

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603260F Intelligence Advanced Development					
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	4,134	4,438	4,545	4,623	4,709	4,799	4,891	Continuing	TBD
3479 Advanced Sensor Exploitation	772	800	820	834	848	864	881	Continuing	TBD
3480 Automated Imagery Exploitation	1,244	1,308	1,317	1,340	1,364	1,390	1,416	Continuing	TBD
3481 Knowledge Based Tech For Intelligence	1,275	1,351	1,340	1,363	1,390	1,417	1,444	Continuing	TBD
3482 Science & Tech Intelligence Methodology	843	979	1,068	1,086	1,107	1,128	1,150	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
<p>(U) A. Mission Description (U) Intelligence Advanced Development (IAD) demonstrates and validates advanced technology required to support warfighter needs for timely all source intelligence information. IAD research supports global awareness, consistent battlespace knowledge, precision information, and the execution of time critical missions. IAD projects provide better on-time information to the warfighter using new and existing data sources, streamline data analysis, reduce footprint required, extend life of sensors in place and enhance performance. Air Force Research Lab Rome Research Site (AFRL/IFE) works directly with users, employing a rapid prototyping evolutionary approach, integrating finished modules directly into the field. The programs are oriented toward specific shortfalls and deficiencies as documented by the major commands (MAJCOMS), unified commands, and intelligence organizations in their mission and function area plans. The goal of this program is to expedite technology transition from the laboratory to operational use via rapid prototyping. This AF program is focused on technology insertion to correct AF intelligence deficiencies at tactical or operation levels. This program bridges the transition of Advance Technology Demonstrations (ATDs), Integrated Technology Thrust Programs (ITTPs), and supports Defense Technology Objectives (DTOs).</p> <p>(U) B. Budget Activity Justification This program is in Demonstration and Validation, Budget Activity 4, because it demonstrates and validates advanced technology which enhances information / intelligence systems' capabilities and techniques.</p>									

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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 0603260F Intelligence Advanced Development				PROJECT 3479	
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
3479 Advanced Sensor Exploitation	772	800	820	834	848	864	881	Continuing	TBD
<p>(U) <u>A. Mission Description</u> The project objectives are to develop, demonstrate and evaluate a near-real-time all source correlation/fusion capability by applying state-of-the-art data processing techniques for the receipt, correlation, templating and analysis of battlefield information. Capabilities will be developed in open systems architecture environment allowing for the greatest efficiency in terms of integrating or interfacing with other systems. There is an Air Force, DoD and Coalition need to correlate various sources of intelligence information (Communications Intelligence - COMINT, Electronic Intelligence - ELINT, Image Intelligence - IMINT) within seconds as opposed to hours with current manual methods. Project includes development of data correlation and predictive intelligence algorithms, target analysis and prioritization, air order of battle updates and tactical analysis techniques. This computerized approach will speed up the correlation of data from diverse sources of intelligence information, including COMINT, ELINT, and IMINT; providing faster situational awareness and threat assessment and replace manual systems with automated capabilities.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$247 Initiated Time Sensitive Target Nominations (TSTN) (U) \$427 Initiated Enhanced Intel Prep of the Battlespace (EIPB) (U) \$98 Initiated Moving Target Exploitation (MTE) Tracking Enhancements (U) \$772 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$295 Complete Time Sensitive Target Nominations (TSTN) (U) \$345 Continue Enhanced Intel Prep of the Battlespace (EIPB) (U) \$160 Continue Moving Target Exploitation (MTE) Tracking Enhancements (U) \$800 Total</p>									
Project 3479			Page 3 of 21 Pages				Exhibit R-2A (PE 0603260F)		

