

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207701F Full Combat Mission Training
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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	34.046	71.643	135.152	88.719	30.699	26.630	27.704	Continuing	TBD
4673 Distributed Mission Training (DMT)	26.882	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
5012 Full Combat Mission Training	7.164	71.643	135.152	88.719	30.699	26.630	27.704	Continuing	TBD

Beginning in FY 08 funding previously documented in BPAC 4673 is consolidated in BPAC 5012

(U) A. Mission Description and Budget Item Justification

Full Combat Mission Training supports Air Force Distributed Mission Operations (DMO). DMO is an operational readiness initiative enabling the USAF to exercise and train at the operational and strategic levels of war while facilitating unit-level training. Networked Live-Virtual-Constructive components form the integrated DMO battlespace by linking geographically distributed high fidelity combat and combat support training devices including Command and Control (C2) and Intelligence, Surveillance, and Reconnaissance (ISR) systems.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	32.243	87.096	99.380
(U) Current PBR/President's Budget	34.046	71.643	135.152
(U) Total Adjustments	1.803	-15.453	
(U) Congressional Program Reductions		-15.453	
Congressional Rescissions	-0.133		
Congressional Increases	2.900		
Reprogrammings	-0.964		
SBIR/STTR Transfer			

(U) Significant Program Changes:

FY08

- Decreased by Congressional programatic reduction (-\$15M for F-15/F-16 Simulator Integration Development)
- Decreased by Congressional General Reductions

FY09

- AF increase to comply with FY 07 NDAA limitation on use of service contracts. Language forced transfer of funds from Operations and Maintenance (O&M), AF to RDT&E, AF to acquire simulator training capability.

Exhibit R-2a, RDT&E Project Justification

DATE
February 2008

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)							PE NUMBER AND TITLE 0207701F Full Combat Mission Training		PROJECT NUMBER AND TITLE 4673 Distributed Mission Training (DMT)	
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	
4673 Distributed Mission Training (DMT)	26.882	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0			

Beginning in FY 08 funding previously documented in BPAC 4673 is consolidated in BPAC 5012

(U) A. Mission Description and Budget Item Justification

Air Force Distributed Mission Training (DMT). DMT provides the research and development to facilitate the integration of fielded and newly acquired, Air Force owned, aircraft training devices into Distributed Mission Operations (DMO) networks. Enhances the quality of training for the systems added to the network. Enables aircrews to network with Live-Virtual-Constructive components to form the integrated DMO battlespace. Links geographically distributed, high-fidelity combat and combat support training devices including Command and Control (C2) and Intelligence, Surveillance, and Reconnaissance (ISR) systems.. Allows the warfighters at home station to exercise and train at the operational and strategic levels of war as well as conduct networked unit-level training.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Study, research and develop solutions to multi-service standards, test asset implementation and platform specific multi-level security issues	6.464	0.000	0.000
(U) Research and development to provide for the DMO integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. Includes but is not limited to studies and development to provide for integration of Air Operation Center [AOC], A-10, B-1, B-2, B-52, Control and Reporting Center [CRC] F-22 F-35, E-8, EC-130, Joint Terminal Attack Controller [JTAC] and Joint Theater Air-Ground Simulation System [JTAGSS])	4.118	0.000	0.000
(U) Research and development to provide for the DMO integration of F-22 high-fidelity flight trainers.	16.300	0.000	0.000
(U) Total Cost	26.882	0.000	0.000

(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) N/A All "Other Program Funding" is reflected in BPAC 5012									

(U) D. Acquisition Strategy

Each platform joining the Distributed Mission Operations (DMO) environment selects its own acquisition strategy based on using command needs, business case considerations and the magnitude of the training system changes required to provide DMO capability. Fielded and newly acquired, Air Force owned Flight and Mission Training Systems will be modified to ensure compatibility with the DMO environment. Additional DMO capable trainers will be acquired for those systems where current quantities are inadequate to meet training requirements.

