

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002																																				
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD																																								
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	1,411,606	881,556	627,266	250,000	0	0	0	0	24,801,255																																			
4069 Advanced Tactical Fighter FSD	1,001,023	732,686	627,266	250,000	0	0	0	0	23,220,675																																			
4874 PRTVII Aircraft Acquisition	410,583	148,870	0	0	0	0	0	0	1,580,580																																			
Quantity of RDT&E Articles	3	7	2	0	0	0	0	0	0																																			
<p>(U) <u>A. Mission Description</u> The F-22 is designed to penetrate enemy airspace and achieve a first look, first kill capability against multiple targets. The F-22 is characterized by a low observable, highly maneuverable airframe, advanced integrated avionics, and aerodynamic performance that allows supersonic cruise without the use of afterburner. The F-22 is currently in the Engineering and Manufacturing Development (EMD) phase of acquisition. The Defense Acquisition Board (DAB) approved Low Rate Initial Production (LRIP) Aug 01.</p> <p>(U) <u>B. Budget Activity Justification</u> This program is in Budget Activity 5, Engineering and Manufacturing Development, because the F-22 Program is developing the next-generation air superiority fighter for the USAF to counter emerging worldwide threats.</p> <p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table border="0"> <thead> <tr> <th></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td>1,398,835</td> <td>865,464</td> <td>320,525</td> <td>24,215,651</td> </tr> <tr> <td>(U) Appropriated Value</td> <td>1,411,786</td> <td>881,556</td> <td></td> <td>29,043</td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td>-9,882</td> <td></td> <td></td> <td>-9,882</td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td>8,949</td> <td></td> <td></td> <td>8,949</td> </tr> </tbody> </table>											<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>	(U) Previous President's Budget	1,398,835	865,464	320,525	24,215,651	(U) Appropriated Value	1,411,786	881,556		29,043	(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-9,882			-9,882	b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram	8,949			8,949
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BUDGET ACTIVITY		PE NUMBER AND TITLE		
05 - Engineering and Manufacturing Development		0604239F F-22 EMD		
(U)	<u>C. Program Change Summary (\$ in Thousands) Continued</u>			
		<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
				<u>Total Cost</u>
	d. Below Threshold Reprogram	3,819		3,819
	e. Rescissions	-3,066		-3,066
(U)	Adjustments to Budget Years Since FY 2002 PBR			306,741
(U)	Current Budget Submit/FY 2003 PBR	1,411,606	881,556	627,266
				24,801,255
(U)	<u>Significant Program Changes:</u>			
	FY01: \$0.18M adjustment reflects BTR for classified requirement.			
	FY02: \$16.1M adjustment reflects congressional realignment (moves funds from PE 27138F to PE 64239F)			
	FY03: \$307M adjustment reflects a 1.5% increase for test extension.			
	FY04: \$250M adjustment reflects increase for test extension.			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD				PROJECT 4069	
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
4069 Advanced Tactical Fighter FSD	1,001,023	732,686	627,266	250,000	0	0	0	0	23,220,675
Unit cost of RDT&E articles not separately priced (NSP). * Total Cost includes \$3,779,811,000 of Demonstration and Validation funding prior to FY 1992 funded in PE 0603230F. ** FY02 adjustment (\$16.1M) reflects congressional realignment (moves funds from PE 27138F to PE 64239F) *** FY03 adjustment (\$307M) and FY04 (\$250M) funding are for test program extension.									
(U) <u>A. Mission Description</u> The F-22 is designed to penetrate enemy airspace and achieve a first look, first kill capability against multiple targets. The F-22 is characterized by a low observable, highly maneuverable airframe, advanced integrated avionics, and aerodynamic performance that allows supersonic cruise without the use of afterburner. The F-22 is currently in the Engineering and Manufacturing Development (EMD) phase of acquisition. The Defense Acquisition Board (DAB) approved Low Rate Initial Production (LRIP) Aug 01. The EMD phase effort includes delivery of nine flight test vehicles and two ground test vehicles (static and fatigue); delivery of 25 flight qualified engines; integration and test of the EMD avionics suite including air-to-surface provision; development and test of the F-22 weapons system support and training system; and updating the YF-22 Avionics Flying Laboratory with EMD assets and software to become an avionics integration Flying Test Bed (FTB). The following are representative activities of efforts being accomplished in the given fiscal year.									