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BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603260F Intelligence Advanced Development			PROJECT 3479		
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2003 (\$ in Thousands)</u>									
(U) \$190 Complete Enhanced Intel Prep of the Battlespace (EIPB)									
(U) \$410 Continue Moving Target Exploitation (MTE) Tracking Enhancements									
(U) \$220 Initiate Advanced Fusion Workstation Transition									
(U) \$820 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) RELATED ACTIVITIES									
0602720F C3I Exploratory Development: information exploitation (imagery/video/text), multi-sensor collaboration, global information base.									
0603789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.									
0603726F C3 Subsystem Integration: advanced information applications, advanced memory technology.									
0604750F Intelligence Equipment: modeling and simulation, foreign threat assessment.									
0301335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).									
(U) <u>D. Acquisition Strategy</u> All major contracts within this Program Element were awarded after full and open competition.									
(U) <u>E. Schedule Profile</u>									
		<u>FY 2001</u>				<u>FY 2002</u>			<u>FY 2003</u>
		1	2	3	4	1	2	3	4
(U) Complete Time Sensitive Target Nominations (TSTN) X									
(U) Complete Enhanced Intel Prep of the Battlespace (EIPB) X									
(U) Continue Moving Target Exploitation (MTE) Tracking Enhancements X									
(U) Initiate Advanced Fusion Workstation Transition X									
* - Denotes completed event									
Project 3479			Page 4 of 21 Pages			Exhibit R-2A (PE 0603260F)			

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<p>(U) <u>E. Schedule Profile Continued</u></p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 10%;"></th> <th colspan="4" style="text-align: center;"><u>FY 2001</u></th> <th colspan="4" style="text-align: center;"><u>FY 2002</u></th> <th colspan="2" style="text-align: center;"><u>FY 2003</u></th> </tr> </thead> <tbody> <tr> <td style="padding-left: 40px;">X - Denotes planned event</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> </tbody> </table>											<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>		X - Denotes planned event	1	2	3	4	1	2	3	4	1	2	3	4
	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>																								
X - Denotes planned event	1	2	3	4	1	2	3	4	1	2	3	4																					
Project 3479			Page 5 of 21 Pages				Exhibit R-2A (PE 0603260F)																										

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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				0603260F Intelligence Advanced Development				3479		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	Time Sensitive Target Nominations (TSTN)					247		295		
(U)	Enhanced Intel Prep of the Battlespace (EIPB)					427		345		190
(U)	Moving Target Exploitation (MTE) Tracking Enhancements					98		160		410
(U)	Network Centric Information Fusion									220
(U)	Total					772		800		820
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Performing Activity</u>	<u>Project Office</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>Performing Activity</u>	<u>or Funding Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>						
<u>Product Development Organizations</u>										
	PRC (00-D-0012)	CPFF	27Feb 01			247	295			542
	Zel-Tech (01-C-0048)	CPFF	6 Mar 01			427	345	190	Continuing	TBD
	Northrup-Grumman (99-C-0067)	CPFF	20 Dec 00			98	160	410	Continuing	TBD
	TBD							220	Continuing	TBD
<u>Support and Management Organizations</u>										
N/A										
<u>Test and Evaluation Organizations</u>										
N/A										
(U) Government Furnished Property:										
<u>Item Description</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</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>or Funding Vehicle</u>	<u>Date</u>	<u>Date</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				0603260F Intelligence Advanced Development			3479		
(U) Government Furnished Property Continued:									
	<u>Contract</u>	<u>Award or</u>							
<u>Item</u>	<u>Method/Type</u>	<u>or Funding</u>	<u>Delivery</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>Vehicle</u>	<u>Date</u>	<u>Date</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>Product Development Property</u>									
N/A									
<u>Support and Management Property</u>									
<u>Test and Evaluation Property</u>									
				<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					772	800	820	TBD	TBD
Subtotal Support and Management									
Subtotal Test and Evaluation									
Total Project					772	800	820	TBD	TBD

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
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BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 3480
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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
3480 Automated Imagery Exploitation	1,244	1,308	1,317	1,340	1,364	1,390	1,416	Continuing	TBD

(U) **A. Mission Description**
 This project demonstrates and validates the capability to more accurately and quickly interpret digital imagery and video by evaluating computer-assisted techniques to manipulate and overlay imagery, cartographic data, signal intelligence (SIGINT), and on-line intelligence data. The result of this effort will be more precise target locations and identifications, precise target reference scenes, and more accurate damage assessments; all developed for easy supportability on low-cost, commercially-available computer workstations.

