

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2000		
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604750F Intelligence Equipment				PROJECT 652053		
COST (\$ in Thousands)		FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
652053	National Air Intel Center	1,179	1,336	1,298	1,315	1,338	1,364	1,391	Continuing	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
<p>(U) <u>A. Mission Description</u> Intelligence Equipment (IE) provides continuing development and upgrades of threat analysis capabilities of the National Air Intelligence Center (NAIC) and Air Force Information Warfare Center (AFIWC). Both organizations are tasked with providing detailed foreign technology intelligence information to a variety of DOD and non-DOD customers. In the past few years, customers' requirements have been more sophisticated, dictating more detailed and timely intelligence not only in the technology regime but also in the economic, world crisis, and political arenas. IE provides NAIC and AFIWC with the tools necessary to produce timely intelligence of foreign weapon systems and develops the tools to model and assess foreign airborne and aerospace systems. This is the only AF program developing new, or upgraded analysis, modeling and simulation tools focused on intelligence production in support of AF developmental and operational functions. IE directs the engineering and development of specialized hardware and software to conduct Information Operations (IO) with systems which process, integrate, display, and distribute intelligence data/ information for the Air Intelligence Agency (AIA), primarily NAIC, AFIWC, and 497th IG/IND.</p>										
<p>(U) <u>FY 1999 (\$ in Thousands)</u></p>										
(U)	\$155	Completed Advanced Communication Network Modeling								
(U)	\$301	Completed CRMPS IO Modeling								
(U)	\$272	Completed Radio Frequency Weapons Modeling								
(U)	\$232	Initiated Comm Network Modeling Tool-Upgrade (TEL-SCOPE)								
(U)	\$137	Initiated Adv Infrared Countermeasures Systems Assessment Model (AIRSAM) Update								
(U)	\$65	Initiated Radio Frequency Weapons Modeling Improvements (HEIMDAL 2+)								
(U)	\$17	Initiated High Speed Propulsion Engine Modeling (Phase 1 - Pulsed-Detonation Engine Model)								
(U)	\$1,179	Total								
<p>(U) <u>FY 2000 (\$ in Thousands)</u></p>										
(U)	\$330	Complete Comm Network Modeling Tool-Upgrade (TEL-SCOPE)								
(U)	\$317	Continue Adv Infrared Countermeasures Systems Assessment Model (AIRSAM) Update								
(U)	\$366	Continue Radio Frequency Weapons Modeling Improvements (HEIMDAL 2+)								
(U)	\$147	Continue High Speed Propulsion Modeling (Phase 1 - Pulsed-Detonation Engine Model)								
Project 652053		Page 1 of 7 Pages					Exhibit R-2 (PE 0604750F)			

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2000			
BUDGET ACTIVITY		PE NUMBER AND TITLE		PROJECT	
05 - Engineering and Manufacturing Development		0604750F Intelligence Equipment		652053	
(U) <u>A. Mission Description Continued</u>					
(U) <u>FY 2000 (\$ in Thousands) Continued</u>					
(U)	\$176	Initiate Mitas Missile System/Booster & Post Booster Upgrades (Phase 1 Focus Area, DIODE Objectives)			
(U)	\$1,336	Total			
(U) <u>FY 2001 (\$ in Thousands)</u>					
(U)	\$169	Complete Adv Infrared Countermeasures Systems Assessment Model (AIRSAM) Update			
(U)	\$119	Complete Radio Frequency Weapons Modeling Improvements (HEIMDAL 2+)			
(U)	\$68	Continue High Speed Engine Propulsion Modeling (Phase 1 - Pulsed-Detonation Engine Model)			
(U)	\$49	Continue High Speed Engine Propulsion Modeling (Phase 2 - Air Turbo Ramjet Engine Model)			
(U)	\$38	Continue High Speed Engine Propulsion Modeling (Phase 3 - Turbo-Ramjet Engine Model)			
(U)	\$299	Continue Missile System/Booster & Post Booster Upgrades for MiTAS (Phase 2)			
(U)	\$278	Continue Mitas Missile System/Booster & Post Booster Upgrades (Phase 1 Focus Area, DIODE Objectives)			
(U)	\$278	Initiate IVIEW 2000 Upgrade/Standard Visualization Solution (SVS)			
(U)	\$1,298	Total			
(U) <u>B. Budget Activity Justification</u>					
This effort is Budget Activity 5, Engineering & Manufacturing Development, because the program develops and inserts new technology into existing systems and models to keep existing systems current.					
(U) <u>C. Program Change Summary (\$ in Thousands)</u>					
		<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U)	Previous President's Budget (FY 2000 PBR)	1,296	1,345	1,311	TBD
(U)	Appropriated Value	1,300	1,345		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions	-4			
	b. Small Business Innovative Research	-33			
	c. Omnibus or Other Above Threshold Reprogram		-9		
	d. Below Threshold Reprogram	-77			
	e. Rescissions	-7			
	f. Other				TBD
(U)	Adjustments to Budget Years Since FY 2000 PBR			-13	
Project 652053		Page 2 of 7 Pages		Exhibit R-2 (PE 0604750F)	

