

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2000																																																								
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604239F F-22 EMD																																																												
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																																																							
Total Program Element (PE) Cost	1,561,786	1,945,138	1,411,786	860,676	318,511	0	0	0	23,925,670																																																							
654069 Advanced Tactical Fighter FSD	1,561,786	1,222,232	1,007,748	712,622	318,511	0	0	0	22,650,672																																																							
654874 PRTVII AIRCRAFT ACQUISITION	0	722,906	404,038	148,054	0	0	0	0	1,274,998																																																							
Quantity of RDT&E Articles	0	3	4	4	2	0	0	0	0																																																							
<p>(U) <b>A. Mission Description</b>            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.</p> <p>(U) <b>B. Budget Activity Justification</b>            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) <b>C. Program Change Summary (\$ in Thousands)</b></p> <table border="0"> <thead> <tr> <th></th> <th><u>FY 1999</u></th> <th><u>FY 2000</u></th> <th><u>FY 2001</u></th> <th><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2000 PBR)</td> <td>1,570,970</td> <td>1,222,232</td> <td>976,601</td> <td>22,628,536</td> </tr> <tr> <td>(U) Appropriated Value</td> <td>1,575,417</td> <td>1,222,232</td> <td></td> <td></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></td> <td></td> <td></td> <td></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></td> <td></td> <td>-449</td> <td></td> </tr> <tr> <td>    d. Below Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    e. Rescissions</td> <td></td> <td></td> <td>-13,182</td> <td></td> </tr> <tr> <td>    f. Other</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2000 PBR</td> <td></td> <td>722,906</td> <td>435,185</td> <td></td> </tr> </tbody> </table>											<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 2000 PBR)	1,570,970	1,222,232	976,601	22,628,536	(U) Appropriated Value	1,575,417	1,222,232			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions					b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram			-449		d. Below Threshold Reprogram					e. Rescissions			-13,182		f. Other					(U) Adjustments to Budget Years Since FY 2000 PBR		722,906	435,185	
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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE February 2000

BUDGET ACTIVITY  
05 - Engineering and Manufacturing Development

PE NUMBER AND TITLE  
0604239F F-22 EMD

(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	1,561,786	1,945,138	1,411,786	23,925,670

(U) Significant Program Changes:

FY00 - Does not include \$300M appropriated for F-22 termination liability or for other F-22 program contractual requirements in lieu of termination liability obligations in the OSD transition account. However, FY01 and FY02 budgets are based on receipt of these funds for the F-22.