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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				
05 System Development and Demonstration (SDD)				0207701F Full Combat Mission Training				4673 Distributed Mission Training (DMT)				
<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 Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
677 AESG AFMC		677AEFG AFMC, Wright Patterson AFB, OH		10.582						Continuing	TBD	
478 AESW AFMC		478 AESW AFMC AFMC, Wright Patterson AFB, OH		16.300						Continuing	TBD	
Subtotal Product Development			0.000	26.882		0.000		0.000		Continuing	TBD	0.000
Remarks:												
(U) <u>Support</u>												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Test & Evaluation</u>												
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	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			0.000	26.882		0.000		0.000		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE

4673 Distributed Mission Training (DMT)

Exhibit R-4: BPAC 4673 Distributed Mission Training (Distributed Mission Operations)

Fiscal Year	FY 04				FY 05				FY 06				FY 07				FY 08				FY 09			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Study, research and develop solutions to multi-service standards, test asset implementation and platform specific multi-level security issues											▲	▶												
Research and development to provide for the DMO integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. Includes but is not limited to studies and development to provide for integration of AOC, A-10, B-1, B-2, B-52, CRC, F-22, F-35, E-8, EC-130, JTAC and JTAGSS											▲	▶												
Phase A F-22 DMO requirements definition/ systems											▶	▶	▶	▶										
Phase B: F-22 DMO Development / Test/Retrofit																								▶

▲ Studies/ Phase Initiated

△ Phase Scheduled

▲ IOC

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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2008
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207701F Full Combat Mission Training	PROJECT NUMBER AND TITLE 4673 Distributed Mission Training (DMT)
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	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <u>Schedule Profile</u>			
(U) Phase A: F-22 DMO requirements definition/systems	2Q		
(U) Phase B: F-22 DMO Development /Test/Retrofit	4Q		

Exhibit R-2a, RDT&E Project Justification

DATE
February 2008

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)				PE NUMBER AND TITLE 0207701F Full Combat Mission Training			PROJECT NUMBER AND TITLE 5012 Full Combat Mission Training			
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	
5012 Full Combat Mission Training	7.164	71.643	135.152	88.719	30.699	26.630	27.704	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0			

Beginning in FY 08 funding previously documented in BPAC 4673 is consolidated in BPAC 5012

(U) A. Mission Description and Budget Item Justification

Full Combat Mission Training (FCMT) supports Air Force Distributed Mission Operations (DMO). DMO is an operational readiness initiative enabling the USAF to exercise and train at the operational and strategic levels of war while facilitating unit-level training. FCMT provides research in areas benefiting the AF DMO environment as a whole. Provides development funding for DMO capable F-16 flight simulators to replace training capability currently provided by training simulation service contracts. Provides Mission Essential Competency studies and contract administration for new systems that support the initial CAF DMO capability. Provides research and development to facilitate integration of fielded and newly acquired, Air Force owned, aircraft training devices into DMO networks. Enhances the quality of training for the systems added to the network. Enables aircrews to network with Live-Virtual-Constructive components to form the integrated DMO battlespace. Links geographically distributed, high-fidelity combat and combat support training devices including Command and Control (C2) and Intelligence, Surveillance, and Reconnaissance (ISR) systems. Develops, demonstrates and inserts multi-level security capability. Allows the warfighters at home station to exercise and train at the operational and strategic levels of war as well as conduct networked unit-level training.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Development, demonstration and insertion of multi-level security capability	0.000	4.040	2.950
(U) Continue development, demonstration, studies and insertion of DMO related technologies and proficiency based continuation training strategies. Includes but is not limited to common databases, improved image generation fidelity, enhanced Brief/Debrief capabilities, Mission Essential Competencies and multi-level security	1.869	4.944	4.950
(U) Studies to assess and validate warfighter seasoning required/desired in continuation training and accreditation of portions of this experiencing process utilizing the Mission Essential Competencies (MECs) in the DMO environment	1.000	1.000	1.000
(U) Studies to Develop objective performance enhancement and measurement tools, for use in the DMO environment, which will be used for certification of a team and/or a team of teams' proficiency/currency	1.000	1.000	1.000
(U) Identify training and rehearsal gaps in DMO architecture based on current weapons system and operational tactics, training, procedures (TTPs), especially those essential to operational Kill Chain	1.000	1.000	1.000
(U) Research and development to provide for the DMO integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. Includes but is not limited to studies and development to provide for integration of Air Operation Center [AOC], A-10, B-1, B-2, B-52, Control and Reporting Center [CRC] F-22, F-35, E-8, EC-130, Joint Terminal Attack Controller [JTAC] and Joint Theater Air-Ground Simulation System [JTAGSS]	0.000	36.547	25.841
(U) Research for and development of DMO capable flight simulators to replace training capability currently provided by	0.000	18.783	92.704

