PE NUMBER: 0207133F
PE TITLE: F-16 SQUADRONS

Exhibit R-2, RDT&E Budget Item Justification

DATE: February 2004

BUDGET ACTIVITY: 07 Operational System Development

PE NUMBER AND TITLE: 0207133F F-16 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	77.627	96.135	99.606	98.486	102.968	106.501	109.289	Continuing	TBD
2671 F-16 Squadrons	77.627	96.135	99.606	98.486	102.968	106.501	109.289	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

The F-16 Fighting Falcon is the world's premier multi-mission fighter. It is a fixed-wing, high performance, single-engine fighter aircraft. In its 25-year history, the F-16 has proven itself in combat in a variety of air-to-air and air-to-surface missions such as close air support, combat air patrol, forward air control, battle air interdiction (day/night and all-weather) and suppression of enemy air defenses (SEAD). Also during these years the aircraft has evolved in its capabilities to exploit the advances made in computer, avionics systems, engine, and structures technologies. The F-16 has been selected by more than 20 air forces around the world. Foreign military sales production will continue well into the 21st century. The F-16 System Program Office (SPO) develops, integrates, and qualifies systems to enhance the overall performance of the F-16 mission.

Modifications which are being or will be developed during the FYDP:

a. Advanced Weapons Integration will integrate Joint Air-to-Surface Stand-off Missile (JASSM), Joint Direct Attack Munition (JDAM), Joint Stand-off Weapon (JSOW) and Wind Corrected Munition Dispenser (WCMD) and other smart weapons into the Block 30, Block 40, and Block 50 F-16. This task also includes performing risk reduction activities on advanced weapon integration.

b. Global Positioning System (GPS) Integration adds GPS capability to the Block 30 and supports testing of GPS changes to other F-16 Blocks. The F-16 development efforts are complemented by comprehensive Operational Flight Program (OFP) upgrades and flight tests.

c. Integrate the Sniper targeting pod on the Blocks 40-52 and transition the HARM Targeting System (HTS) pod to the left inlet hardpoint on the Blocks 50/52. This will allow the F-16 Block 50 to perform the SEAD/DEAD mission.

d. The Air-to-Air Interrogator (AAI) consists of a single unit interrogator/transponder, a beam forming network, fuselage-mounted array antenna elements, and a lower interrogator antenna. The system provides a higher reliability rate and increases performance over present systems. Initial capabilities include coverage of + or - 60 degrees azimuth and elevation coverage with a + or - 2 degree accuracy, a range accuracy of 152 meters and range of 100 nmi. 32 in beam targets can be handled. Modes 1, 2, 3/A, C, S, and 4 are available. The AAI is developed for Block 50 and will be integrated into Block 40.

e. Structural analysis from the on-going Structural Integrity Program (SIP) has indicated that the F-16 is experiencing structural fatigue that will impact the ability of the airframes to reach their 8,000 hrs service life. RDT&E funds are required to design the required structural modifications, as appropriate for each F-16 Block of aircraft. Falcon Structural Augmentation Roadmap (Falcon STAR) development costs will be shared with the Multi-National Fighter Program (MNFP) countries.

f. The Blk 50 AN/APG-68(V)9 radar enables an all weather autonomous detection and targeting capability to take full advantage of newly introduced Global Positioning System (GPS) weapons to conduct evolving missions of time critical targeting and Destruction of Enemy Air Defenses (DEAD).

Note: Flight test costs reflect OFP work requried for software modifications

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2004
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207133F F-16 SQUADRONS

Since the development activities in this PE support an operational aircraft, these development activities are funded in the Operational System Development budget activity 7.

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

		FY 2003	FY 2004	FY 2005
(U)	Previous President's Budget	81.639	87.478	99.867
(U)	Current PBR/President's Budget	77.627	96.135	99.606
(U)	Total Adjustments	-4.012	8.657	
(U)	Congressional Program Reductions			
	Congressional Rescissions		-0.843	
	Congressional Increases		9.500	
	Reprogrammings	-1.626		
	SBIR/STTR Transfer	-2.386		

(U) Significant Program Changes:

FY04: 3.500M Common Configurable Remote Interface Unit Congressional Plus Up

FY04: 6.000M Blk 50 AN/APG-68(V)9 Congressional Plus Up

Exhibit R-2a, RDT&E Project Justification			DATE: February 2004
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207133F F-16 SQUADRONS	PROJECT NUMBER AND TITLE: 2671 F-16 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
2671 F-16 Squadrons	77.627	96.135	99.606	98.486	102.968	106.501	109.289	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The F-16 Fighting Falcon is the world's premier multi-mission fighter. It is a fixed-wing, high performance, single-engine fighter aircraft. In its 25-year history, the F-16 has proven itself in combat in a variety of air-to-air and air-to-surface missions such as close air support, combat air patrol, forward air control, battle air interdiction (day/night and all-weather) and suppression of enemy air defenses (SEAD). Also during these years the aircraft has evolved in its capabilities to exploit the advances made in computer, avionics systems, engine, and structures technologies. The F-16 has been selected by more than 20 air forces around the world. Foreign military sales production will continue well into the 21st century. The F-16 System Program Office (SPO) develops, integrates, and qualifies systems to enhance the overall performance of the F-16 mission.