(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$531,347 Air Vehicle									
<ul style="list-style-type: none"> - Continued full-scale airframe static testing. (NSP) - Initiated 1st full-scale airframe lifetime fatigue testing. (NSP) - Completed assembly of EMD aircraft #4004-4006. (NSP) - Continued assembly of EMD aircraft #4007-4009. (NSP) - Completed flight test readiness review of EMD aircraft #4004. (NSP) - Completed final production readiness review. (NSP) 									
Project 4069			Page 3 of 15 Pages				Exhibit R-2A (PE 0604239F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
05 - Engineering and Manufacturing Development	0604239F F-22 EMD	4069
<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2001 (\$ in Thousands) Continued</u></p> <p>(U) \$280,576 Avionics</p> <ul style="list-style-type: none"> - Continued flight test and flight test support. (NSP) - Initiated structural certification analysis activities. (NSP) - Completed Avionics Integration Lab (AIL) Block 3.0 integration. (NSP) - Completed Block 3.0 Flight Test Bed (FTB) testing. (NSP) - First flight of the first avionics test aircraft. (NSP) - Initiated avionics software Block 3.0 flight testing. (NSP) - Initiated AIL Block 3.1.0 integration. (NSP) - Initiated Block 3.1.0 FTB testing. - Continued Diminishing Manufacturing Sources (DMS) redesign, requalification and retesting activities. (NSP) - Continued incorporating avionics software/hardware into the FTB. (NSP) <p>(U) \$53,600 Engine</p> <ul style="list-style-type: none"> - Completed delivery and support of 25 flight test engines. (NSP) - Continued production engine configuration development testing. (NSP) - Continued verification of engine support system products. (NSP) - Completed building additional flight test engines. (NSP) - Continued to test flight test engines. (NSP) - Completed Initial Service Release (ISR) milestone test activities. (NSP) - Initiated Verification Requirements Complete (VRC) activities. (NSP) <p>(U) \$135,500 Other Government Cost</p> <ul style="list-style-type: none"> - Continued flight test and flight test support at Edwards AFB. - Continued aperture measurements at Rome Labs. - Continued engine testing at Arnold Engineering Development Center (AEDC). - Completed avionics ground testing at various government facilities. - Mission support of the SPO; travel, computer costs, misc contracts, etc. - Procurement of required Government Furnished Equipment (GFE). - Continued live fire testing at Air Force Research Labs. 		
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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
05 - Engineering and Manufacturing Development	0604239F F-22 EMD	4069
<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2001 (\$ in Thousands) Continued</u></p> <p>(U) \$1,001,023 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <p>(U) \$435,520 Air Vehicle</p> <ul style="list-style-type: none"> - Complete full-scale airframe static testing. (NSP) - Complete 1st full-scale airframe lifetime fatigue test. (NSP) - Initiate 2nd full-scale airframe lifetime fatigue test. (NSP) - Complete assembly of EMD aircraft #4007-4009. (NSP) - Continue flight test and flight test support. (NSP) - Continue structural certification analysis activities. (NSP) <p>(U) \$132,466 Avionics</p> <ul style="list-style-type: none"> - Complete avionics software Block 3.0 flight testing. (NSP) - Complete AIL Block 3.1.0 integration. (NSP) - Complete Block 3.1.0 FTB testing. (NSP) - Initiate and complete avionics software Block 3.1.0 flight testing. (NSP) - Initiate and complete AIL Block 3.1.1 integration. (NSP) - Initiate and complete Block 3.1.1 FTB testing. (NSP) - Initiate AIL Block 3.1.2 integration. (NSP) - Initiate Block 3.1.2 FTB testing. (NSP) - Initiate avionics software Block 3.1.2 flight testing. (NSP) - Complete incorporating avionics software/hardware into the FTB. (NSP) - Continue DMS redesign, requalification and retesting activities. (NSP) - Initiate revised Block 4.0 implementation. (NSP) <p>(U) \$18,300 Engine</p> <ul style="list-style-type: none"> - Continue verification of engine support system products. (NSP) - Continue to test flight test engines. (NSP) - Continue and complete Verification Requirements Complete (VRC) activities. (NSP) 		