- (U) **FY 2001 (\$ in Thousands)**
- (U) \$97 Initiated NATO Secondary Imagery Interoperability
 - (U) \$148 Initiated eXploitation Tools for Video (XTV)
 - (U) \$229 Initiated Smart Digital Imagery & Video Exploitation Tools
 - (U) \$348 Continued Multi-Sensor Intel Exploitation Applications for GCCS
 - (U) \$422 Continued Hyper-Spectral Image Exploitation
 - (U) \$1,244 Total

- (U) **FY 2002 (\$ in Thousands)**
- (U) \$199 Continue NATO Secondary Imagery Interoperability
 - (U) \$250 Continue eXploitation Tools for Video (XTV)
 - (U) \$246 Complete Smart Digital Imagery & Video Exploitation Tools
 - (U) \$186 Complete Multi Sensor Intel Exploitation Applications for GCCS
 - (U) \$427 Complete Hyper-Spectral Image Exploitation
 - (U) \$1,308 Total

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<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2003 (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">(U) \$204</td> <td>Continue NATO Secondary Imagery Interoperability</td> </tr> <tr> <td>(U) \$302</td> <td>Continue eXploitation Tools for Video (XTV)</td> </tr> <tr> <td>(U) \$202</td> <td>Initiate Geospacial Intelligence Tools</td> </tr> <tr> <td>(U) \$178</td> <td>Initiate Hypershop</td> </tr> <tr> <td>(U) \$152</td> <td>Initiate Video Annotation</td> </tr> <tr> <td>(U) \$279</td> <td>Initiate Imagery Assurance and Exploitation</td> </tr> <tr> <td>(U) \$1,317</td> <td>Total</td> </tr> </table> <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;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;"><u>FY 2001</u></th> <th style="width: 10%;"><u>FY 2002</u></th> <th style="width: 10%;"><u>FY 2003</u></th> <th style="width: 10%;"><u>FY 2004</u></th> <th style="width: 10%;"><u>FY 2005</u></th> <th style="width: 10%;"><u>FY 2006</u></th> <th style="width: 10%;"><u>FY 2007</u></th> <th style="width: 10%;"><u>Cost to</u></th> <th style="width: 10%;"><u>Total Cost</u></th> </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> </thead> <tbody> <tr> <td>(U) Related Activities:</td> <td colspan="9"></td> </tr> <tr> <td>0602720F C3I Exploratory Development:</td> <td colspan="9">information exploitation (imagery / video / text), multi-sensor collaboration, global information base.</td> </tr> <tr> <td>0603789F C3 Advanced Technology Development:</td> <td colspan="9">correlation, fusion algorithms, visualization.</td> </tr> <tr> <td>0603726F C3 Subsystem Integration:</td> <td colspan="9">advanced imagery/information applications, advanced memory technology.</td> </tr> <tr> <td>0604750F Intelligence Equipment:</td> <td colspan="9">modeling and simulation, foreign threat assessment.</td> </tr> <tr> <td>0301335F Intelligence Data Handling:</td> <td colspan="9">enhances DoD Intelligence Information Systems (DoDIIS).</td> </tr> </tbody> </table> <p>(U) <u>D. Acquisition Strategy</u> All major contracts within this Program Element were awarded after full and open competition.</p> <p>(U) <u>E. Schedule Profile</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%;"><u>FY 2001</u></th> <th style="width: 25%;"><u>FY 2002</u></th> <th style="width: 25%;"><u>FY 2003</u></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			(U) \$204	Continue NATO Secondary Imagery Interoperability	(U) \$302	Continue eXploitation Tools for Video (XTV)	(U) \$202	Initiate Geospacial Intelligence Tools	(U) \$178	Initiate Hypershop	(U) \$152	Initiate Video Annotation	(U) \$279	Initiate Imagery Assurance and Exploitation	(U) \$1,317	Total		<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) Related Activities:										0602720F C3I Exploratory Development:	information exploitation (imagery / video / text), multi-sensor collaboration, global information base.									0603789F C3 Advanced Technology Development:	correlation, fusion algorithms, visualization.									0603726F C3 Subsystem Integration:	advanced imagery/information applications, advanced memory technology.									0604750F Intelligence Equipment:	modeling and simulation, foreign threat assessment.									0301335F Intelligence Data Handling:	enhances DoD Intelligence Information Systems (DoDIIS).										<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>				
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(U) <u>E. Schedule Profile Continued</u>														
		<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)	Complete Multi-Sensor Intel Exploitation Applications for GCCS								X					
(U)	Complete Multi Spectral / Hyper Spectral Image Applications								X					
(U)	Continue NATO Secondary Imagery Interoperability													
(U)	Continue eXploitation Tools for Video													
(U)	Complete Smart Digitalk Imagery & Video Exploitation Tools								X					
(U)	Initiate Geospacial Intelligence Tools											X		
(U)	Initiate Hypershop											X		
(U)	Initiate Video Annotation											X		
(U)	Initiate Imagery Assurance and Exploitation											X		
	* - Denotes completed event													
	X - Denotes planned even													
Project 3480					Page 10 of 21 Pages					Exhibit R-2A (PE 0603260F)				

