

**UNCLASSIFIED**

PE NUMBER: 0207138F  
 PE TITLE: F-22 SQUADRONS

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0207138F F-22 SQUADRONS</b>
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	459.464	607.515	700.305	505.637	413.332	516.085	491.218	Continuing	TBD
4785 F-22	459.464	607.515	700.305	505.637	413.332	516.085	491.218	Continuing	TBD

**(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, and 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 Engineering and Manufacturing Development (EMD) phase of F-22 acquisition is complete. The program is now continuing the modernization effort through incremental development phases that enhance the F-22A Global Strike capability.

The development program enhances the air vehicle, engine, and training system to improve/enhance F-22A weapons, communications, and Intelligence Surveillance Reconnaissance (ISR) capabilities.

This program is in Budget Activity 7, Operational System Development, 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 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	472.475	743.593	666.848
(U) Current PBR/President's Budget	459.464	607.515	700.305
(U) Total Adjustments	-13.011	-136.078	
(U) Congressional Program Reductions		-132.200	
Congressional Rescissions		-3.878	
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-13.011		

**(U) Significant Program Changes:**

FY08 \$136.1M decrease due to FY08 Congressional mark and rescissions.

FY09 \$33.5M increase to support the Virtual Address eXtension (VAX).

## Exhibit R-2a, RDT&amp;E Project Justification

DATE

February 2008

BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
<b>07 Operational System Development</b>				<b>0207138F F-22 SQUADRONS</b>			<b>4785 F-22</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4785 F-22	459.464	607.515	700.305	505.637	413.332	516.085	491.218	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(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, and 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 Engineering and Manufacturing Development (EMD) phase of F-22 acquisition is complete. The program is now continuing the modernization effort through incremental development phases that enhance the F-22A Global Strike capability.

The development program enhances the air vehicle, engine, and training system to improve/enhance F-22A weapons, communications, and Intelligence Surveillance Reconnaissance (ISR) capabilities.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Continue requirements definition and increment development activities for planned hardware and software capability upgrades. (NSP)	284.198	414.195	443.278
--Continue Increment 2 to develop Global Strike Conops basic capabilities.			
--Continue Increment 3 to develop Global Strike Conops enhanced capabilities.			
(U) Continue System Engineering/Program Management Support	16.260	17.304	17.572
(U) Continue Air Vehicle Instrumentation support (Training and Test Instrumentation)	9.364	1.800	3.600
(U) Continue flight test and flight test support *	100.365	110.944	158.305
(U) Continue mission support of the Program Office; travel, computer costs, misc contracts, etc.	10.751	10.945	11.142
(U) Continue F-22A Reliability and Maintainability Maturation Program (RAMMP)	28.250	24.000	24.000
(U) Initiate Aircraft Structural Integrity Program (ASIP)		3.500	8.000
(U) Replacement Test Aircraft (RTA) and Instrumentation	10.276	24.827	34.408
(U) Total Cost	459.464	607.515	700.305

\* FY09 increase is a result of non-recurring flight test costs to replace and refurbish F-22 flight test engines

## Exhibit R-2a, RDT&amp;E Project Justification

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0207138F F-22 SQUADRONS</b>	PROJECT NUMBER AND TITLE <b>4785 F-22</b>
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**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</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 (PE 64239F)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24,295.158
(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-22A Squadrons Procurement (3010) (PE 0207138F)*	158.400	368.524	457.762	412.593	526.456	424.403	433.083	Continuing	TBD
(U) F-22A Squadrons Procurement (3080) (PE 027138F)	2.727	4.256	0.000	1.227	1.486	2.217	1.545	Continuing	TBD
(U) Military Construction (PE 0604239F)	0.000	0.000	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	0.000	0.000	96.018
(U) Military Construction (PE 0207138F)	61.861	70.180	197.750	50.006	0.000	0.000	0.000	0.000	465.788
(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003**	3461.852	3590.308	3089.811	44.235	43.935	1.925	1.921	Continuing	TBD
(U) Munitions Procurement (PE 0207219F)	16.508	12.574	12.867	16.212	12.931	13.190	13.454	Continuing	TBD
(U) Tactical Data Link RDT&E (PE 27445F)	63.104	36.851	62.788	90.709				Continuing	TBD