Modifications which are being or will be developed during the FYDP:

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f. The Blk 50 AN/APG-68(V)9 radar enables an all weather autonomous detection and targeting capability to take full advantage of newly introduced Global Positioning System (GPS) weapons to conduct evolving missions of time critical targeting and Destruction of Enemy Air Defenses (DEAD).

Note: Flight test costs reflect OFP work requried for software modifications

Since the development activities in this PE support an operational aircraft, these development activities are funded in the Operational System Development budget activity

Exhibit R-2a, RDT&E Project Justification		DATE February 2004
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207133F F-16 SQUADRONS	PROJECT NUMBER AND TITLE 2671 F-16 Squadrons

7.

	B. Accomplishments/Planned Program ($ in Millions)	FY 2003	FY 2004	FY 2005
(U)	ACCOMPLISHMENTS/PLANNED PROGRAM			
(U)	Blk 40 AAI Congressional Plus Up	1.978		
(U)	Reprogramming		5.191	
(U)	Blk 50 AN/APG-68(V)9 Congressional Plus Up		9.500	
(U)	Common Configurable Remote Interface Unit Plus Up		3.500	
(U)	Continue OFP Updates	47.297	44.639	60.278
(U)	ALR-56M	0.547	0.497	0.494
(U)	Continue Flight Tests DT&E	22.990	27.735	38.340
(U)	Weapons Integration	0.382	0.451	0.494
(U)	Complete Falcon STAR (Structural analysis and design)	4.433	4.622	
(U)	Total Cost	77.627	96.135	99.606

FY04: Congressional plus ups for V9 radar, 6.000M; and Common Configurable Remote Interface Unit, 3.5000M

FY04: -.843M Congressional recission

Note: Increase in OFP funding in FY05 results from increased software development effort in new software tape and increase in integration lab testing as a result of previous OFP lessons learned.

(U) C. Other Program Funding Summary ($ 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 Cost
(U)	Aircraft Procurement (3010), Line Item 29, F-16 Mods	274.878	307.261	336.289	373.942	327.847	329.290	274.761		TBD
(U)	Aircraft Procurement (3010), Line Item 71, Post Production Support	16.161	17.341	11.531	17.504	11.807	17.188	18.827		TBD

(U) D. Acquisition Strategy

RDT&E funds will primarily be executed in developing improved capability, maintenance and safety mods. Operational Flight Program (OFP) software will be continuously updated to complement mod development efforts. The approach to contracting varies by individual project. Lockheed Martin Aeronautics Company (LM Aero) is the prime contractor on all systems except the 110 Engines (General Electric), and the 229 Engines (Pratt & Whitney). Northrop Grumman and LM Aero will work collectively on Blk 50 AN/APG-68(V)9 efforts. Contract types are T&M, CPIF, CPFF, FFP.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: February 2004

BUDGET ACTIVITY: 07 Operational System Development

PE NUMBER AND TITLE: 0207133F F-16 SQUADRONS

PROJECT NUMBER AND TITLE: 2671 F-16 Squadrons

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) ($ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2003 Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
OFP Updates	CPIF/T&M	LM Aero	153.746	47.296	Dec-02	44.639	Jan-04	60.278	Jan-05	Continuing	TBD	
Falcon STAR	FFP	LM Aero	0.000	4.433	Dec-02	4.622	Jun-04				9.055	
ALR-56M	PO	WRALC/LN	1.912	0.548	Nov-03	0.497	Dec-03	0.495	Dec-04		3.452	
Weapons Integration	T&M/FFP	LM Aero	1.150	0.382	Jun-03	0.451	Jul-04	0.495	Jul-05		2.478	
AAI Block 40 Congressional Plus Up	CPIF	LM Aero		1.978	Sep-03						1.978	
Blk 50 AN/APG-68(V)9	T&M/CPFF	Northrup Grumman / LM Aero				9.500	Mar-04				9.500	
CCRIU						3.500					3.500	
Subtotal Product Development			156.808	54.637		63.209		61.268		Continuing	TBD	0.000
Remarks:												
(U) Support												
											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Test & Evaluation												
Flight Tests	T&M/CPFF	LM Aero/ Edwards AFB	110.941	22.990	Jan-03	27.735	Jan-04	38.338	Jan-05	Continuing	TBD	
Subtotal Test & Evaluation			110.941	22.990		27.735		38.338		Continuing	TBD	0.000
Remarks:												
(U) Management												
Reprogramming						5.191					5.191	
Subtotal Management			0.000	0.000		5.191		0.000		0.000	5.191	0.000
Remarks:												
(U) Rescission												
(U) Total Cost			267.749	77.627		96.135		99.606		Continuing	TBD	0.000
Remarks:												