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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				0603260F Intelligence Advanced Development				3480		
(U) A. Project Cost Breakdown (\$ in Thousands)										
					<u>FY 2001</u>		<u>FY 2002</u>			<u>FY 2003</u>
(U)	Multi Sensor Intel Exploitation Apps for GCCS				348		186			
(U)	NATO Second Imagery Interoperability				97		199			204
(U)	eXploitation Tools for Video				148		250			
(U)	Smart Digital Imagery				229		246			302
(U)	Hyper-Spectral Image Exploitation Toolkit (HIET)				422		427			
(U)	Geospatial Intelligence Tools									202
(U)	Hypershop									178
(U)	Video Annotation									152
(U)	Imagery Assurance and Exploitation									279
(U)	Total				1,244		1,308			1,317
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Performing Activity</u>	<u>Project Office</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>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>						
<u>Product Development Organizations</u>										
PAR, Inc. (01-C-0073)	CPFF	6 Apr 01				97	199	204	Continuing	TBD
PRC (97-C-0030)	CPFF	1 Jun 01				148	250	302	Continuing	TBD
Research Foundation, U. of Binghamton (00-1-0521)	Grant	8 Nov 00			154	229	246			629
PAR, Inc. (98-C-0166)	CPFF	11 May 98			726	348	186			1,260
PAR, Inc. (00-C-0046)	CPFF	1 Nov 00			110	422	427			959
TBD								202	Continuing	TBD
TBD								178	Continuing	TBD
TBD								152	Continuing	TBD
Project 3480				Page 11 of 21 Pages				Exhibit R-3 (PE 0603260F)		

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04 - Demonstration and Validation				0603260F Intelligence Advanced Development			3480			
(U) <u>Performing Organizations Continued:</u>										
<u>Product Development Organizations</u>							279		Continuing	TBD
TBD										
<u>Support and Management Organizations</u>										
N/A										
<u>Test and Evaluation Organizations</u>										
N/A										
(U) <u>Government Furnished Property:</u>										
	<u>Contract</u>									
	<u>Method/Type</u>	<u>Award or</u>								
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</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>Vehicle</u>	<u>Date</u>	<u>Date</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>Product Development Property</u>										
N/A										
<u>Support and Management Property</u>										
N/A										
<u>Test and Evaluation Property</u>										
N/A										
				<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				990	1,244	1,308	1,317	TBD	TBD	
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project				990	1,244	1,308	1,317	TBD	TBD	

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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 0603260F Intelligence Advanced Development				PROJECT 3481	
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
3481 Knowledge Based Tech For Intelligence	1,275	1,351	1,340	1,363	1,390	1,417	1,444	Continuing	TBD
<p>(U) <u>A. Mission Description</u> This project will improve Global Awareness, Dynamic Planning and Execution, providing knowledge bases and inference engines to exploit collected data for nine major commands on AF intelligence organizations. The development of the analytical aids is based on artificial intelligence techniques. The increased timeliness, efficiency and effectiveness derived will provide warning time and accuracy, allowing national/military authorities a greater range of options to avert, diminish or control a crisis.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$668 Initiated Broadsword Enhancements (U) \$607 Initiated Secure Information Delivery Trusted Transfer Agent (TTA) (U) \$1,275 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$517 Continue Secure Information Delivery Trusted Transfer Agent (TTA) --Phase 2: Reach Up (U) \$567 Continue Broadsword Enhancements (U) \$267 Initiate WebTAS Transition into CAOC-X (U) \$1,351 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$452 Continue Secure Information Delivery Trusted Transfer Agent (TTA) --Phase 2: Reach Up (U) \$552 Continue Broadsword Enhancements (U) \$336 Continue WebTAS Transition into CAOC-X (U) \$1,340 Total</p> <p>(U) <u>B. Project Change Summary</u> Not Applicable</p>									
Project 3481			Page 13 of 21 Pages				Exhibit R-2A (PE 0603260F)		