FY01- \$31,300 adjustment offsets past year program reductions. Program remains \$4.287M under the Congressionally mandated cost cap.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2000	
BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>				PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>				PROJECT <b>654069</b>	
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
654069    Advanced Tactical Fighter FSD	1,561,786	1,222,232	1,007,748	712,622	318,511	0	0	0	22,650,672
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. ** Quantity of RDT&E Articles includes one EMD flight test aircraft delivered in FY 1997. *** FY99 is understated by \$4.448M. BTR not reflected in cost table above. Cost breakout below reflects correct program amounts.									
<b>(U)    <u>A. Mission Description</u></b>									
The EMD phase effort includes delivery of nine flight test vehicles and two ground test vehicles (static and fatigue); delivery of 26 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).									
<b>(U)    <u>FY 1999 (\$ in Thousands)</u></b>									
<b>(U)    \$739,301</b>	Air Vehicle - Continued assembly of EMD aircraft #3-6. (NSP) - Initiated assembly of EMD aircraft #7-9. (NSP) - Initiated static test. (NSP) - Completed full scale pole model testing (Radar Cross Section) (NSP) - Continued flight test and flight test support (NSP)								
<b>(U)    \$557,888</b>	Avionics - Initiated AIL integration in preparation of Block 2 integration testing (NSP) - Initiated delivery and installation of avionics hardware on the first avionics test aircraft (NSP) - Continued flight testing avionics on the FTB (NSP) - Completed (AIL) Block 1.0 integration (NSP) - Continued DMS redesign, requalification and retesting activities (NSP)								
<b>(U)    \$172,520</b>	Engine - Continued to deliver and support six additional flight test engines (13 total). (NSP) - Continued full flight release (FFR) milestone. (NSP) - Continued verification of engine support system products (NSP)								
Project 654069			Page 3 of 14 Pages				Exhibit R-2A (PE 0604239F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE
BUDGET ACTIVITY		PROJECT
<b>05 - Engineering and Manufacturing Development</b>	<b>0604239F F-22 EMD</b>	<b>February 2000</b> <b>654069</b>
(U) <u>A. Mission Description Continued</u>		
(U) <u>FY 1999 (\$ in Thousands) Continued</u>		
	- Continued building and test additional flight test engines (NSP)	
	- Continued production engine configuration development testing (NSP)	
	- Initiated Initial Service Release (ISR) milestone activities	
(U) \$96,525	Other Government Cost	
	- Continued flight test and flight test support at Edwards AFB	
	- Continued support of engine testing	
	- Continued aperture measurements at Rome Labs	
	- Continued avionics ground testing at various government facilities	
	- Mission support of the SPO; travel, computer costs, misc contracts, etc.	
	- Procurement of required GFE	
	- Completed sled test program at Holloman AFB	
	- Continued live fire testing at Air Force Research Labs	
	- Continued stores separation testing at AEDC	
(U) \$1,566,234	Total	
(U) <u>FY 2000 (\$ in Thousands)</u>		
(U) \$594,897	Air Vehicle	
	- Complete static test (NSP)	
	- Initiate fatigue test (NSP)	
	- Conduct First Flight Readiness Review for aircraft #4. (NSP)	
	- Complete assembly of EMD aircraft #3-6 (NSP)	
	- Continue assembly of EMD aircraft #7-9 (NSP)	
	- Complete final production readiness review (NSP)	
	- Continue flight test and flight test support (NSP)	
	- Complete full scale pole model testing (RCS). (NSP)	
	- Complete first lifetime fatigue test (NSP)	
(U) \$368,124	Avionics	
	- First flight of the first avionics test aircraft (NSP)	
	- Initiate AIL Block 3 integration (NSP)	
Project 654069	Page 4 of 14 Pages	Exhibit R-2A (PE 0604239F)

