Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force	**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	77.362	79.807	57.393	0.000	57.393	34.838	40.573	28.361	27.486	Continuing	Continuing
655012: *Full Combat Mission Training*	77.362	21.850	14.154	0.000	14.154	14.039	14.449	14.740	15.139	Continuing	Continuing
655354: *F-16 Block 40/50 MTC*	0.000	57.957	43.239	0.000	43.239	20.799	26.124	13.621	12.347	Continuing	Continuing

A. Mission Description and Budget Item Justification

Full Combat Mission Training supports Air Force Distributed Mission Operations (DMO) and Live-Virtual-Constructive (LVC) integration. 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 LVC 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. RDT&E for Full Combat Mission Training is funded in Budget Activity 5, System Development and Demonstration. BPAC 5012, FCMT, efforts are focused on development, demonstration, and transitioning of critical functions associated with the DMO/LVC network and linked simulators. BPAC 5354, F-16 Block 40/50 MTC, efforts are focused on development and demonstration of the F-16 Block 40/50 Mission Training Centers (MTC).

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	135.152	89.568	0.000	0.000	0.000
Current President's Budget	77.362	79.807	57.393	0.000	57.393
Total Adjustments	-57.790	-9.761	57.393	0.000	57.393
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-57.790	-9.761	57.393	0.000	57.393

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2011 Air Force	**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*

Change Summary Explanation

FY09:
Decreased by Air Force Reprogramming action for higher priorities

FY10:
Increased to fully fund F-16 trainer development and to integrate additional platforms and networks
Decreased by Congressional Program Reduction

FY11:
N/A

Exhibit R-2A, **RDT&E Project Justification:** PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
655012: *Full Combat Mission Training*	77.362	21.850	14.154	0.000	14.154	14.039	14.449	14.740	15.139	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Full Combat Mission Training (FCMT) supports Air Force Distributed Mission Operations (DMO) and Live-Virtual-Constructive (LVC) integration. 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. FY11 FCMT funding provides research in areas benefiting the AF DMO/LVC environment as a whole. Provides Mission Essential Competency studies and contract administration for new systems that support the initial Combat Air Forces (CAF) DMO/LVC capability. Provides research and development to facilitate integration of fielded and newly acquired, Air Force owned, aircraft training devices into DMO/LVC networks. Enhances the quality of training for the systems added to the network. Enables aircrews to network with LVC 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.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Development, demonstration and insertion of multi-level security capability.	2.950	3.785	1.872	0.000	1.872
FY 2009 Accomplishments: In FY 2009: Cross Domain Solution (CDS) for F-16 MTC *FY 2010 Plans:* In FY 2010: CDS for F-15E *FY 2011 Base Plans:* In FY 2011: Continue CDS for F-15E					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: Continue development, demonstration, studies and insertion of DMO/LVC related technologies and proficiency based continuation training strategies. *FY 2009 Accomplishments:* In FY 2009: Includes, but is not limited to, common databases, improved image generation fidelity, enhanced Brief/Debrief capabilities, Mission Essential Competencies and multi-level security. Continue network re-architecture initiative *FY 2010 Plans:* In FY 2010: Continue network re-architecture initiative *FY 2011 Base Plans:* In FY 2011: Continue network re-architecture initiative *FY 2011 OCO Plans:* In FY 2011 OCO: N/A	4.950	6.943	5.592	0.000	5.592
MAJOR THRUST: Studies to assess and validate warfighter seasoning required in continuation training and accreditation of portions of this experiencing process. *FY 2009 Accomplishments:* In FY 2009: Process utilizes the Mission Essential Competencies (MECs) in the Distributed Mission Operations (DMO)/Live, Virtual, Constructive (LVC) training and rehearsal environment. Completed development and field test of competency-based scenarios with F-15C mission training center at Eglin AFB; Validated methods to use MEC products for assessing live and virtual training environment fidelity; Developed methods to permit competency-based fidelity assessments to be used as part of a training environment certification process; Started development of multirole competency-based	1.000	1.000	1.022	0.000	1.022

