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PE NUMBER: 0604239F
 PE TITLE: F-22 EMD

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2006
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0604239F F-22 EMD
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Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	211.815	75.117	0.000	0.000	0.000	0.000	0.000	0.000	24,086.648
4069 Advanced Tactical Fighter FSD	211.815	75.117	0.000	0.000	0.000	0.000	0.000	0.000	24,086.648

(U) A. Mission Description and Budget Item Justification

The F-22A Raptor represents the USAF's top priority for providing the Joint Force with air dominance, operational access, homeland and cruise missile defense for the next 20+ years. The F-22A is a first-of-a-kind multi-mission fighter aircraft that combines stealth, supercruise, advanced maneuverability and integrated avionics to make it the world's most capable combat aircraft. The F-22A is currently closing out the Engineering and Manufacturing Development (EMD) phase of acquisition.

This program is in Budget Activity 5, System Development and Demonstration, because the F-22A Program is developing the next-generation air dominance fighter for the USAF to counter emerging worldwide threats.

(U) B. Program Change Summary (\$ in Millions)

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	208.143	76.203	0.000
(U) Current PBR/President's Budget	211.815	75.117	0.000
(U) Total Adjustments	3.672	-1.086	
(U) Congressional Program Reductions	-0.001		
Congressional Rescissions	-0.160	-1.086	
Congressional Increases			
Reprogrammings	9.619		
SBIR/STTR Transfer	-5.786		
(U) <u>Significant Program Changes:</u>			
None			

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Exhibit R-2a, RDT&E Project Justification

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Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4069 Advanced Tactical Fighter FSD	211.815	75.117	0.000	0.000	0.000	0.000	0.000	0.000	24,086.648
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

* Total Cost includes \$3,779,811,000 of Demonstration and Validation funding prior to FY 1992 funded in PE 0603230F.

(U) A. Mission Description and Budget Item Justification

The F-22A Raptor represents the USAF's top priority for providing the Joint Force with air dominance, operational access, homeland and cruise missile defense for the next 20+ years. The F-22A is a first-of-a-kind multi-mission fighter aircraft that combines stealth, supercruise, advanced maneuverability and integrated avionics to make it the world's most capable combat aircraft. The F-22A is currently closing out the Engineering and Manufacturing Development (EMD) phase of acquisition.

This program is in Budget Activity 5, System Development and Demonstration, because the F-22A Program is developing the next-generation air dominance fighter for the USAF to counter emerging worldwide threats.

(U) B. Accomplishments/Planned Program (\$ in Millions)

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Air Vehicle	92.154	48.009	
- Completed full-scale airframe structural fatigue testing and analysis (NSP)			
- Continue structural certification analysis activities. (NSP)			
- Completed EMD flight test and flight test support. (NSP)			
- Completed life extension NRE (early aircraft getting modified to get "full life"). (NSP)			
- Initiated and completed technical support for Force Development Evaluation and Follow-on Operational Test and Evaluation (NSP)			
(U) Avionics	40.122	23.050	
- Completed Avionics Integration Lab Block 3.1.3 Integration. (NSP)			
- Completed DMS redesign, requalification and retesting activities. (NSP)			
- Complete EMD OFP development and testing. (NSP) - Initiated and completed technical support for Force Development Evaluation and Follow-on Operational Test and Evaluation (NSP)			
(U) Engine	20.380	2.200	
- Completed support and test of flight test engines (25 total). (NSP)			
(U) Other Government Cost	59.159	1.858	
- Complete flight test and flight test support at Edwards AFB.			
- Mission support of the SPO; travel, computer costs, misc contracts, etc.			
(U) Total Cost	211.815	75.117	0.000

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(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</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)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,580.580
(U) F/A-22 Squadrons RDT&E (PE 0207138F)	318.369	373.124	584.290	620.560	326.994	203.724	202.257	Continuing	TBD
(U) F/A-22 Squadrons (3010) Procurement (PE 0207138F)	95.187	78.489	262.906	300.218	285.885	170.679	398.246	Continuing	TBD
(U) F/A-22 Squadrons (3080) Procurement (PE 0207138F)	0.443	1.471	2.741	1.735	0.000	0.721	1.479	Continuing	TBD
(U) Military Construction (PE 0604239F)	0.000	0.000	0.000	0.000	0.000			0.000	65.000
(U) Military Construction (PE 0207219F)	0.000	0.000	0.000	0.000	0.000			0.000	96.018
(U) Military Construction (PE 0207138F)	28.370	47.120	62.900	98.391	0.000	0.000	0.000	0.000	267.951
(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003**	4024.599	3763.848	2032.881	3197.146	2894.025	1694.514	0.000	0.000	34,099.816
(U) Munitions Procurement (PE 0207219F)	16.788	10.836	16.575	12.496	12.801	16.153	12.909	0.000	120.424
(U) F/A-22 Adv Comm Sys Procurement (PE 27445F)			0.000	0.000	0.000	34.521	16.690	Continuing	TBD
(U) F/A-22 Tactical Data Link RDT&E (PE 27445F)	35.526	95.557	88.099	52.175	38.626	34.714	0.000		344.697

(U) **D. Acquisition Strategy**

The EMD contract is Cost Plus Award Fee with Lockheed Martin Aeronautical Systems (LMAS) to produce the F-22A air vehicle and Pratt & Whitney (P&W) to produce the F119 engines. The engines are provided to LMAS as GFE.