Exhibit R-2a, RDT&E Project Justification

DATE

February 2008

BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207701F Full Combat Mission Training	PROJECT NUMBER AND TITLE 5012 Full Combat Mission Training
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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
training simulation service contracts. Includes but is not limited to the development of F-16 flight simulators			
(U) Program Office support	2.295	4.329	5.707
(U) Total Cost	7.164	71.643	135.152

(U) <u>C. Other Program Funding Summary (\$ in Millions)</u>	<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) PE 0207701, Full Combat Mission Training, Aircraft Procurement, AF	10.598	86.114	50.533	108.741	119.296	84.058	23.830	Continuing	TBD
(U) PE 0207701, Full Combat Mission Training, Other Procurement, AF	0.000	0.000	0.000	4.655	7.859	26.156	29.937	Continuing	TBD
(U) PE 0207701, Full Combat Mission Training, O & M, AF	197.340	175.415	146.734	163.384	167.231	172.602	208.142	Continuing	TBD

(U) **D. Acquisition Strategy**
 Each platform joining the Distributed Mission Operations (DMO) environment selects its own acquisition strategy based on using command needs, business case analysis (BCA) and the magnitude of the training system changes required to provide DMO capability. The pioneer systems in DMO including F-15C, AWACS, F-16 Block 40/50 and F-15E all required new training systems. In addition, the Operations and Integration capability had to be created. The Training Simulation Service (TSS) acquisition strategy was used to meet a portion of these requirements. In the TSS approach, the contractor owns and provides the simulator equipment, maintains simulator concurrency with weapons system, and has incentives to keep the equipment up to date with simulator and network technologies. The NDAA for FY 07 specifically limited the acquisition of military flight simulators with service contracts. As a result, training capability currently provided on the F-16 MTC will be replaced with training provided with procured flight simulators. The FY08 NDAA language may allow continued use of service approach on systems where it was already in use. Currently fielded and projected Air Force owned Flight and Mission Training Systems without DMO capability will be modified to ensure compatibility with the DMO environment. Additional DMO capable trainers will be acquired for those systems where current quantities are inadequate to meet training requirements.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2008

BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE				
05 System Development and Demonstration (SDD)				0207701F Full Combat Mission Training				5012 Full Combat Mission Training				
(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>												
677 AESG AFMC		677 AESG AFMC, Wright Patterson AFB, OH		1.869		22.514	Jan-08	120.075		Continuing	TBD	
478 AESW (F-22)		478 AESW AFMC, Wright Patterson AFB, OH		0.000		18.200				0.000	18.200	
507 MASSG (B-52)		507 MASSG, Hill AFB, UT		0.000		4.800	Jan-08	0.000		0.000	4.800	
677 AESG/TO (B-1 & B-2)		677 AESG/TQ AFMC, Wright Patterson AFB, OH		0.000		18.800	Jan-08	7.000		0.000	25.800	
Subtotal Product Development			0.000	1.869		64.314		127.075		Continuing	TBD	0.000
Remarks:	670 AESS funds reflected in BPAC 4673 through FY 07											
(U) <u>Support</u>												
- Air Force Research Lab Human Effectiveness Directorate		AFRL/HEA, Mesa, AZ		3.000		3.000		3.000		Continuing	TBD	
Subtotal Support			0.000	3.000		3.000		3.000		Continuing	TBD	0.000
Remarks:												
(U) <u>Test & Evaluation</u>												
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Management</u>												
Program Office Support		677 AESG AFMC, Wright Patterson AFB, OH		2.295		4.329		5.077		Continuing	TBD	
Subtotal Management			0.000	2.295		4.329		5.077		Continuing	TBD	0.000
Remarks:												
(U)												
Subtotal			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	7.164		71.643		135.152		Continuing	TBD	0.000

R-1 Line Item No. 90

Page-8 of 11

Exhibit R-3 (PE 0207701F)