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 2000						
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604750F Intelligence Equipment			PROJECT 652053						
(U) C. Program Change Summary (\$ in Thousands) Continued													
		<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>		<u>Total Cost</u>					
(U)	Current Budget Submit/FY 2001 PBR	1,179		1,336		1,298		TBD					
(U)	<u>Significant Program Changes:</u> None												
(U) D. Other Program Funding Summary (\$ in Thousands)													
		<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>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)	Not Applicable												
(U) E. Acquisition Strategy													
All major contracts within this Program Element were awarded after full and open competition.													
(U) F. Schedule Profile													
		<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
		1	2	3	4	1	2	3	4	1	2	3	4
(U)	Completed Adv Communication Network Modeling Tool				*								
(U)	Completed CRMPS IO Modeling				*								
(U)	Completed Radio Frequency Weapons Modeling				*								
(U)	Completed Virtual Laboratory Model Testbed				*								
(U)	Communication Network ModelingTool Upgrade (TEL-SCOPE) upgrade			*						X			
(U)	Advanced IRCM Systems Assessment Model (AIRSAM) Update				*								X
(U)	Radio Frequency Weapons Modeling Improvements (HEIMDALL-2+)										X		
(U)	Begin High Speed Propulsion / Pulsed Detonation Engine Model										X		
(U)	Begin High Speed Propulsion / Air-Turbo Ramjet Engine Model												X
(U)	Begin High Speed Propulsion / Turbo-Ramjets Engine Model												X
(U)	Begin Missile System / Booster & Post Booster Upgrades for MiTAS											X	
(U)	Begin IVIEW 2000 Upgrade/Standard Visualization Solution (SVS)									X			
(U)	Begin DIODE Objectives Model									X			
Project 652053		Page 3 of 7 Pages							Exhibit R-2 (PE 0604750F)				

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE February 2000

BUDGET ACTIVITY
05 - Engineering and Manufacturing Development

PE NUMBER AND TITLE
0604750F Intelligence Equipment

PROJECT
652053

(U) F. Schedule Profile Continued

<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
1	2	3	4	1	2	3	4	1	2	3	4

Note: * denotes completed event, X denotes planned event.

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000			
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604750F Intelligence Equipment			PROJECT 652053			
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>
(U)	Adv Com Network Modeling Tool (CNMT)					155				
(U)	CRMPS IO Modeling					301				
(U)	Radio Frequency Weapons Modeling					272				
(U)	Comm Network Modeling Tool (CNMT) Upgrade (TEL-SCOPE)					232		313		
(U)	Adv IRCM Systems Assessment Model (AIRSAM) Update					137		299		169
(U)	Radio Frequency Weapon Modeling Improvements (HEIMDALL 2+)					65		348		119
(U)	High Speed Propulsion: Pulsed Detonation Engine Model					17		129		68
(U)	High Speed Propulsion: Air Turbo Ramjet Engine Model									49
(U)	High Speed Propulsion: Turbo-Ramjet Engine Model									38
(U)	Missile System: Booster & Post Booster Upgrades for MiTAS									299
(U)	IVIEW 2000 Upgrade/Standard Visualization Solution (SVS)							89		278
(U)	DIODE Objectives Model							158		278
(U)	Integrated IO Modeling Environment									
(U)	Adv Analysis Capability: Integrated Avionics System Model									
(U)	Total					1,179		1,336		1,298
(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 1999</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
Planning Research Corp(PRC)/Litton 95-C-0048	CPFF	31 Jul 98	N/A	N/A	183	332			Continuing	TBD
Sterling Software, Inc 98-D-0318/06	CPFF	Sep 99	N/A	N/A		25	301	93	Continuing	TBD
Applied Sciences Laboratory 97-C-0036/01	CPFF	17 Jul 97	N/A	N/A	408	332			Continuing	TBD

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2000	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604750F Intelligence Equipment				PROJECT 652053	
(U) <u>Performing Organizations Continued:</u>									
<u>Product Development Organizations</u>									
Applied Sciences Laboratory	CPFF	26 May 99	N/A	N/A	57	353	128	Continuing	TBD
97-C-0036/02									
Planning Research	CPFF	31 Jul 98	N/A	N/A	78	290			368
Corp(PRC)/Litton 95-C-0048									
Sterling Software, Inc	CPFF	12 Feb 99	N/A	N/A	143	332	178	Continuing	TBD
98-D-0318/02									
TBD for 2 High Speed	TBD	TBD	N/A	N/A			94	Continuing	TBD
Propulsion									
TBD for MiTAS	TBD	TBD	N/A	N/A			283	Continuing	TBD
TBD for Integ IO Modeling	TBD	TBD	N/A	N/A				Continuing	TBD
Environment									
TBD for IVIEW 2000	TBD	TBD	N/A	N/A		153	283	Continuing	TBD
Upgrade									
TBD for Adv Analysis	TBD	TBD	N/A	N/A				Continuing	TBD
Capability: Integ Avionics									
System Model									
TBD for DIODE Objective	TBD	TBD	N/A	N/A		197	239	Continuing	TBD
Model									
<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>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>		<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>
									<u>Total</u>
									<u>Program</u>

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000			
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604750F Intelligence Equipment				PROJECT 652053		
(U) Government Furnished Property Continued:										
	<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 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</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 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>	
Subtotal Product Development				669	1,179	1,336	1,298	TBD	TBD	
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project				669	1,179	1,336	1,298	TBD	TBD	