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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE
		February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
05 - Engineering and Manufacturing Development	0604239F F-22 EMD	4069
<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2002 (\$ in Thousands) Continued</u></p> <p>(U) \$146,400 - Complete production engine configuration development testing. (NSP) - Complete Initial Service Release Milestone activities. Other Government Cost</p> <p>(U) \$146,400 - Continue flight test and flight test support at Edwards AFB. - Continue aperture measurements at Rome Labs. - Continue engine testing at AEDC. - Continue live fire testing at Air Force Research Labs. - Mission support of the SPO; travel, computer costs, misc contracts, etc.</p> <p>(U) \$732,686 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u></p> <p>(U) \$273,866 Air Vehicle - Complete 2nd full-scale airframe lifetime fatigue test. (NSP) - Continue flight test and flight test support. (NSP) - Continue structural certification analysis activities. (NSP)</p> <p>(U) \$106,300 Avionics - Complete avionics software Block 3.1.2 flight testing. (NSP) - Complete AIL Block 3.1.2 integration. (NSP) - Initiate AIL Block 3.1.3 integration. (NSP) - Initiate avionics software Block 3.1.3 flight testing. (NSP) - Continue revised Block 4.0 implementation. (NSP)</p> <p>(U) \$22,600 Engine - Continue verification of engine support system products. (NSP) - Continue to support and test flight test engines. (NSP)</p> <p>(U) \$224,500 Other Government Cost - Continue flight test and flight test support at Edwards AFB. - Continue aperture measurements at Rome Labs.</p>		
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BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD				PROJECT 4069	
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2003 (\$ in Thousands) Continued</u>									
<ul style="list-style-type: none"> - Continue engine testing at AEDC. - Continue live fire testing at Air Force Research Lab. - Mission support of the SPO; travel, computer costs, misc contracts, etc. 									
(U)	\$627,266	Total							
(U) <u>B. Project Change Summary</u>									
(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)	PRTV II (6)	410,583	148,870						1,580,580
(U)	(U) F-22 Squadrons RDT&E (PE 0207138F)		181,239	227,296	205,728	261,871	464,291		1,340,425
(U)	(U) F-22 Squadrons Procurement (PE 0207138F)		16,098	41,287	30,791	20,200	52,006		160,382
(U)	(U) Military Construction (PE 0604239F)	0	0	0	0	0	0	0	39,700
(U)	(U) Military Construction (PE 0207219F)*	25,300	61,253	42,790	21,700	49,800	47,110	41,180	160,014
(U)	(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003**	2,536,494	3,037,312	4,633,883	4,591,650	4,718,979	4,704,479	5,735,641	11,775,692
(U)	(U) Munitions Procurement (PE 0207219F)	0	4,322	6,396	9,480	9,433	10,922	10,771	36,642
PE 0207138F includes manpower authorizations, peculiar and common support equipment, necessary facilities and the associated costs specifically identified and measurable to the following: Operation, maintenance, and logistical support of the F-22 fighter * NOTE: FY04 and outyears not listed in ABIDES. Estimate reflected in DAES/SAR. ** NOTE: Includes BP 10, 11, 16, 19 and Advance Buy.									
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<p>(U) <u>D. Acquisition Strategy</u> The EMD contract is Cost Plus Award Fee with Lockheed Martin Aeronautical Systems (LMAS) to produce the F-22 air vehicle and Pratt & Whitney (P&W) to produce the F119 engines. The engines are provided to LMAS as GFE.</p> <p>(U) <u>E. Schedule Profile</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;"></th> <th colspan="3" style="text-align: center;"><u>FY 2001</u></th> <th colspan="3" style="text-align: center;"><u>FY 2002</u></th> <th colspan="3" style="text-align: center;"><u>FY 2003</u></th> </tr> <tr> <th style="text-align: left;"></th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> </tr> </thead> <tbody> <tr> <td>(U) (U) Aircraft Delivered (EMD Test Article)</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td></td> <td></td> <td></td> <td style="text-align: center;">*</td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) (U) Aircraft Delivered (EMD Test