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE
BUDGET ACTIVITY		PROJECT
<b>05 - Engineering and Manufacturing Development</b>	<b>0604239F F-22 EMD</b>	<b>February 2000</b> <b>654069</b>
(U)	<u>A. Mission Description Continued</u>	
(U)	<u>FY 2000 (\$ in Thousands) Continued</u>	
	<ul style="list-style-type: none"> <li>- Continue incorporating avionics software/hardware into the FTB (NSP)</li> <li>- Continue DMS redesign activities for production incorporation (NSP)</li> <li>- Initiate avionics software Block 3S flight testing (NSP)</li> <li>- Initiate Block 3 FTB testing (NSP)</li> </ul>	
(U)	\$140,111	Engine <ul style="list-style-type: none"> <li>- Continue production engine configuration development testing (NSP)</li> <li>- Continue to deliver and support twelve additional flight test engines (25 total) (NSP)</li> <li>- Continue verification of engine support system products (NSP)</li> <li>- Continue to build and test additional flight test engines (NSP)</li> <li>- Continue Initial Service Release (ISR) milestone activities</li> </ul>
(U)	\$119,100	Other Government Cost <ul style="list-style-type: none"> <li>- Continue flight test and flight test support at Edwards AFB</li> <li>- Continue support of engine testing at AEDC</li> <li>- Continue aperture measurements at Rome Labs</li> <li>- Continue avionics ground testing at various government facilities</li> <li>- Mission support of the SPO; travel, computer costs, misc contracts, etc.</li> <li>- Procurement of required GFE</li> <li>- Continue live fire testing at Air Force Research Labs</li> </ul>
(U)	\$1,222,232	Total
(U)	<u>FY 2001 (\$ in Thousands)</u>	
(U)	\$537,397	Air Vehicle <ul style="list-style-type: none"> <li>- Complete assembly of EMD aircraft #7-9. (NSP)</li> <li>- Continue flight test and flight test support. (NSP)</li> <li>- Complete second lifetime fatigue test. (NSP)</li> </ul>
(U)	\$271,176	Avionics <ul style="list-style-type: none"> <li>- Initiate AIL Block 3.1 integration. (NSP)</li> <li>- Complete flight testing on the Block 3.1 FTB. (NSP)</li> <li>- Complete AIL Block 3.0 and 3.1 integration. (NSP)</li> </ul>
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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2000				
BUDGET ACTIVITY			PE NUMBER AND TITLE				PROJECT				
<b>05 - Engineering and Manufacturing Development</b>			<b>0604239F F-22 EMD</b>				<b>654069</b>				
<b>(U) <u>A. Mission Description Continued</u></b>											
<b>(U) <u>FY 2001 (\$ in Thousands) Continued</u></b>											
			- Continue DMS redesign, requalification and retesting activities. (NSP)								
<b>(U)</b>	\$56,875	Engine									
			- Continue production engine configuration development testing. (NSP)								
			- Continue verification of engine support system products. (NSP)								
			- Continue to test flight test engines. (NSP)								
			- Complete Initial Service Release (ISR) milestones (NSP)								
			- Initiate Operational Capability Release (OCR) activities								
<b>(U)</b>	\$142,300	Other Government Cost									
			- Continue flight test and flight test support at Edwards AFB								
			- Continue engine testing at AEDC								
			- Continue avionics ground testing at various government facilities								
			- Mission support of the SPO; travel, computer costs, misc contracts, etc.								
			- Procurement of required GFE								
			- Continue live fire testing at Air Force Research Labs								
<b>(U)</b>	\$1,007,748	Total									
<b>(U) <u>B. Project Change Summary</u></b>											
FY01 - \$31,300 adjustment offsets past year program reductions. Program remains \$4.287M under the Congressionally mandated cost cap.											
<b>(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u></b>											
			<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>	
<b>(U)</b>	PRTV II (6)			722,906	404,038	148,054					1,274,998
<b>(U)</b>	(U) F-22 Squadrons (PE 0207138F)						83,061	82,963			166,024
<b>(U)</b>	(U) Military Construction (PE 0604239F)	0	18,600	0	0	0	0	0	0	0	18,600
<b>(U)</b>	(U) Military Construction (PE	0	0	25,300	51,600	17,400	16,800	13,200	137,900		262,200
Project 654069			Page 6 of 14 Pages						Exhibit R-2A (PE 0604239F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2000	
BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>				PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>				PROJECT <b>654069</b>	
<b>(U) C. Other Program Funding Summary (\$ in Thousands)</b>									
	<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>	
0207219F)									
(U) (U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003 *	797,798	283,043	2,553,559	3,023,600	4,330,648	3,993,482	3,591,287	19,422,998	38,077,187
(U) (U) Munitions Procurement (PE 0207219F)	449	1,425	2,721	4,297	6,384	9,479	9,431	56,510	90,662
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: Includes BP 10, BP 19, and Advance Buy									
<b>(U) D. Acquisition Strategy</b>									
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.									
<b>(U) E. Schedule Profile</b>									
				<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>	
			1	2	3	4	1	2	3
(U) (U) Aircraft Delivered (EMD Test Article)							X	X	X
(U) Program Milestones									
(U) - Program Review, PRTV Award, PRTV II (6) LL			*						
(U) - DAB MS III, 4QFY03									
(U) Engineering Milestones									
(U) - Final PRR								X	
(U) - First Avionics Flight							X		
(U) T&E Milestones									
(U) - Dedicated IOT&E, 4QFY02									
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									
Project 654069			Page 7 of 14 Pages				Exhibit R-2A (PE 0604239F)		

