE February 2002	
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
04 - Demonstration and Validation		0603617F Command Control and Communication Applications			2321	
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>
						<u>Total</u>
	<u>Subtotals</u>					
	Subtotal Product Development	10,610	2,594	0	0	13,204
	Subtotal Support and Management	27,423	1,041	0	0	28,464
	Subtotal Test and Evaluation					
	Total Project	38,033	3,635	0	0	41,668

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BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603617F Command Control and Communication Applications				PROJECT 3804																						
COST (\$ in Thousands)		FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost																				
3804	Tactical Air Forces Systems Integration	221	0	0	0	0	0	0	0	2,728																				
<p>(U) <u>A. Mission Description</u> Provides systems engineering and integration support to the Aerospace Command Control & Intelligence Surveillance Reconnaissance Center (AC2ISRC) development efforts. Project addresses integration and interoperability issues associated with AC2ISRC directed efforts, makes recommendations, identifies deficiencies, and establishes requirements for development efforts.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$221 Completed detailed analysis of Effects-Based-Operations (EBO) prototype tools for development and interoperability (see BPAC 642321) for technology transition within PE (U) \$221 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p> <p>(U) <u>B. Project Change Summary</u> Not Applicable</p> <p>(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u></p> <table style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;"><u>FY 2001</u></td> <td style="text-align: center;"><u>FY 2002</u></td> <td style="text-align: center;"><u>FY 2003</u></td> <td style="text-align: center;"><u>FY 2004</u></td> <td style="text-align: center;"><u>FY 2005</u></td> <td style="text-align: center;"><u>FY 2006</u></td> <td style="text-align: center;"><u>FY 2007</u></td> <td style="text-align: center;"><u>Cost to</u></td> <td style="text-align: center;"><u>Total Cost</u></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>Actual</u></td> <td style="text-align: center;"><u>Estimate</u></td> <td style="text-align: center;"><u>Complete</u></td> <td></td> </tr> </table> <p>(U) Not Applicable</p>												<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>Complete</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>Complete</u>																						
Project 3804		Page 17 of 20 Pages				Exhibit R-2A (PE 0603617F)																								

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002																																									
BUDGET ACTIVITY	PE NUMBER AND TITLE						PROJECT																																									
04 - Demonstration and Validation	0603617F Command Control and Communication Applications						3804																																									
<p>(U) <u>D. Acquisition Strategy</u> Not Applicable</p> <p>(U) <u>E. Schedule Profile</u></p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 45%;"></th> <th colspan="3" style="text-align: center;"><u>FY 2001</u></th> <th style="width: 10%;"></th> <th colspan="3" style="text-align: center;"><u>FY 2002</u></th> <th style="width: 10%;"></th> <th colspan="3" style="text-align: center;"><u>FY 2003</u></th> </tr> </thead> <tbody> <tr> <td>(U) Evaluated effects based ops prototypes</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Note: * represents a completed event; X represents a planned event.</td> <td></td> <td></td> <td></td> <td style="text-align: center;">*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			(U) Evaluated effects based ops prototypes	1	2	3	4	1	2	3	4	1	2	3	4	Note: * represents a completed event; X represents a planned event.				*								
	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>																																							
(U) Evaluated effects based ops prototypes	1	2	3	4	1	2	3	4	1	2	3	4																																				
Note: * represents a completed event; X represents a planned event.				*																																												
Project 3804			Page 18 of 20 Pages				Exhibit R-2A (PE 0603617F)																																									

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT			
04 - Demonstration and Validation					0603617F Command Control and Communication Applications			3804			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Systems Engineering					221		0		0	
(U)	Government Engineering Support										
(U)	Contractor Engineering Support										
(U)	Total					221		0		0	
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) 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 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Product Development Organizations</u>										
	N/A										
	<u>Support and Management Organizations</u>										
	MITRE	SS/TO&P	Various	N/A	TBD	2,138	0	0	0	0	2,138
	AF Research Lab/AC2ISRC	In-house	N/A	N/A	TBD	151	221	0	0	0	372
	Miscellaneous	Various	Various	N/A	TBD	0	0	0	0	0	0
	<u>Test and Evaluation Organizations</u>										
(U) 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 FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Product Development Property</u>										
	Not Applicable										
Project 3804					Page 19 of 20 Pages			Exhibit R-3 (PE 0603617F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)		DATE				
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
04 - Demonstration and Validation		0603617F Command Control and Communication Applications			3804	
(U) <u>Government Furnished Property Continued:</u>						
<u>Support and Management Property</u>						
Not Applicable						
<u>Test and Evaluation Property</u>						
Not Applicable						
<u>Subtotals</u>		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>
Subtotal Product Development						<u>Total</u>
Subtotal Support and Management		2,289	221	0	0	2,510
Subtotal Test and Evaluation						
Total Project		2,289	221	0	0	2,510