Article)</td> <td></td> <td style="text-align: center;">*</td> <td></td> <td></td> <td></td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Program Milestones</td> <td></td> </tr> <tr> <td>(U) - LRIP DAB, 4QFY01</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> <tr> <td>(U) Engineering Milestones</td> <td></td> </tr> <tr> <td>(U) - Final PRR</td> <td style="text-align: center;">*</td> <td></td> </tr> <tr> <td>(U) - First Avionics Flight</td> <td style="text-align: center;">*</td> <td></td> </tr> <tr> <td>(U) T&E Milestones</td> <td></td> </tr> <tr> <td>(U) - Dedicated IOT&E</td> <td></td> <td style="text-align: center;">X</td> </tr> </tbody> </table> <p>Start of DIOT&E testing has slipped from Aug 02 to Apr 03 (obj)/Oct 03 (threshold).</p> <p>EMD = Engineering and Manufacturing Development, DAB = Defense Acquisition Board LRIP = Low Rate Initial Production, LL = Long Lead, MS = Milestone, DT&E = Developmental Test & Evaluation, IOT&E = Initial Operational Test & Evaluation</p> <p>NOTE: Schedule is according to current A/C build schedule.</p> <p>* - Completed X - Planned Event</p>											<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) (U) Aircraft Delivered (EMD Test Article)	*	*				*	X						(U) (U) Aircraft Delivered (EMD Test Article)		*				X							(U) Program Milestones													(U) - LRIP DAB, 4QFY01				*									(U) Engineering Milestones													(U) - Final PRR	*												(U) - First Avionics Flight	*												(U) T&E Milestones													(U) - Dedicated IOT&E												X
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002						
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT					
05 - Engineering and Manufacturing Development				0604239F F-22 EMD				4069					
(U) A. Project Cost Breakdown (\$ in Thousands)													
						<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>					
(U)	Air Vehicle/Avionics					811,923	567,986	380,166					
(U)	Engine					53,600	18,300	22,600					
(U)	Government Cost												
(U)	- Government Test					116,500	132,200	211,200					
(U)	- Mission Support					11,500	11,500	11,500					
(U)	- GFE					7,500	2,700	1,800					
(U)	Total					1,001,023	732,686	627,266					
(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>Performing</u>		<u>or Funding</u>		<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
	<u>Activity</u>		<u>Vehicle</u>		<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</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>Budget to</u>			
									<u>Complete</u>	<u>Total</u>			
										<u>Program</u>			
	<u>Product Development Organizations</u>												
	Lockheed (Air Veh)		C/CPAF		Aug 91	15,753,259	15,753,259	13,841,184	811,923	567,986	380,166	152,000	15,753,259
	Pratt & Whitney		C/CPFF		Aug 91	2,435,179	2,435,179	2,331,679	53,600	18,300	22,600	9,000	2,435,179
	<u>Support and Management Organizations</u>												
	Support Contracts		Various		Various	N/A	N/A	14,303	1,600	1,500	1,500	0	18,903
	In House Support		Various		Various	N/A	N/A	104,098	9,900	10,000	10,000	0	133,998
	<u>Test and Evaluation Organizations</u>												
	AEDC		PO			N/A	N/A	142,900	12,500	6,000	6,000	6,000	173,400
	AFFTC		PO			N/A	N/A	249,400	99,600	109,600	128,400	81,000	668,000
	All Other Tests		Various		Various	N/A	N/A	97,825	4,400	16,600	76,800	2,000	197,625

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD			PROJECT 4069			
(U) Government Furnished Property:										
<u>Item</u>	<u>Contract</u>	<u>Method/Type</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>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>										
GFE	Various	Various	Various		48,500	7,500	2,700	1,800	0	60,500
<u>Support and Management Property</u>										
<u>Test and Evaluation Property</u>										
Not Applicable										
					<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					16,221,363	873,023	588,986	404,566	161,000	18,248,938
Subtotal Support and Management					118,401	11,500	11,500	11,500	0	152,901
Subtotal Test and Evaluation					490,125	116,500	132,200	211,200	89,000	1,039,025
Total Project					16,829,889	1,001,023	732,686	627,266	250,000	19,440,864
NOTE: Total program cost for Engineering and Manufacturing Development only. Does not include \$3,779,811,000 of Demonstration and Validation funding prior to FY92.										

