

UNCLASSIFIED

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

Exhibit R-2, RDT&E Budget Item Justification								DATE February 2004	
BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND TITLE 0207138F F-22 SQUADRONS					
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	65.422	313.101	354.528	431.396	639.376	612.377	562.197	Continuing	TBD
4785 F-22	65.422	313.101	354.528	431.396	639.376	612.377	562.197	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

The F/A-22 is designed to penetrate enemy airspace and achieve a first look, first kill capability against multiple targets. The F/A-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/A-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. This exhibit is for post EMD requirements/developments - which includes hardware and software enhancements to the EMD baseline. These enhancements will upgrade the F/A-22 to enable a more robust air-to-ground target engagement capability.

This program is in Budget Activity 7, Operational System Development, because the F/A-22 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 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	66.323	315.784	375.428
(U) Current PBR/President's Budget	65.422	313.101	354.528
(U) Total Adjustments	-0.901	-2.683	
(U) Congressional Program Reductions			
Congressional Rescissions		-2.683	
Congressional Increases			
Reprogrammings	-0.901		
SBIR/STTR Transfer			

(U) **Significant Program Changes:**

FY05 funding was realigned from FY05 to FY06 to properly phase funding with planned efforts.

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY 07 Operational System Development				PE NUMBER AND TITLE 0207138F F-22 SQUADRONS			PROJECT NUMBER AND TITLE 4785 F-22			
Cost (\$ in Millions)		FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
4785	F-22	65.422	313.101	354.528	431.396	639.376	612.377	562.197	Continuing	TBD
Quantity of RDT&E Articles		0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The F/A-22 is designed to penetrate enemy airspace and achieve a first look, first kill capability against multiple targets. The F/A-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/A-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. This exhibit is for post EMD requirements/developments - which includes hardware and software enhancements to the EMD baseline. These enhancements will upgrade the F/A-22 to enable a more robust air-to-ground target engagement capability.

This program is in Budget Activity 7, Operational System Development, because the F/A-22 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 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Continue requirements definition and spiral development activities for planned hardware and software capability upgrades. (NSP)	39.318	254.754	253.117
--Continue Spiral 2 to develop Global Strike Conops basic capabilities.			
--Continue Spiral 3 to develop Global Strike Conops enhanced capabilities.			
(U) Continue Air Vehicle Instrumentation support (SEEK EAGLE Instrumentation).	3.870	12.000	18.000
(U) Continue Post-EMD System Engineering/Program Management Contract Support	22.234	30.711	20.792
(U) Continue Air Vehicle Instrumentation support (Test Instrumentation)		6.270	8.560
(U) Continue Flight test and flight test support at Edwards AFB.		2.200	46.782
(U) Continue Mission support of the SPO; travel, computer costs, misc contracts, etc.		7.166	7.277
(U) Total Cost	65.422	313.101	354.528

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

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</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)	843.999	615.467	210.000	75.794					24,084.384
(U) PRTV II (6)									1,580.580
(U) F/A-22 Squadrons Procurement (PE 0207138F)	22.427	39.532	96.691	10.079	76.503	134.768	167.521	Continuing	TBD
(U) Military Construction (PE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	39.700

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Exhibit R-2a, RDT&E Project Justification

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

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(U) Military Construction (PE 0207219F)	42.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	96.018
(U) Military Construction (PE 0207138F)	0.000	31.164	40.246	54.460	93.324	121.991	80.075	Continuing	TBD	
(U) Aircraft Procurement (PE 0207219F) Advanced Tactical Fighter, P-1 Line Item #003**	4480.149	4109.533	4155.976	4423.214	4220.211	4090.326	3920.002	5,987.570	42,120.610	
(U) Munitions Procurement (PE 0207219F)	6.260	6.410	9.406	10.897	10.763	12.038	12.293	27.805	102.057	
(U) F/A-22 Link 16 Transmit RDT&E (PE 27445F)				27.560	29.059	31.988	32.598	Continuing	TBD	
(U) F/A-22 Link 16 Transmit Procurement (PE 27445F)	28.926	42.318	50.940	55.817	14.026	27.509	28.919	Continuing	TBD	