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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 0603260F Intelligence Advanced Development			PROJECT 3481		
(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) Related Activities:									
0602720F C3I Exploratory Development: information exploitation (imagery/video/text), multi-sensor collaboration, global information base.									
0603789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.									
0603726F C3 Subsystem Integration: advanced information technology, advanced memory technology.									
0604750F Intelligence Equipment: modeling and simulation, foreign threat assessment.									
0301335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).									
(U) D. Acquisition Strategy									
All major contracts within this Program Element were awarded after full and open competition.									
(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) Continue Broadsword Enhancements									
(U) Cont. Secure Info Delivery Trusted Transfer Agent(TTA)-Ph 2: Reach Up									
(U) Initiate WebTAS Transition into CAOC-X									
* - Denotes completed event									
X - Denotes planned event									
<div style="display: flex; justify-content: space-between;"> Project 3481 Page 14 of 21 Pages Exhibit R-2A (PE 0603260F) </div>									

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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				0603260F Intelligence Advanced Development				3481		
(U) A. Project Cost Breakdown (\$ in Thousands)										
					<u>FY 2001</u>		<u>FY 2002</u>			<u>FY 2003</u>
(U)	Broadsword Enhancements				668		517			452
(U)	Secure Information Delivery TTA				607		567			552
(U)	WebTAS Transition into CAOC-X						267			336
(U)	Total				1,275		1,351			1,340
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</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>Product Development Organizations</u>										
	Synectics Corp (00-C-0073)	CPFF	3 Nov 00		45	668	567	452	Continuing	TBD
	Sterling Software	CPFF	27 Jan 00		600	607	517	552	Continuing	TBD
	(98-D-0013)									
	TBD	TBD	TBD				267	336	Continuing	TBD
<u>Support and Management Organizations</u>										
N/A										
<u>Test and Evaluation Organizations</u>										
N/A										
(U) Government Furnished Property:										
		<u>Contract</u>								
		<u>Method/Type</u>	<u>Award or</u>							
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</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>Vehicle</u>	<u>Date</u>	<u>Date</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>Product Development Property</u>										
N/A										

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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	0603260F Intelligence Advanced Development	3481				
(U) <u>Government Furnished Property Continued:</u>						
<u>Support and Management Property</u>						
N/A						
<u>Test and Evaluation Property</u>						
N/A						
	<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	645	1,275	1,351	1,340	TBD	TBD
Subtotal Support and Management						
Subtotal Test and Evaluation						
Total Project	645	1,275	1,351	1,340	TBD	TBD

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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 0603260F Intelligence Advanced Development				PROJECT 3482	
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
3482 Science & Tech Intelligence Methodology	843	979	1,068	1,086	1,107	1,128	1,150	Continuing	TBD
<p>(U) <u>A. Mission Description</u> Demonstrates and validates intelligence methodologies and techniques for operational employment of simulation models in support of Air Intelligence Agency (AIA) requirements. The methods and techniques will help AIA improve their analysis of current and future foreign weapon systems, and prevent technological surprises with regard to the capabilities of these systems.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$391 Completed Intelligence Analyst Associate (Build 2) for Automated Information Extraction (U) \$3 Continued Missile System Reentry Vehicle Algorithm Enhancements for NAIC (U) \$3 Completed Radio Frequency Weapons Modeling Improvements (HEIMDAL2+) (includes Laser Weapons Modeling Code (LODUR). (Reference companion PE 64750, Intelligence Equipment.) (U) \$294 Initiated Dynamic Info Operations Development Environment (DIODE) (U) \$152 Initiated Tel-Scope Situation Awareness (U) \$843 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$581 Continue Dynamic Info Operations Development Environment (DIODE) (U) \$0 Transition Missile System Reentry Vehicle Algorithm Enhancements for NAIC to PE 64750 (U) \$0 Transition LODUR to PE64750 (U) \$398 Continue Tel-Scope Situation Awareness (U) \$979 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$267 Continue DIODE for Enhanced Intel Prep of the Battlespace (EIPB) (U) \$292 Initiate Joint DIODE Integration Tools (U) \$341 Continue Tel-Scope Situation Awareness (U) \$168 Initiate Joint IADS View</p>									
Project 3482			Page 17 of 21 Pages				Exhibit R-2A (PE 0603260F)		

