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

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2006
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207133F F-16 SQUADRONS

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	95.664	154.533	148.373	108.888	106.710	108.434	106.666	Continuing	TBD
2671 F-16 Squadrons	95.664	154.533	148.373	108.888	106.710	108.434	106.666	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 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.

Enhancements which are being or will be developed during the FYDP include:

a. Advanced Weapons Integration will include Joint Air-to-Surface Stand-off Missile (JASSM), Joint Direct Attack Munition (JDAM), Joint Stand-off Weapon (JSOW), Wind Corrected Munition Dispenser (WCMD), WCMD-ER Small Diameter Bomb (SDB) and updates to existing weapons into the F-16. This task also includes performing risk reduction activities on advanced weapon integration and add development/integration of advanced racks, pylons and adapters. Also includes Nuclear surety, safety and compatibility tasks.

b. The AN/APG-68(V)10 radar provides an all weather auto detection/target cueing capability taking full advantage of GPS-aided precision guided muntions to conduct evolving missions of time critical targeting and Destruction of Enemy Air Defenses (DEAD). The (V)10 radar program was to develop and integrate the system into the Blocks 50/52 aircraft. The (V)10 program has been terminated before production fielding, however, the program is being restructured to cost effectively complete initial testing as required to support other non-F-16 modification efforts. A Congressional plus up of $1.1M FY06 was received for integration into Blk 30 aircraft.

c. 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. Modes 1, 2, 3/A, C, S, 4 and 5 are available. Mode S transponders will be required for operation within the European Union. The AAI has been integrated in the Block 50 and will be integrated onto other blocks as required.

d. Integrate the Sniper and LITENING targeting pods and transition the HARM Targeting System (HTS) pod to the left inlet hard point. This will allow the F-16 to perform the Destruction of Enemy Air Defenses (DEAD) mission and includes integration of future pod upgrades.

e. The F-16 development efforts are complimented by the comprehensive operational flight program (OFP) upgrades. Hardware and Group A development associated with OFP software candidates are included in the OFP line. Integration efforts include manned fighter reconnaissance capabilities, Joint Helmet Mounted Cueing System (JHMCS) which allows the pilot to designate and shoot targets at high angles without maneuvering the aircraft. When integrated to the high angle off-bore sight AIM-9X missile, this provides the F-16 with enhanced first-look/first-shoot/first-kill advantage in the "dogfight" arena. Also, the Link 16 provides the F-16s with a secure, jam resistant, high-capacity data communications link with other fighters, airborne control aircraft, and ground control centers. Embedded GPS/INS (EGI)

systems will provide targeting capability to take full advantage of GPS-aided precision weapons to conduct evolving missions. Starting with M6/M6+ LM Aero will start transfer of OFP workload and maintenance of M-series tapes to OO-ALC. There is a large increase starting in FY07 to fund this transition and assumes a "see one/do one" transition where LM will produce M6/M6+ as OO-ALC builds up capability (personnel, Special Test Equipment, OFP development tools & processes, and training). OO-ALC will then assume system responsibility for the next M-series program (M7/M7+). During transition, both Lockheed and Ogden may have some concurrent software development capabilities both in terms of Special Test Equipment and personnel since OPF tape developments overlap. This funding is broken out for clarity as the SORAP was approved in Aug 05.

f. The EMD Hardware Development line provides funding to test, qualify, and field aircraft subsystems replaced or modified due to OFP requirements, Pre-Planned Product Improvements (P3I) and Diminishing Manufacturing Source (DMS). The approach to contracting varies by individual project. EMD solutions include but are not limited to MMC upgrade, digital video recorder and display upgrades and other hardware development activities. The MMC upgrade is broken out for clarity

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 2005	FY 2006	FY 2007
(U)	Previous President's Budget	96.984	155.666	165.288
(U)	Current PBR/President's Budget	95.664	154.533	148.373
(U)	Total Adjustments	-1.320	-1.133	
(U)	Congressional Program Reductions			
	Congressional Rescissions		-2.233	
	Congressional Increases		1.100	
	Reprogrammings	-1.320		
	SBIR/STTR Transfer			

(U) Significant Program Changes:

FY06: $1.1M Plus-up for AN/APG-68(V)10 for Blk 30 Aircraft

FY07: Flight test costs for FY07 reflects transfer of indirect costs from F-16 account into Major Range & Test Facilty account to comply with FY03 Congressional language.