Exhibit R-4, RDT&E Schedule Profile		DATE: February 2004
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207133F F-16 SQUADRONS	PROJECT NUMBER AND TITLE: 2671 F-16 Squadrons

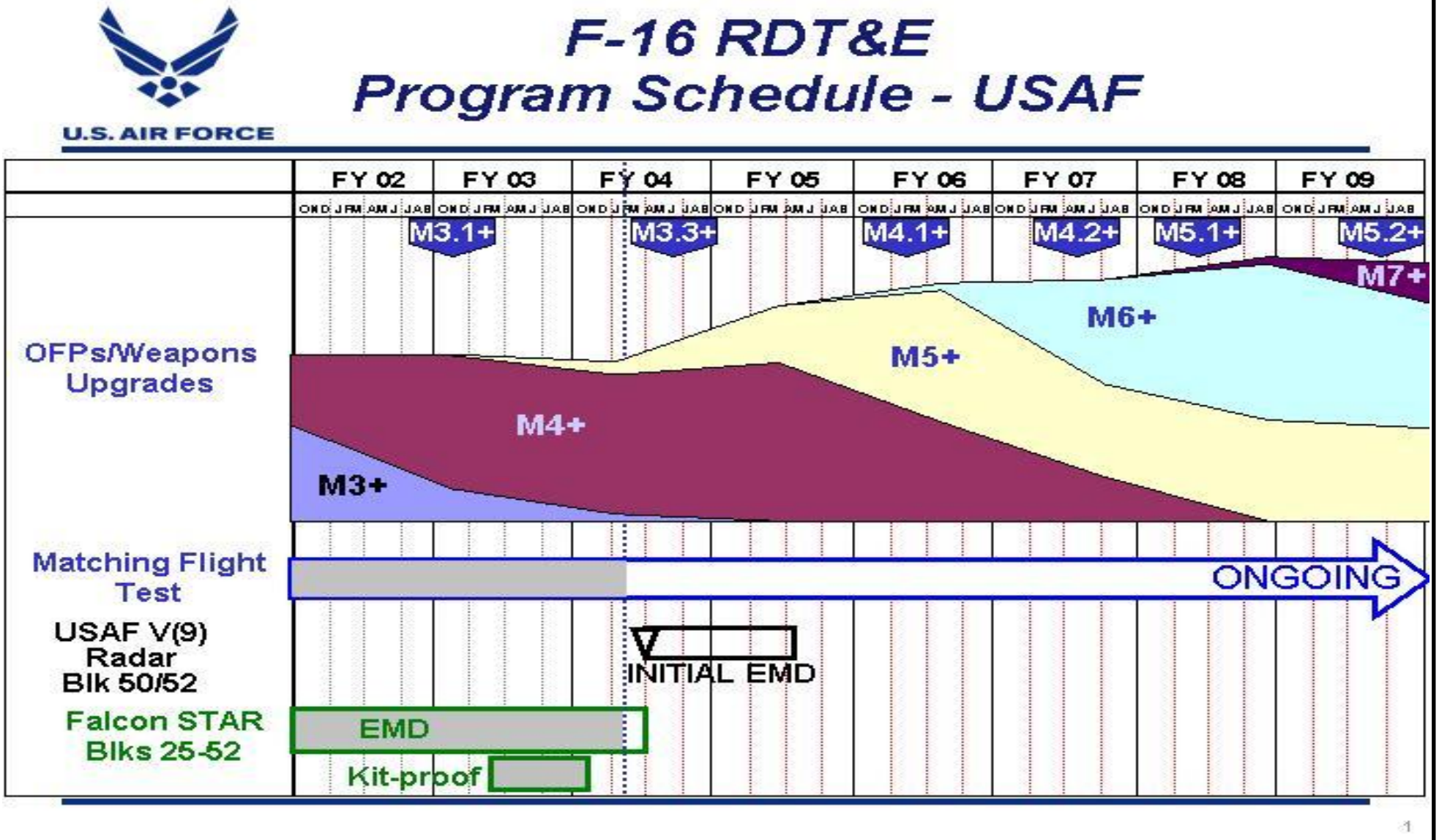

Exhibit R-4a, RDT&E Schedule Detail		DATE February 2004
BUDGET ACTIVITY **07 Operational System Development**	PE NUMBER AND TITLE **0207133F F-16 SQUADRONS**	PROJECT NUMBER AND TITLE **2671 F-16 Squadrons**

(U) Schedule Profile	FY 2003	FY 2004	FY 2005
(U) Flight Testing	1-4Q	1-4Q	1-4Q
(U) Falcon Star		3Q	
(U) BLK 50 AN/APG-68(V)9			2Q
(U) Flight Software and Weapons Upgrades	1-4Q	1-4Q	1-4Q