Project 5012

Exhibit R-4, RDT&E Schedule Profile

DATE
February 2008

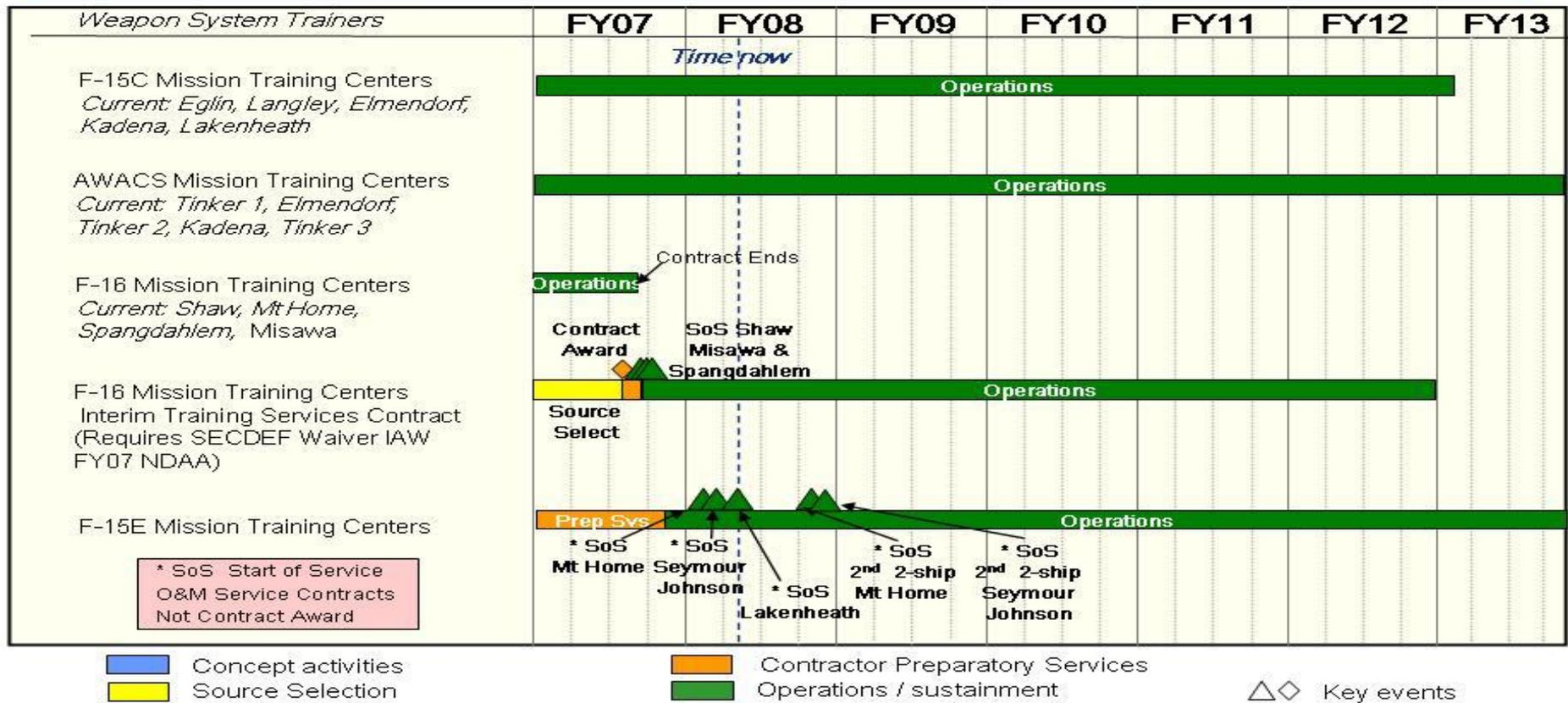
BUDGET ACTIVITY
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE
0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE
5012 Full Combat Mission Training