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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					0603260F Intelligence Advanced Development					3482			
(U) <u>A. Mission Description Continued</u>													
(U) <u>FY 2003 (\$ in Thousands) Continued</u>													
(U) \$1,068 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) Related Activities:													
0602720F C3I Exploratory Development: information exploitation (image/video/text), multi-sensor collaboration, global information base.													
0603789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.													
0603726F C3 Subsystem Integration: advanced information technology, advanced memory technology.													
0604750F Intelligence Equipment: modeling and simulation, foreign threat assessment.													
0301335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).													
(U) <u>D. Acquisition Strategy</u>													
All major contracts within this Program Element were awarded after full and open competition.													
(U) <u>E. Schedule Profile</u>													
				<u>FY 2001</u>			<u>FY 2002</u>			<u>FY 2003</u>			
				1	2	3	4	1	2	3	4	1	
(U) Transitioned Radio Frequency Modeling (HEIMDAL) & LODUR to PE 64750													
								*					
(U) Transitioned Missile Sys RV Algorithm Enhancement to PE 64750													
								*					
(U) Continue Tel-Scope Situation Awareness													
(U) Continue DIODE for EIPB													
(U) Completed Intel Analyst Associate (Build 2)													
								*					
(U) Initiate Joint DIODE Integration Tools													
												X	
(U) Initiate Joint IADS View													
												X	
Project 3482				Page 18 of 21 Pages				Exhibit R-2A (PE 0603260F)					

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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				0603260F Intelligence Advanced Development				3482			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Intelligence Analysts Associate (Build 2)					391					
(U)	Missile System Reentry Vehicle Algorithm Enhancement					3					
(U)	DIODE for Enhanced Intel Prep of the Battlespace (EIPB)					294		581		267	
(U)	Tel-Scope					152		398		341	
(U)	Joint DIODE Integration Tools									292	
(U)	Radio Frequency Weapons Modeling					3					
(U)	Joint IADS View									168	
(U)	Total					843		979		1,068	
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation Date</u>	<u>Performing Activity</u>	<u>Project Office</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>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>							
<u>Product Development Organizations</u>											
Calspan (96-C-0108)	CPAF	26 Sep 96			1,176	391				1,567	
SAIC (99-D-0137)	IDIQ	1 Jul 99			48	3				51	
Calspan (96-C-0108)	CPFF	31 Jul 98			97	3				100	
PRC, Inc (00-C-0045)	CPFF	1 Dec 00				294	581	267	Continuing	TBD	
PRC, Inc (01-C-0048)	CPFF	1 Feb 01				152	398	341	Continuing	TBD	
TBD	TBD	TBD						292	Continuing	TBD	
TBD	TBD	TBD						168	Continuing	TBD	
<u>Support and Management Organizations</u>											
N/A											
<u>Test and Evaluation Organizations</u>											
N/A											
Project 3482				Page 20 of 21 Pages				Exhibit R-3 (PE 0603260F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002		
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603260F Intelligence Advanced Development				PROJECT 3482	
(U) Government Furnished Property:									
	<u>Contract</u>								
	<u>Method/Type</u>	<u>Award or</u>							
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</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>Vehicle</u>	<u>Date</u>	<u>Date</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>Product Development Property</u>									
N/A									
<u>Support and Management Property</u>									
N/A									
<u>Test and Evaluation Property</u>									
N/A									
				<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				1,321	843	979	1,068	TBD	TBD
Subtotal Support and Management									
Subtotal Test and Evaluation									
Total Project				1,321	843	979	1,068	TBD	TBD