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
training scenarios; Started definition of MEC products for remotely piloted aircraft and mission areas associated with Global Hawk, Predator, and Reaper. *FY 2010 Plans:* In FY 2010: Refine methodology for linking knowledge, skills, and experiences to gaps and to training opportunities; completion of F-22 and F-15C MEC data and results; start F-15E and F-16 multirole MEC, and Joint Terminal Attack Control (JTAC) Close Air Support (CAS) MEC refresher; Complete definition and gap analyses for remotely piloted aircraft and mission areas; Develop competency-based scenarios for remotely piloted aircraft; Develop scenarios and syllabi for close air support live and virtual training. *FY 2011 Base Plans:* In FY 2011: Complete F-15E and F-16 multirole process and results. Complete JTAC CAS MEC refresher; Refine development of MEC process for schoolhouse tactical training using A-10 and F-22 mission areas and schoolhouses as initial domains; Refine development of methods to link schoolhouse initial competency sets and MEC ops definitions and data; Validate distributed close air support distributed mission training using competency-based methods in live and virtual environments. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
MAJOR THRUST: Studies to develop objective performance enhancement and measurement tools, for use in the DMO/LVC environment. *FY 2009 Accomplishments:* In FY 2009: Completed development of visualization tools for reporting and summarizing individual and team performance and readiness data; Developed methods for team assessment in Air and Space Operations Centers; Started development of a common user interface for linking data from live and virtual environments together; Demonstrated performance data analysis visualization for actual	1.000	1.000	1.022	0.000	1.022

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
aircraft, instrumented range, and virtual simulation data; Completed initial evaluation of performance measurement in routine ops applications; Developed metrics to support Boeing Project Alpine LVC integration events; Started development of methods for rapidly authoring metrics and readiness measures for customized assessments in ops squadrons; Started development of cross mission metrics and measures to support USAF Nellis LVC field evaluation. *FY 2010 Plans:* In FY 2010: Develop and integrate metrics and measurement reporting method for F-15C and F-22 performance measurement. Develop and refine data displays and visualization for air combat assessment. Complete development of authoring tools to permit ops definition of metrics and measures. Begin development of methods to routinely track and certify readiness and performance across live and virtual systems and events for operational squadrons; Demonstrate persistent performance measurement in F-15C and F-22 mission training centers; Demonstrate cross mission LVC performance assessment; Conduct field evaluation of persistent performance measurement at Aviano AB, IT . *FY 2011 Base Plans:* In FY 2011:Validate air-to-air and air-to-ground performance measures and visualization tools; Complete field evaluations of persistent readiness assessment in F-15C, F-16, and F-22 live and virtual contexts; Demonstrate integrated Close Air Support common metrics for ground controllers and air platforms; Validate metrics and visualization tools for remotely piloted aircraft readiness assessment ; Complete validation of authoring tools to rapidly develop metrics for ops unit assessments and certification. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
MAJOR THRUST: Studies to identify training and rehearsal gaps in DMO/LVC architecture based on current weapons system and operational tactics, training, procedures (TTPs).	1.000	1.000	1.022	0.000	1.022