**NOTE: Includes BP10, 11, 16, 19 and Advance Buy.

(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 based on funding. 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. The first Delivery Order is used to initiate requirements analysis (Phase A) of all spiral development efforts associated with planned capability enhancements. Subsequent Delivery Orders will be issued for the design phase (Phase B) and the development, integration and verification phase (Phase C,D,E) of a specific spiral development effort. Separate delivery orders at these predetermined breakpoints allows the spiral effort 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

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BUDGET ACTIVITY			PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
07 Operational System Development			0207138F F-22 SQUADRONS					4785 F-22				
<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2003</u> <u>Cost</u>	<u>FY</u> <u>2003</u> <u>Cost</u>	<u>FY</u> <u>2003</u> <u>Award</u> <u>Date</u>	<u>FY</u> <u>2004</u> <u>Cost</u>	<u>FY</u> <u>2004</u> <u>Award</u> <u>Date</u>	<u>FY</u> <u>2005</u> <u>Cost</u>	<u>FY</u> <u>2005</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
<u>(U) Product Development</u>												
Spiral development activities	Cost Plus		0.000	39.318	Mar-03	254.754	Dec-03	253.117	Dec-04	Continuing	TBD	
Air Vehicle Instrumentation support (SEEK EAGLE Instr)	Cost Plus		0.000	3.870	Mar-03	12.000	Feb-04	18.000	Dec-04	Continuing	TBD	
Air Vehicle Instrumentation support (Test Instrumentation)	Cost Plus		0.000			6.270	Feb-04	8.560	Feb-04	Continuing	TBD	
System Engineering / Program Management	Cost Plus		0.000	22.234	Mar-03	30.711	Feb-04	20.792	Dec-04	Continuing	TBD	
Not Applicable											0.000	
Subtotal Product Development			0.000	65.422		303.735		300.469		Continuing	TBD	0.000
Remarks:												
<u>(U) Support</u>												
Support Contracts	Various					7.166		7.277		Continuing	TBD	
In House Support										Continuing	TBD	
Not Applicable											0.000	
Subtotal Support			0.000	0.000		7.166		7.277		Continuing	TBD	0.000
Remarks:												
<u>(U) Test & Evaluation</u>												
AFFTC	PO	Edwards AFB, CA				2.200	Jan-04	46.782	Jan-04	Continuing	TBD	
Not Applicable											0.000	
Subtotal Test & Evaluation			0.000	0.000		2.200		46.782		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>(U) Total Cost</u>			0.000	65.422		313.101		354.528		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