FY07: Removed $16.6M from the AN/APG-68(V)10 for Blk 50 Aircraft

Exhibit R-2a, RDT&E Project Justification			DATE: February 2006
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 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
2671 F-16 Squadrons	95.664	154.533	148.373	108.888	106.710	108.434	106.666	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 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.

Enhancements which are being or will be developed during the FYDP include:

a. Advanced Weapons Integration will include Joint Air-to-Surface Stand-off Missile (JASSM), Joint Direct Attack Munition (JDAM), Joint Stand-off Weapon (JSOW), Wind Corrected Munition Dispenser (WCMD), WCMD-ER Small Diameter Bomb (SDB) and updates to existing weapons into the F-16. This task also includes performing risk reduction activities on advanced weapon integration and add development/integration of advanced racks, pylons and adapters. Also includes Nuclear surety, safety and compatibility tasks.

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c. 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. Modes 1, 2, 3/A, C, S, 4 and 5 are available. Mode S transponders will be required for operation within the European Union. The AAI has been integrated in the Block 50 and will be integrated onto other blocks as required.

d. Integrate the Sniper and LITENING targeting pods and transition the HARM Targeting System (HTS) pod to the left inlet hard point. This will allow the F-16 to perform the Destruction of Enemy Air Defenses (DEAD) mission and includes integration of future pod upgrades.

e. The F-16 development efforts are complimented by the comprehensive operational flight program (OFP) upgrades. Hardware and Group A development associated with OFP software candidates are included in the OFP line. Integration efforts include manned fighter reconnaissance capabilities, Joint Helmet Mounted Cueing System (JHMCS) which allows the pilot to designate and shoot targets at high angles without maneuvering the aircraft. When integrated to the high angle off-bore sight AIM-9X missile, this provides the F-16 with enhanced first-look/first-shoot/first-kill advantage in the "dogfight" arena. Also, the Link 16 provides the F-16s with a secure, jam resistant, high-capacity data communications link with other fighters, airborne control aircraft, and ground control centers. Embedded GPS/INS (EGI) systems will provide targeting capability to take full advantage of GPS-aided precision weapons to conduct evolving missions. Starting with M6/M6+ LM Aero will

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0207133F F-16 SQUADRONS	PROJECT NUMBER AND TITLE 2671 F-16 Squadrons

start transfer of OFP workload and maintenance of M-series tapes to OO-ALC. There is a large increase starting in FY07 to fund this transition and assumes a "see one/do one" transition where LM will produce M6/M6+ as OO-ALC builds up capability (personnel, Special Test Equipment, OFP development tools & processes, and training). OO-ALC will then assume system responsibility for the next M-series program (M7/M7+). During transition, both Lockheed and Ogden may have some concurrent software development capabilities both in terms of Special Test Equipment and personnel since OPF tape developments overlap. This funding is broken out for clarity as the SORAP was approved in Aug 05.

f. The EMD Hardware Development line provides funding to test, qualify, and field aircraft subsystems replaced or modified due to OFP requirements, Pre-Planned Product Improvements (P3I) and Diminishing Manufacturing Source (DMS). The approach to contracting varies by individual project. EMD solutions include but are not limited to MMC upgrade, digital video recorder and display upgrades and other hardware development activities. The MMC upgrade is broken out for clarity