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009: Completed field evaluation of competency-based training and integration of performance measurement methods in commercial mission training center virtual environment; Completed CSAF-requested field study to evaluate alternative mixes of live and virtual training across tactical and ISR aircraft and mission areas; Developed methodology to routinely track impacts associated with changes to the mix of live and virtual training in ops; Completed skill-decay study evaluating alternative ops strategies for reducing tactical combats skill decay in the absence of practice; Completed initial fidelity study of full-fidelity and less-than full fidelity virtual environments; started design of field evaluation study for Nellis LVC operational demonstration; Started design of four field studies to evaluate the impact of alternate mixes of live and virtual training in ops squadrons. *FY 2010 Plans:* In FY 2010: Start Nellis LVC field study; implement study designs for alternate mixes of live and virtual training with F-15C and F-22 ops units; Develop LVC field evaluation design for integrated USAF and RAAF coalition mission training; Complete distributed mission training study with Joint Terminal Attack and Control (JTAC) and remotely piloted aircraft virtual training; Complete initial ops evaluation of less-than-full-fidelity virtual training at Aviano AB, IT; Develop evaluation study design for integrated air combat and command and control LVC training. *FY 2011 Base Plans:* In FY 2011: Complete initial USAF and RAAF coalition mission training evaluation; Conduct field evaluation of integrated performance measurement and sortie tracking methods for ops readiness certification; Conduct additional studies of alternate mixes of live and virtual training with F-15E and F-16 ops squadrons; Complete second skill decay study evaluating impacts of different mixes of live and virtual training on combat skill retention and decay; Complete initial evaluation of Nellis LVC operational assessment. Integrate data into next spiral of Nellis LVC operational assessment; Demonstrate common aircraft, range, and virtual environment performance measurement and tracking in Nellis LVC ops assessment.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: Research and development to provide for the integration of fielded and newly introduced, Air Force high-fidelity flight and mission trainers. *FY 2009 Accomplishments:* In FY 2009: Includes but is not limited to studies, demonstrations 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 Control Training and Rehearsal (JTCTR), Joint Theater Air-Ground Simulation System (JTAGSS), CSAR-X, HC-130, MQ-1 and MQ-9.---Connected two A-10, one RC-135, one F-22 and the USAFE Warrior Prep Center *FY 2010 Plans:* In FY 2010: Study and demonstrate DMO network conversion to the GIG *FY 2011 Base Plans:* In FY 2011: Continue study and demonstration of the DMO network conversion to the GIG *FY 2011 OCO Plans:* In FY 2011 OCO: N/A	25.841	3.167	1.968	0.000	1.968
MAJOR THRUST: Research for and development of DMO capable flight simulators to replace training capability currently provided by training simulation service contracts. Includes but is not limited ... *FY 2009 Accomplishments:* In FY 2009: Begin development of F-16 flight simulators *FY 2010 Plans:* In FY 2010: N/A	34.914	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: N/A *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
MAJOR THRUST: Program Office support *FY 2009 Accomplishments:* In FY 2009: Program Office support *FY 2010 Plans:* In FY 2010: Program Office support *FY 2011 Base Plans:* In FY 2011: Program Office support *FY 2011 OCO Plans:* In FY 2011 OCO: N/A	5.707	4.955	1.656	0.000	1.656
Accomplishments/Planned Programs Subtotals	77.362	21.850	14.154	0.000	14.154

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0207701F: *Full Combat Mission Training, Aircraft Procurement, AF*	40.703	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	143.942	189.518	212.588	0.000	212.588	194.324	244.178	272.178	271.396	0.000	0.000

Exhibit R-2A, **RDT&E Project Justification:** PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0207701F (1): *Full Combat Mission Training, O & M, AF*											