\* NOTE: Includes BP10, 11, 12, 16, and 19 (Depot Activation)

\*\* NOTE: Includes BP10, 11, and 19 (Other Useful Loads)

**(U) D. Acquisition Strategy**

The Raptor Enhancement Development & Integration (REDI) contract is an Indefinite Delivery/Indefinite Quantity Ordering contract that maximizes flexibility to start, stop, accelerate and decelerate projects as required. The REDI contract was established to be more responsive to evolving war fighter requirements. The REDI contract allows the issuance of orders for the highest priority war fighter capabilities in operationally meaningful capability increments, requirements analysis, contractor cost estimates and studies, development and demonstration of capability enhancements, and unanticipated future war fighter requirements. Each increment is broken into phases. Phase A is to initiate requirements analysis, Phase B is the design phase and Phases C, D, and E are the development, integration and verification phase of a specific incremental development effort. Separate delivery orders will be issued for various phases of an increment. These separate delivery orders at these predetermined breakpoints allow the modernization program to be tailored to the technology maturity, available funding and capability priority during the life of the program.

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**February 2008**

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>07 Operational System Development</b>				<b>0207138F F-22 SQUADRONS</b>					<b>4785 F-22</b>			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) <u>Product Development</u>												
Increment development activities	Cost Plus	Lockheed Martin	750.844	284.198	Dec-06	414.195	Dec-07	443.278	Dec-08	Continuing	TBD	
Air Vehicle Instrumentation support (Training and Test Instrumentation)	Cost Plus	Lockheed Martin	17.429	9.364	Oct-06	1.800	Oct-07	3.600	Nov-08	Continuing	TBD	
System Engineering / Program Management	Cost Plus	Lockheed Martin	102.159	16.260	Dec-06	17.304	Dec-07	17.572	Dec-08	Continuing	TBD	
F-22A Reliability and Maintainability Maturation Program (RAMMP)	Cost Plus	Lockheed Martin	13.391	28.250	Dec-06	24.000	Dec-07	24.000	Dec-08	Continuing	TBD	
Aircraft Structural Integrity Program (ASIP)	Cost Plus	Lockheed Martin	0.000	0.000		3.500	Dec-07	8.000	Dec-08	Continuing	TBD	
Subtotal Product Development			883.823	338.072		460.799		496.450		Continuing	TBD	0.000
Remarks:												
(U) <u>Support</u>												
Support Contracts	Various		23.361	10.751		10.945		11.142		Continuing	TBD	
Subtotal Support			23.361	10.751		10.945		11.142		Continuing	TBD	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
AFFTC and Contractor Flight Test Support	Various	Lockheed Martin, Pratt & Whitney, and Edwards AFB	67.618	100.365	Oct-06	110.944	Nov-07	158.305	Nov-08	Continuing	TBD	
Replacement Test Aircraft (RTA) and Instrumentation	Cost Plus / Fixed Price	Lockheed Martin	56.571	10.276	Nov-06	24.827	Dec-07	34.408	Dec-08	Continuing	TBD	
Subtotal Test & Evaluation			124.189	110.641		135.771		192.713		Continuing	TBD	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			1,031.373	459.464		607.515		700.305		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0207138F F-22 SQUADRONS