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

	B. Accomplishments/Planned Program ($ in Millions)	FY 2005	FY 2006	FY 2007
(U)	AN/APG-68(V)10	26.603	19.965	8.000
(U)	Continue OFP Updates	33.093	87.222	79.087
(U)	ALR-56M	0.496	0.463	0.494
(U)	Continue Flight Tests DT&E	34.881	23.465	26.526
(U)	Weapons Integration	0.591	0.230	0.494
(U)	Mode S/5 IFF for CAF Aircraft		2.800	7.793
(U)	EMD Hardware/MMC Upgrade Development		12.628	3.390
(U)	EGI/INS Development		3.740	3.412
(U)	OFP Transition		4.020	19.177
(U)	Total Cost	95.664	154.533	148.373

(U) C. Other Program Funding Summary ($ 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 Cost
(U)	Aircraft Procurement (3010), Line Item 27, F-16 Mods	347.100	414.375	352.054	319.512	280.787	150.335	97.987		TBD
(U)	Aircraft Procurement (3010), Line Item 71, Post Production Support	11.277	17.596	12.245	19.188	20.528	20.310	20.608		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. OFP updates will transition to OO-ALC starting in FY06. Costs associated with this transition will

Exhibit R-2a, RDT&E Project Justification		DATE February 2006
BUDGET ACTIVITY **07 Operational System Development**	PE NUMBER AND TITLE **0207133F F-16 SQUADRONS**	PROJECT NUMBER AND TITLE **2671 F-16 Squadrons**

take place over FY06 to FY10. The EMD Hardware Development line provides funding to test, qualify, and field aircraft subsystems replaced or modified due to OFP requirements, Pre-Planned Product Improvements (P3I) and Diminishing Manufacturing Source (DMS). 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 AN/APG-68(V)10 efforts. Contract types are T&M, CPIF, CPFF and FFP.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: **February 2006**

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 2005 Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
OFP Updates	CPIF, T&M	LM Aero		33.093	Jan-05	87.222	Jan-06	79.087	Jan-07	Continuing	TBD	
OFP Transition	T&M, Organic	LM Aero, OO-ALC				4.020	Feb-06	19.177	Feb-07	Continuing	TBD	
ALR-56M	PO	WRALC/LN		0.496	Dec-04	0.463	Jan-06	0.494	Dec-06	Continuing	TBD	
Weapons Integration	T&M/FFP	LM Aero		0.591	Jun-05	0.230	Jan-06	0.494	Jan-07	Continuing	TBD	
AN/APG-68(V)10	T&M/CPFF	Northrup Grumman / LM Aero		26.603	Jan-06	19.965	Mar-06	8.000	Jan-07	Continuing	TBD	
Mode S/5 IFF for CAF Aircraft	CPFF	LM Aero				2.800	Jun-06	7.793	Jan-06	Continuing	TBD	
EMD Hardware/MMC Upgrade Development	FFP/CPIF	LM Aero				12.628	Mar-06	3.390	Jan-06	Continuing	TBD	
EGI/INS Development	FFP	Honeywell, Northrop Grumman				3.740	Jan-06	3.412	Jan-07	Continuing	TBD	
Subtotal Product Development			0.000	60.783		131.068		121.847		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		34.881	Jan-05	23.465	Jan-06	26.526	Jan-07	Continuing	TBD	
Subtotal Test & Evaluation			0.000	34.881		23.465		26.526		Continuing	TBD	0.000
Remarks:												
(U) Management											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Rescission												
(U) Total Cost			0.000	95.664		154.533		148.373		Continuing	TBD	0.000
Remarks:												

Exhibit R-4, RDT&E Schedule Profile		DATE: February 2006
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0207133F F-16 SQUADRONS	PROJECT NUMBER AND TITLE: 2671 F-16 Squadrons