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD				PROJECT 4874	
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
4874 PRTVII Aircraft Acquisition	410,583	148,870	0	0	0	0	0	0	1,580,580
<p>(U) <u>A. Mission Description</u> Complete test aircraft to support continued F-22 development and production. The PRTV II (6) Full Contract Award (Dec 99) criteria, approved by OUSD (A&T) on 23 Dec 98, required the program to demonstrate maturity prior to a contract award.</p> <p>Following successful completion of all CY99 DAE criteria, the Air Force awarded contracts for PRTV II (6) and Lot 1 Advanced Buy aircraft on 30 Dec 99.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$318,418 Air Vehicle (U) \$90,100 Engine (U) \$2,065 Other Government Cost (U) \$410,583 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$148,568 Air Vehicle (U) \$302 Engine (U) \$0 Other Government Cost (U) \$148,870 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> N/A</p>									
Project 4874			Page 11 of 15 Pages				Exhibit R-2A (PE 0604239F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD				PROJECT 4874	
(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) AF RDT&E	1,001,023	732,686	627,266	250,000					23,220,673
(U) F-22 Squadrons (PE 0207138F)			181,239	227,296	205,728	261,871	464,291		1,340,425
(U) F-22 Squadrons Procurement (PE 0207138F)			16,098	41,287	30,791	20,200	52,006		160,382
(U) Military Construction (PE 0604239F)	0	0	0	0	0	0	0	0	39,700
(U) Military Construction (PE 0207219F)*	25,300	61,253	42,790	21,700	49,800	47,110	41,180	160,014	449,147
(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003**	2,536,494	3,037,312	4,633,883	4,591,650	4,718,979	4,704,479	5,735,641	11,775,692	42,895,959
(U) Munitions Procurement (PE 0207219F)	0	4,322	6,396	9,480	9,433	10,922	10,771	36,642	89,840
(U) Other APPN PE 0207138F includes manpower authorizations, peculiar and common support equipment, necessary facilities and the associated costs specifically identified and measurable to the following: Operation, maintenance, and logistical support of the F-22 fighter.									
*NOTE: FY04 and outyears not listed in ABIDES. Estimate reflected in DAES/SAR.									
**NOTE: Includes BP10, 11, 16, 19 and Advance Buy.									
(U) D. Acquisition Strategy The PRTV II contract is Firm Fixed Price with Lockheed Martin Aeronautical Systems (LMAS) to produce the F-22 air vehicle and Pratt & Whitney (P&W) to produce the F119 engines. The engines are provided to LMAS as GFE.									
(U) E. Schedule Profile									
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>						
Project 4874									

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002					
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD				PROJECT 4874				
(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) Aircraft Delivered (PRTV II Test Article)							X	X	X			
(U) Aircraft Delivered (PRTV II Test Article)								X	X			
(U) Aircraft Delivered (PRTV II Test Article)								X				
NOTE: Schedule is according to current A/C build schedule.												
* - Completed												
X - Planned												
Project 4874			Page 13 of 15 Pages				Exhibit R-2A (PE 0604239F)					

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604239F F-22 EMD			PROJECT 4874			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>	<u>FY 2002</u>			<u>FY 2003</u>	
(U)	Air Vehicle					318,418	148,568			0	
(U)	Engine					90,100	302			0	
(U)	Other Government Cost					2,065	0			0	
(U)	Total					410,583	148,870			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>											
	Lockheed (Air Veh)	FFP	Dec 99	1,393,956	1,393,956	926,970	318,418	148,568	0	0	1,393,956
	Pratt & Whitney	FFP	Dec 99	180,402	180,402	90,000	90,100	302	0	0	180,402
<u>Support and Management Organizations</u>											
	N/A	N/A	N/A	N/A	N/A						
<u>Test and Evaluation Organizations</u>											
	N/A	N/A	N/A	N/A	N/A						
(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>											
	GFE	Various	Various	Various		4,157	2,065	0	0	0	6,222
<u>Support and Management Property</u>											
	Not Applicable	N/A	N/A	N/A							
Project 4874					Page 14 of 15 Pages			Exhibit R-3 (PE 0604239F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT
05 - Engineering and Manufacturing Development				0604239F F-22 EMD			4874
(U) <u>Government Furnished Property Continued:</u>							
<u>Test and Evaluation Property</u>							
Not Applicable	N/A	N/A	N/A				
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
				<u>Budget to</u>			<u>Total</u>
					<u>Complete</u>		<u>Program</u>
<u>Subtotals</u>							
Subtotal Product Development				1,021,127	410,583	148,870	0
Subtotal Support and Management							0
Subtotal Test and Evaluation							1,580,580
Total Project				1,021,127	410,583	148,870	0
							0
							1,580,580