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2000		
BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>					PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>			PROJECT <b>654069</b>		
<b>(U) A. Project Cost Breakdown (\$ in Thousands)</b>										
						<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>		
(U)	Air Vehicle/Avionics					1,293,289	963,021	808,573		
(U)	Engine					171,972	140,111	56,875		
(U)	Government Cost									
(U)	- Government Test					77,825	99,600	126,200		
(U)	- Mission Support					11,600	12,600	11,500		
(U)	- HAZMAT					300	100	100		
(U)	- GFE					6,800	6,800	4,500		
(U)	Total					1,561,786	1,222,232	1,007,748		
<b>(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)</b>										
<b>(U) Performing Organizations:</b>										
<u>Contractor or Government</u>	<u>Contract Method/Type</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>										
Lockheed (Air Veh)	C/CPAF	Aug 91	12,992,163	15,325,739	11,541,006	1,293,289	963,021	808,573	720,299	15,326,188
Pratt & Whitney	C/CPAF	Aug 91	2,224,000	2,473,848	2,037,556	171,972	140,111	56,875	67,334	2,473,848
<u>Support and Management Organizations</u>										
Support Contracts	Various	Various	N/A	N/A	12,402	2,603	1,900	1,600	1,500	20,005
In House Support	Various	Various	N/A	N/A	81,498	9,297	10,800	10,000	17,500	129,095
<u>Test and Evaluation Organizations</u>										
AEDC	PO		N/A	N/A	155,008	19,956	20,000	8,000	0	202,964
AFFTC	PO		N/A	N/A	148,508	52,682	68,800	111,100	219,700	600,790
All Other Tests	Various	Various	N/A	N/A	31,184	5,187	10,800	7,100	4,800	59,071
Note: The Project Office EAC includes the following items not included in the Performing Activity (i.e., Contractor) EAC - Base Fee, Award Fee, SPO Planned CCPs not yet on contract, and other adjustments based on results of the restructured program.										
Project 654069					Page 8 of 14 Pages			Exhibit R-3 (PE 0604239F)		

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<b>RDT&amp;E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)</b>	DATE <b>February 2000</b>
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BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>	PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>	PROJECT <b>654069</b>
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(U) **Government Furnished Property:**

<u>Item</u> <u>Description</u>	<u>Contract</u> <u>Method/Type</u> <u>or Funding</u> <u>Vehicle</u>	<u>Award or</u> <u>Obligation</u> <u>Date</u>	<u>Delivery</u> <u>Date</u>	<u>Total Prior</u> <u>to FY 1999</u>	<u>Budget</u> <u>FY 1999</u>	<u>Budget</u> <u>FY 2000</u>	<u>Budget</u> <u>FY 2001</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Product Development Property</u>									
GFE	Various	Various	Various	40,800	6,800	6,800	4,500	0	58,900
<u>Support and Management Property</u>									
Not Applicable									
<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 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development				13,619,362	1,472,061	1,109,932	869,948	787,633	17,858,936
Subtotal Support and Management				93,900	11,900	12,700	11,600	19,000	149,100
Subtotal Test and Evaluation				334,700	77,825	99,600	126,200	224,500	862,825
Total Project				14,047,962	1,561,786	1,222,232	1,007,748	1,031,133	18,870,861