U.S. AIR FORCE

F-16 Program Schedule - USAF

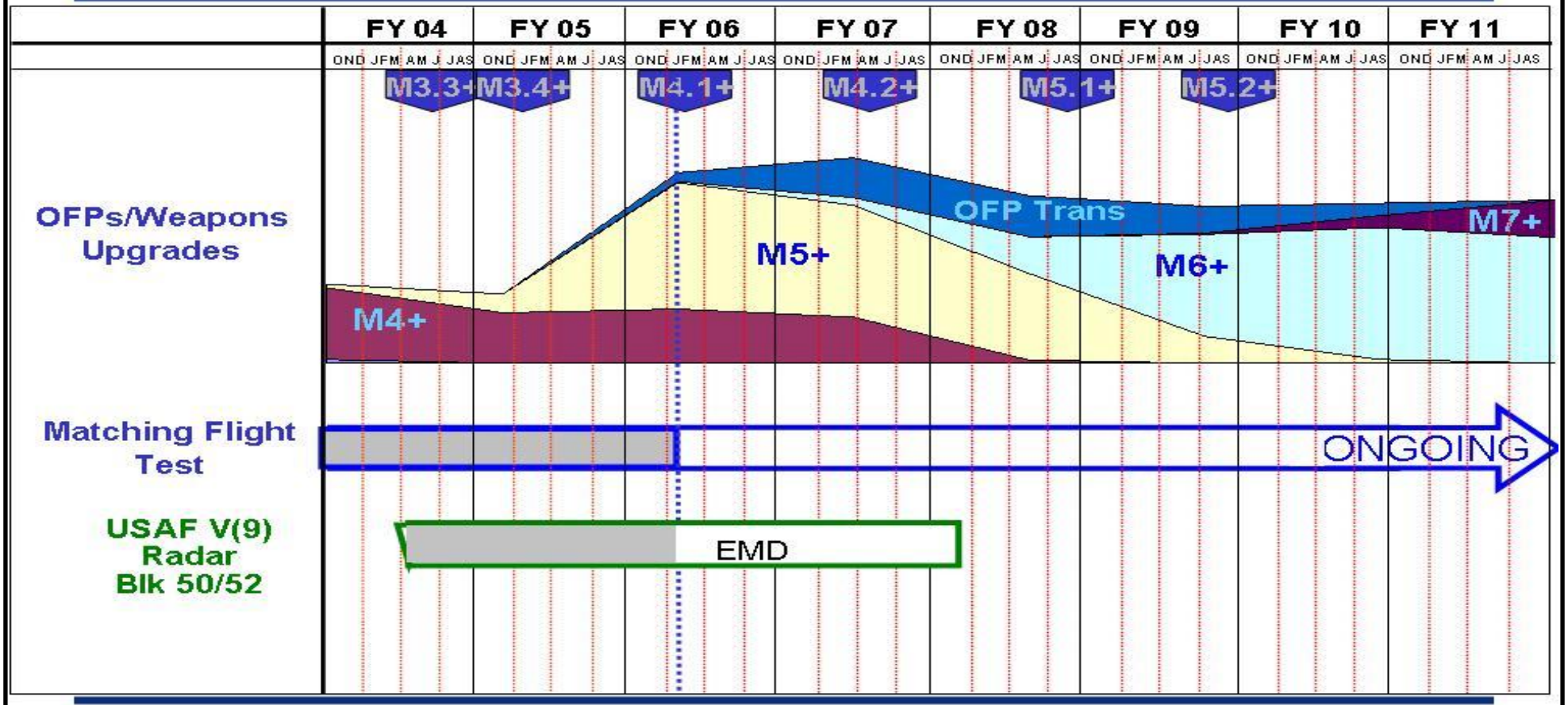

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Exhibit R-4a, RDT&E Schedule Detail

DATE: February 2006

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
07 Operational System Development	0207133F F-16 SQUADRONS	2671 F-16 Squadrons

(U) **Schedule Profile**	FY 2005	FY 2006	FY 2007
(U) Flight Test Continuous, no end date	1-4Q	1-4Q	1-4Q
(U) OFP Development, continuous	1-4Q	1-4Q	1-4Q
(U) OFP Transition		1-2Q	1-2Q
(U) ALR-56M	1Q	1-2Q	1Q
(U) Weapons Integration	3Q	2Q	2Q
(U) AN/APG-68(V)10	1-4Q	1-2Q	2Q
(U) Mode S/5 IFF for CAF Aircraft		3Q	2Q
(U) EMD Hardware/MMC Development Development		1-2Q	1-2Q
(U) EGI/INS Development		1-2Q	1-2Q