D. Acquisition Strategy

Each platform joining the Distributed Mission Operations (DMO)/ Live-Virtual-Constructive (LVC) 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 initial systems in the DMO/ LVC environment; 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 weapon systems, and has incentives to keep the equipment up to date with simulator and network technologies. The FY07 NDAA specifically limited the Air Force's ability to acquire military flight simulators with service contracts. As a result, training capability currently provided on the F-16 MTC is being replaced under a separate program with training provided with procured flight simulators. (Acquisition of the F-16 Block 40/50 MTCs is detailed under the 655354 BPAC in this document.) The FY08 NDAA language allows continued use of the service contract approach on systems where it was already in use. Currently fielded and projected Air Force-owned Flight and Mission Training Systems without DMO/LVC capability will be modified using FCMT funds to ensure compatibility with the DMO/LVC environment. Additional DMO capable trainers will be acquired for those systems where current quantities are inadequate to meet training requirements using FCMT funds.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
677 AESG AFMC	C/Various	677 AESG AFMC Wright Patterson AFB, OH	111.210	9.102		8.832		0.000		8.832	Continuing	Continuing	0.000
478 AESW (F-22)	SS/CPIF	478 AESW AFMC Wright Patterson AFB, OH	69.300	0.200		0.200		0.000		0.200	0.000	69.700	0.000
507 MASSG (B-52)	SS/FFP	507 MASSG Hill AFB, UT	4.800	0.200		0.200		0.000		0.200	0.000	5.200	0.000
677 AESG/SYCB (B-1, B-2 & Joint Terminal Control Training and Rehearsal System [JTC TRS]))	SS/CPIF	677 AESG/SYCB AFMC Wright Patterson AFB, OH	22.800	4.393		0.200		0.000		0.200	0.000	27.393	0.000
		Subtotal	208.110	13.895		9.432		0.000		9.432			0.000

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
- Air Force Research Lab Human Effectiveness Directorate	C/CPFF	AFRL/HEA Mesa, AZ	14.402	3.000		3.066		0.000		3.066	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
		Subtotal	14.402	3.000		3.066		0.000		3.066			0.000

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
No text provided	TBD/TBD	No text provided No text provided	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
		Subtotal	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Program Office Support	C/Various	677 AESG AFMC	25.077	4.955		1.656		0.000		1.656	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
		Wright Patterson AFB, OH											
		Subtotal	25.077	4.955		1.656		0.000		1.656			0.000

Remarks

	Total Prior Years Cost	**FY 2010**		**FY 2011 Base**		**FY 2011 OCO**		**FY 2011 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals	247.589	21.850		14.154		0.000		14.154			0.000

Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

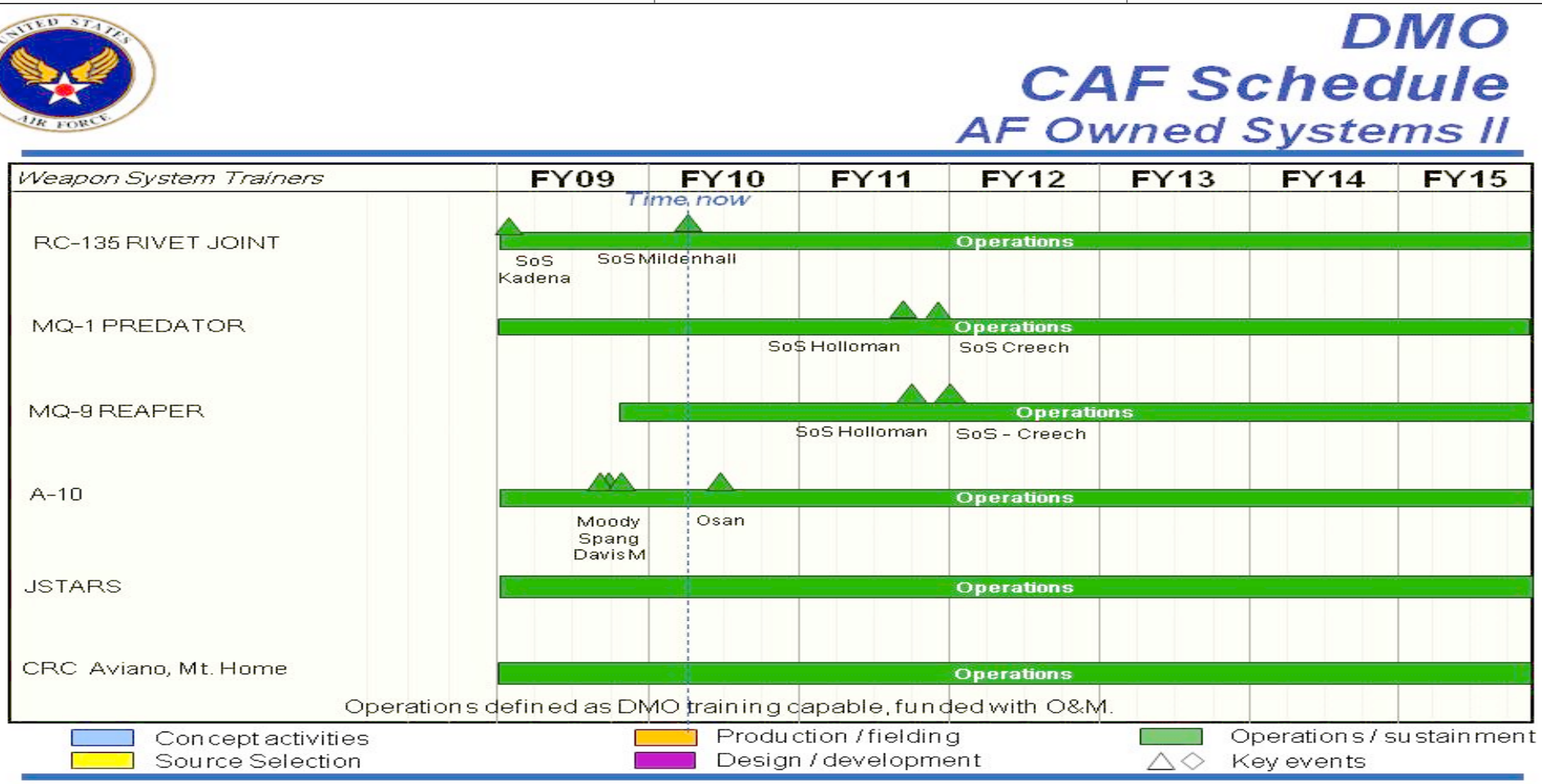

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

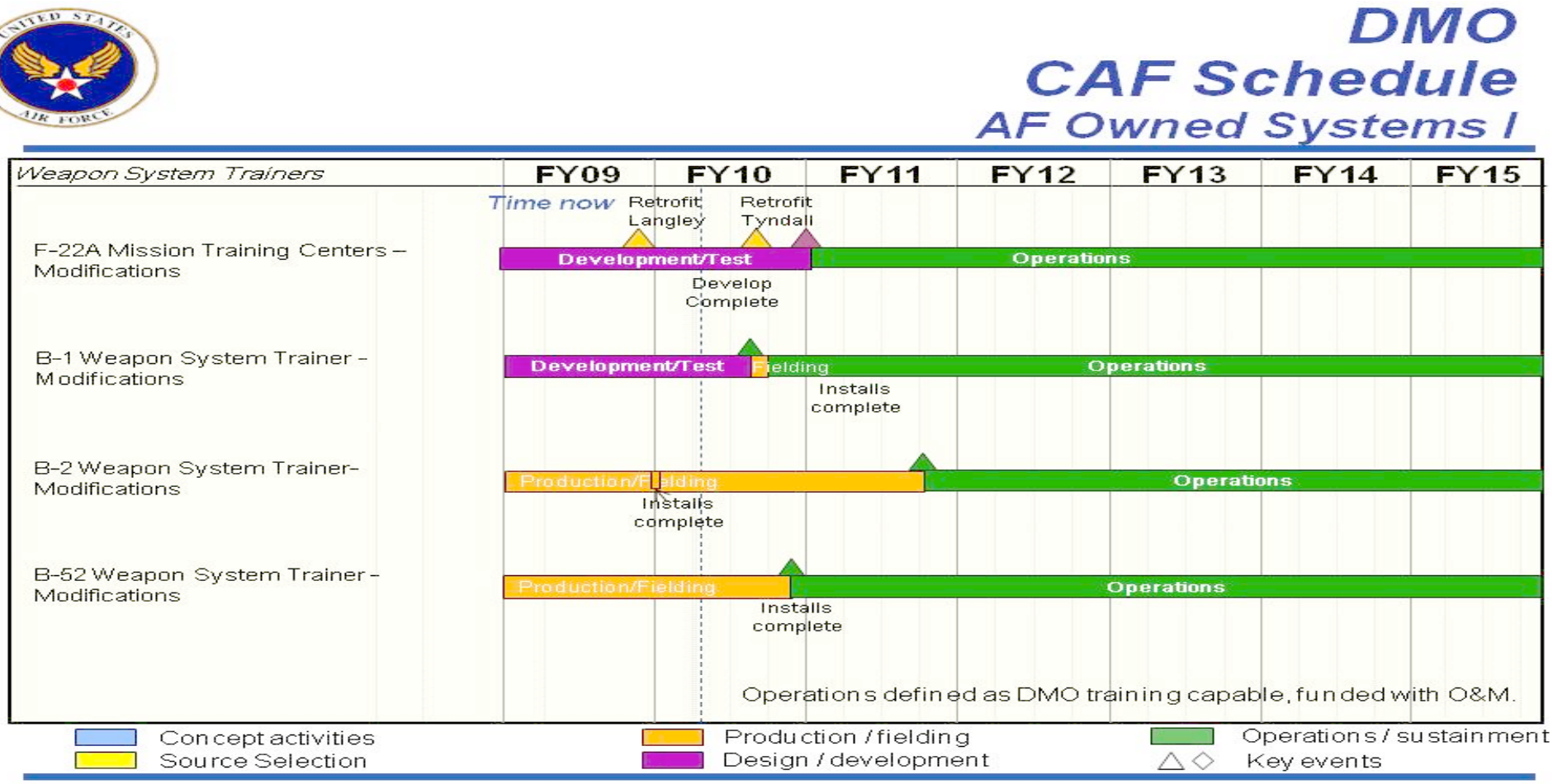

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

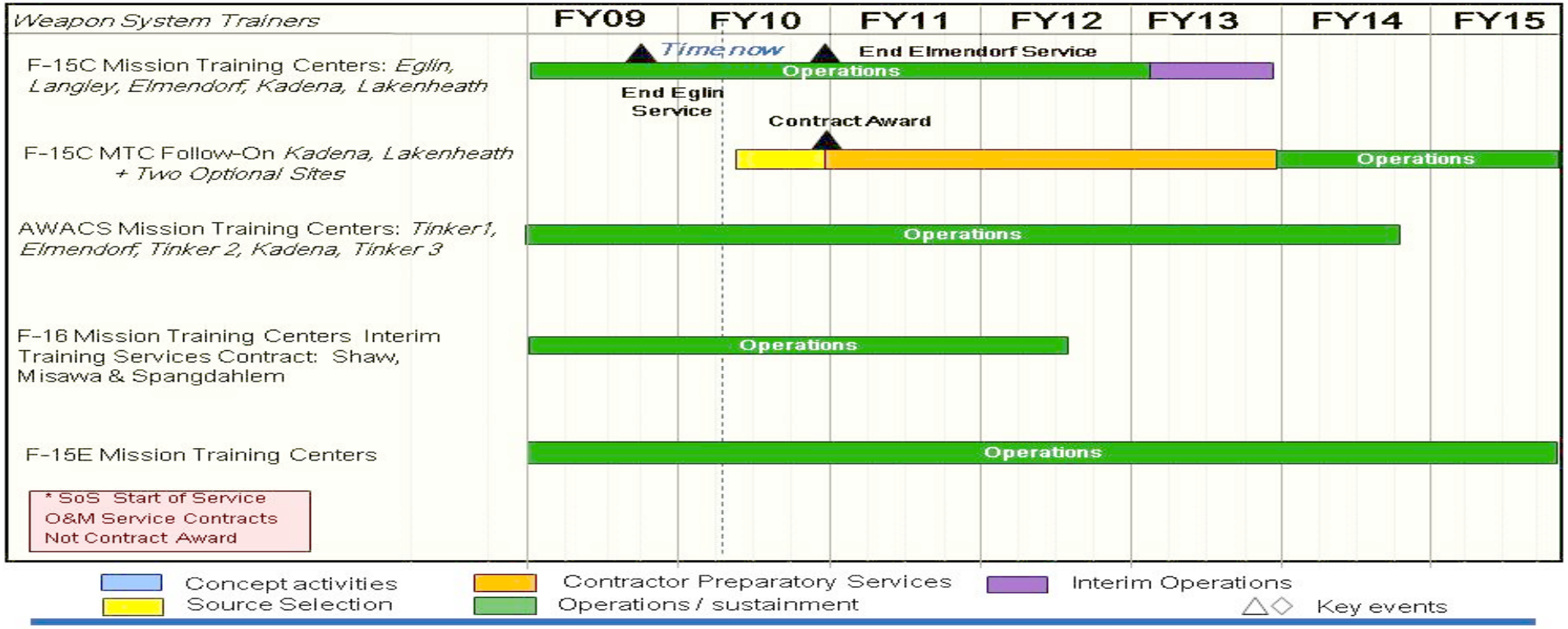

Exhibit R-4A, **RDT&E Schedule Details:** PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655012: *Full Combat Mission Training*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
F-22 DMO Development Complete	4	2010	4	2010
F-22 Retrofit: Langley	4	2009	4	2009
F-22 Retrofit: Tyndall	3	2010	3	2010
B-1 Mod kits installed	3	2010	3	2010
B-2 Mod kits installed	4	2009	4	2009
B-2 Operations begin	4	2011	4	2011
B-52 Mod kits installed	4	2010	4	2010

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force											DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0207701F: *Full Combat Mission Training*				PROJECT 655354: *F-16 Block 40/50 MTC*			
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
655354: *F-16 Block 40/50 MTC*	0.000	57.957	43.239	0.000	43.239	20.799	26.124	13.621	12.347	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