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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BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>				PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>				PROJECT <b>654874</b>			
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	
654874	PRTVII AIRCRAFT ACQUISITION	0	722,906	404,038	148,054	0	0	0	0	1,274,998	
<p>(U) <b><u>A. Mission Description</u></b>            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.</p> <p>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&amp;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) aircraft on 30 Dec 99.</p> <p>(U) <b><u>FY 1999 (\$ in Thousands)</u></b>            (U) \$0 No Activity            (U) \$0 Total            * See Note Below</p> <p>(U) <b><u>FY 2000 (\$ in Thousands)</u></b>            (U) \$647,366 Air Vehicle            (U) \$60,000 Engine            (U) \$15,540 Other Government Cost            (U) \$722,906 Total            * See Note Below</p> <p>(U) <b><u>FY 2001 (\$ in Thousands)</u></b>            (U) \$302,429 Air Vehicle            (U) \$90,100 Engine            (U) \$11,509 Other Government Cost            (U) \$404,038 Total</p> <p>*FY00 - Does not include \$300M appropriated for F-22 termination liability or for other F-22 program contractual requirements in lieu of termination liability</p>											
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BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>				PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>				PROJECT <b>654874</b>	
(U) <b><u>A. Mission Description Continued</u></b>									
(U) <u>FY 2001 (\$ in Thousands) Continued</u> obligations. However, FY01 and FY02 budgets are based on receipt of these funds for the F-22.									
(U) <b><u>B. Project Change Summary</u></b> N/A									
(U) <b><u>C. Other Program Funding Summary (\$ in Thousands)</u></b>									
	<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) AF RDT&E	1,561,786	1,222,232	1,007,748	712,622	318,511				22,650,672
(U) F-22 Squadrons (PE 0207138F)						83,061	82,963		166,024
(U) Military Construction (PE 0604239F)	0	18,600	0	0	0	0	0	0	18,600
(U) Military Construction (PE 0207219F)	0	0	25,300	51,600	17,400	16,800	13,200	137,900	262,200
(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003	797,798	283,043	2,553,559	3,023,600	4,330,648	3,993,482	3,591,287	19,422,998	38,077,187
(U) Munitions Procurement (PE 0207219F)	449	1,425	2,721	4,297	6,384	9,479	9,431	56,510	90,662
(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									
(U) <b><u>D. Acquisition Strategy</u></b> 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) <b><u>E. Schedule Profile</u></b>									
			<u>FY 1999</u>			<u>FY 2000</u>			<u>FY 2001</u>

<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)</b>	DATE <b>February 2000</b>
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BUDGET ACTIVITY <b>05 - Engineering and Manufacturing Development</b>	PE NUMBER AND TITLE <b>0604239F F-22 EMD</b>	PROJECT <b>654874</b>
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(U) E. 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

(U) Aircraft Delivered (PRTV II Test Article)  
Aircraft Delivered beyond FY 2001 as follows:

- FY 2002 2Q 1
- FY 2002 3Q 2
- FY 2002 4Q 1
  
- FY 2003 1Q 2

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2000			
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604239F F-22 EMD			PROJECT 654874			
(U) <b><u>A. Project Cost Breakdown (\$ in Thousands)</u></b>											
					<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>		
(U)	Air Vehicle						647,366		302,429		
(U)	Engine						60,000		90,100		
(U)	Other Government Cost						15,540		11,509		
(U)	Total						722,906		404,038		
(U) <b><u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u></b>											
(U) <b><u>Performing Organizations:</u></b>											
	<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>											
	Lockheed (Air Veh)	FFP	Dec 99	1,344,132	1,344,132		647,366	302,429	124,337	1,074,132	
	Pratt & Whitney	FFP	Dec 99	180,402	180,402		60,000	90,100	302	150,402	
<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) <b><u>Government Furnished Property:</u></b>											
	<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 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 Property</u>											
	GFE	Various	Various	Various				15,540	11,509	23,415	50,464
<u>Support and Management Property</u>											
	Not Applicable	N/A	N/A	N/A							

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE February 2000		
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
<b>05 - Engineering and Manufacturing Development</b>		<b>0604239F F-22 EMD</b>			<b>654874</b>	
<b>(U) <u>Government Furnished Property Continued:</u></b>						
<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>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>
<u>Subtotals</u>					<u>Budget</u>	<u>Budget to</u>
Subtotal Product Development					<u>FY 2001</u>	<u>Complete</u>
Subtotal Support and Management						<u>Program</u>
Subtotal Test and Evaluation						
Total Project						
					722,906	404,038
						148,054
						1,274,998
					722,906	404,038
						148,054
						1,274,998