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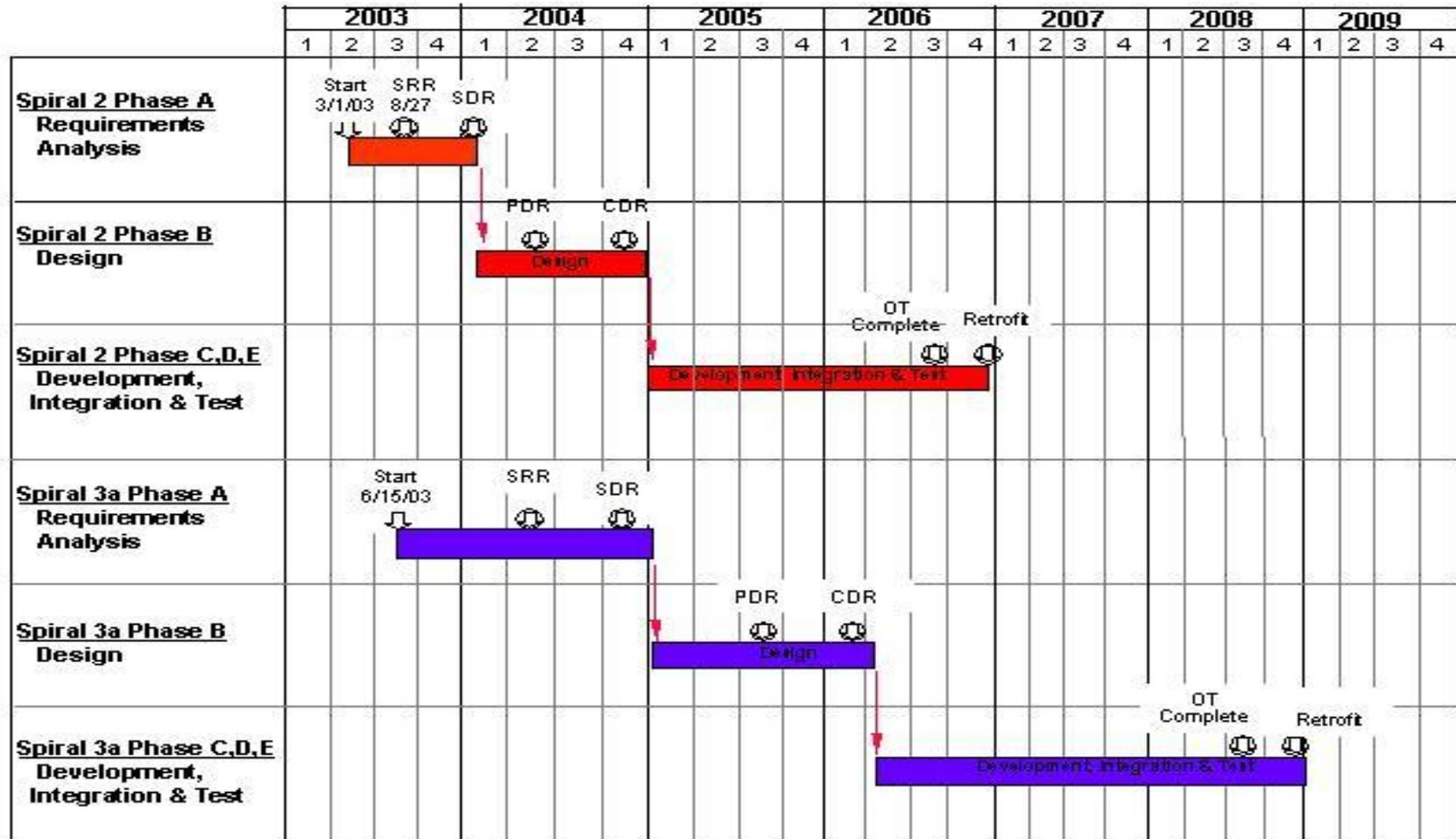
February 2004

BUDGET ACTIVITY
07 Operational System Development

PE NUMBER AND TITLE
0207138F F-22 SQUADRONS

PROJECT NUMBER AND TITLE
4785 F-22

F/A-22 Modernization Schedule



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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2004
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207138F F-22 SQUADRONS	PROJECT NUMBER AND TITLE 4785 F-22
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	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Schedule Profile			
(U) Initiate Spiral 2 Phase A (Requirements Analysis)	2Q		
(U) Initiate Spiral 2 Phase B (Design)		2Q	
(U) -- Spiral 2 PDR		3Q	
(U) -- Spiral 2 CDR			1Q
(U) Initiate Spiral 2 Phase C, D & E (Development, Integration & Test)			2Q
(U) Initiate Spiral 3a Phase A (Requirements Analysis)	3Q		
(U) -- Spiral 3a SRR		3Q	
(U) -- Spiral 3a SDR			1Q
(U) Initiate Spiral 3a Phase B (Design)			2Q
(U) -- Spiral 3a PDR			3Q