PROJECT NUMBER AND TITLE  
4785 F-22

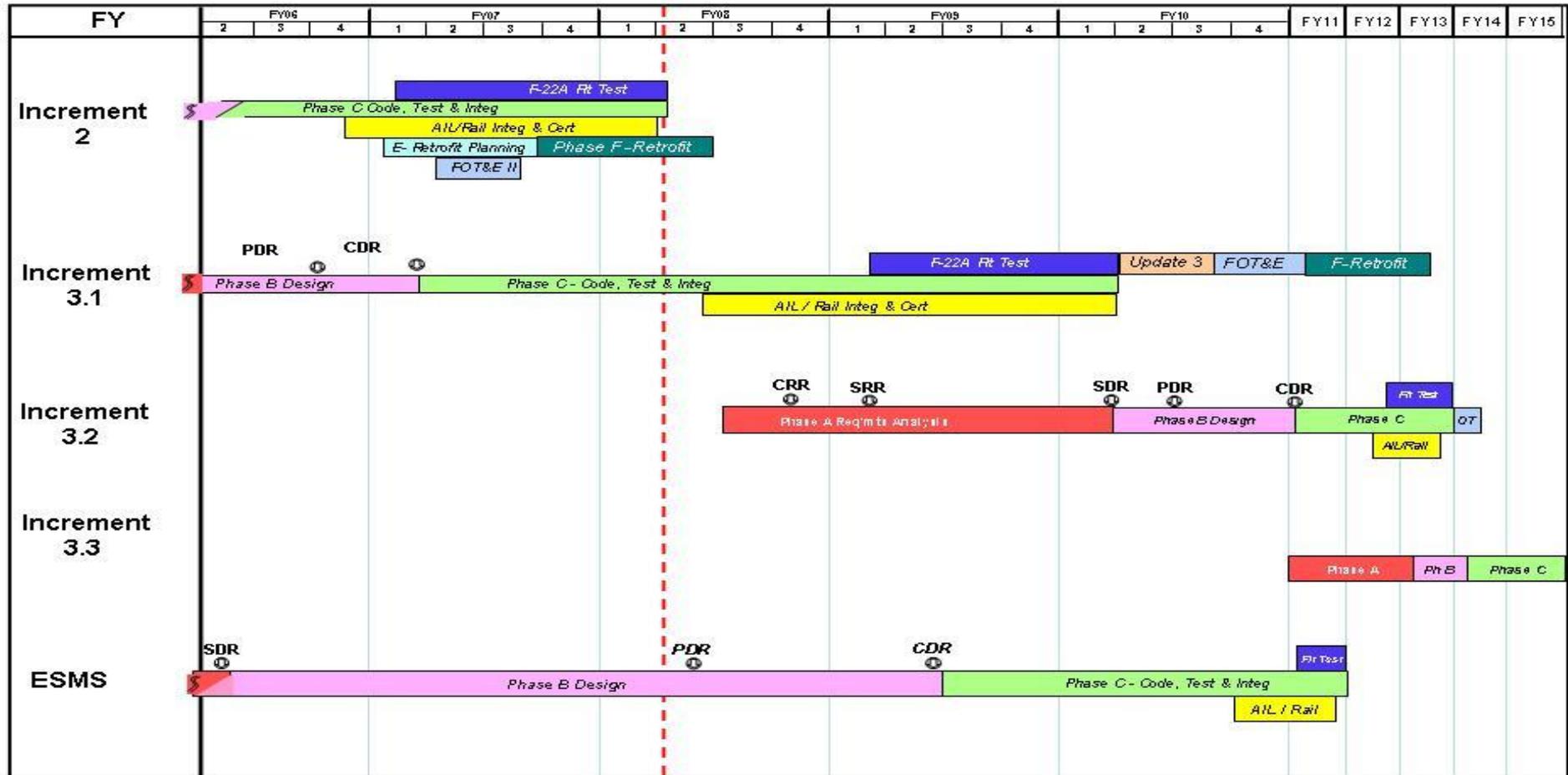


Exhibit R-4a, RDT&E Schedule Detail

DATE

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(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Complete Increment 2 Phase C, D, &E (Development, Integration & Test)		1Q	
(U) Initiate Increment 3.1 Phase C	1Q		
(U) --Increment 3.1 CDR	1Q		
(U) Initiate Increment 3.2 Phase A (Requirements Analysis)		3Q	
(U) --Increment 3.2 CRR		4Q	
(U) --Increment 3.2 SRR			1Q
(U) Enhanced Stores Management System (ESMS) PDR		2Q	
(U) ESMS CDR			2Q
(U) Initiate ESMS Phase C (Development, Integration, & Test)			3Q