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Exhibit R-3, RDT&E Project Cost Analysis

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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2005</u> <u>Cost</u>	<u>FY 2005</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2007</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target Value</u> <u>of Contract</u>
				<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>	<u>Cost</u>	<u>Award</u>			
				<u>Date</u>	<u>Date</u>	<u>Date</u>	<u>Date</u>					
(U) <u>Product Development</u> Lockheed (Air Veh)	C/CPAF	Lockheed Martin, Marietta, GA	16,311.177	115.305	Aug-91	68.698	Aug-91			0.000	0.000	14,727.198
Pratt & Whitney	C/CPFF	Pratt & Whitney, Hartford, CT	2,488.917	12.880	Aug-91					0.000	2,501.797	2,388.171
GFE	Various		65.899	0.254						0.000	66.153	
Subtotal Product Development			2,570.816	128.439		68.698		0.000		0.000	2,567.950	17,115.369
Remarks:												
(U) <u>Support</u> Mission Support	Various		165.200	8.797		0.000				0.000	173.997	
Subtotal Support			165.200	8.797		0.000		0.000		0.000	173.997	0.000
Remarks:												
(U) <u>Test & Evaluation</u> AEDC	PO	Arnold AFB, TN	158.000							0.000	158.000	
AFFTC	PO	Edwards AFB, CA	729.637	50.523	Nov-04					0.000	780.160	
All Other Tests	Various		101.075	24.056		6.419		0.000		0.000	131.550	
Not Applicable										0.000	0.000	
Subtotal Test & Evaluation			988.712	74.579		6.419		0.000		0.000	1,069.710	0.000
Remarks:												
(U) <u>Management</u> Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			3,724.728	211.815		75.117		0.000		0.000	3,811.657	17,115.369

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.

Exhibit R-4, RDT&E Schedule Profile

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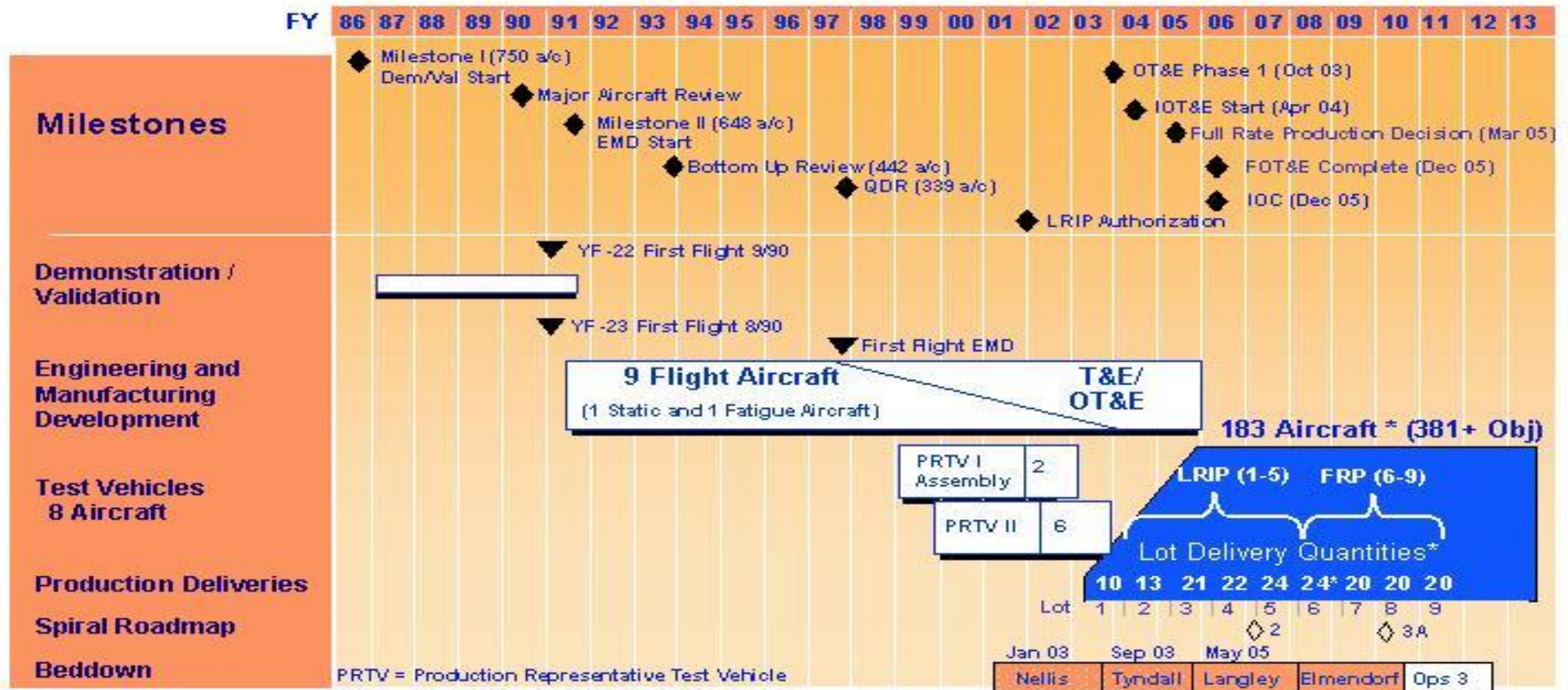
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Program Overview (FY07 PB)



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Exhibit R-4a, RDT&E Schedule Detail

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	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) <u>Schedule Profile</u>			
(U) IOT&E Complete	2Q		
(U) FDE Start	2Q		
(U) FDE Complete		1Q	
(U) FOT&E Start	4Q		
(U) FOT&E Complete		1Q	