DMO CAF Schedule Training Service Contracts



FY08 Staffer Brief

Exhibit R-4, RDT&E Schedule Profile

DATE
February 2008

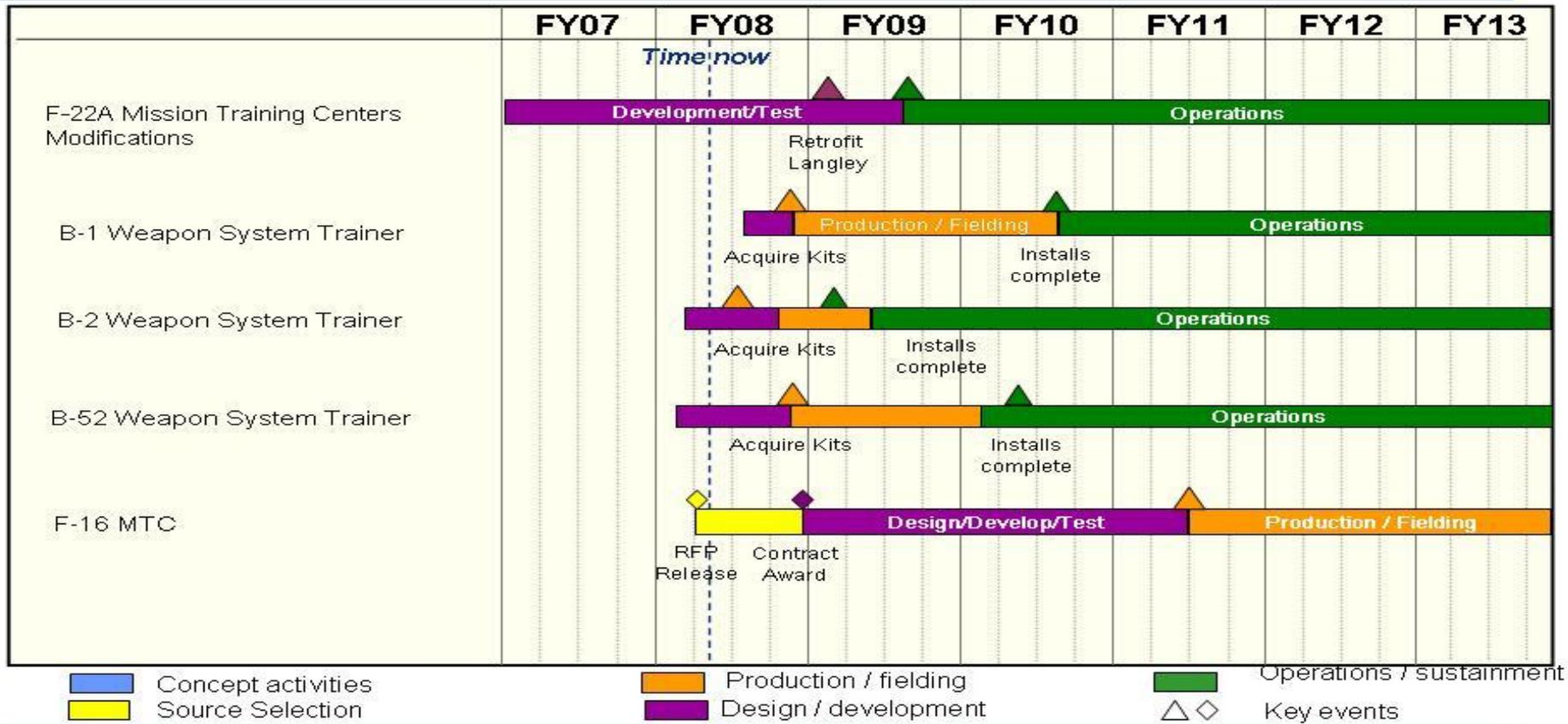
BUDGET ACTIVITY
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE
0207701F Full Combat Mission Training

PROJECT NUMBER AND TITLE
5012 Full Combat Mission Training



DMO
CAF Schedule
AF Owned Systems



FY08 Staffer Brief

2

UNCLASSIFIED

Exhibit R-4a, RDT&E Schedule Detail	DATE February 2008
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0207701F Full Combat Mission Training	PROJECT NUMBER AND TITLE 5012 Full Combat Mission Training
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(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) F-15E 2-ship operations begin: Mt Home	4Q		
(U) F-15E 2-ship operations begin: Seymour Johnson		1Q	
(U) F-15E 2-ship operations begin: Lakenheath		2Q	
(U) F-15E 2-ship operations (2nd) begin: Mt Home		4Q	
(U) F-22 Development			2Q
(U) F-22 Proof Kit: Langley			1Q
(U) B-1 Development begins		3Q	
(U) B-1 Mod kits acquired		4Q	
(U) B-2 Development begins		1Q	
(U) B-2 Mod kits acquired		4Q	
(U) B-2 Mod kits installed			1Q
(U) B-52 Development begins		1Q	
(U) B-52 Mod kits acquired		4Q	
(U) F-16 Procurement contract award/development begins		4Q	