FY08 and FY09 funding contained in BPAC 655012. Separate BPAC, 655354, F-16 Block 40/50 MTC was established as a separate program on the Non-Space programs list.

A. Mission Description and Budget Item Justification

F-16 Block 40/50 Mission Training Center (MTC) supports the development, acquisition, fielding and sustainment of high fidelity, Distributed Mission Operations (DMO) capable flight simulators for F-16 Block 40 and 50 weapon systems. Each MTC includes multiple high fidelity Simulator Cockpits, Instructor Operator Stations, a Threat Server and Brief/Debrief and Mission Observation capability. Each is capable of linking to 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.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Major Thrust: Research and development of DMO capable flight simulators to replace training capability which has been provided by training simulation service contracts. *FY 2009 Accomplishments:* In FY 2009: N/A *FY 2010 Plans:* In FY 2010: F-16 MTC Training System Support Center development. Includes, but is not limited to, the development and support of F-16 flight simulators.	0.000	56.564	41.239	0.000	41.239

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655354: *F-16 Block 40/50 MTC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: Continue F-16 MTC development, test and fielding *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
Major Thrust: Program Office support *FY 2009 Accomplishments:* In FY2009: N/A *FY 2010 Plans:* In FY2010: Program office support *FY 2011 Base Plans:* In FY2011: Program office support *FY 2011 OCO Plans:* In FY2011 OCO: N/A	0.000	1.393	2.000	0.000	2.000
Accomplishments/Planned Programs Subtotals	0.000	57.957	43.239	0.000	43.239

Exhibit R-2A, **RDT&E Project Justification:** PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655354: *F-16 Block 40/50 MTC*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0207701F: *F-16 Block 40/50 MTC; Aircraft Procurement, AF*	0.000	51.814	53.953	0.000	53.953	49.358	6.561	1.774	1.811	0.000	0.000

D. Acquisition Strategy

F-16 Block 40/50 MTCs are being developed and fielded under a competitively awarded FAR Part 15 Supply contract with RDT&E and APAF funds. The MTCs will be sustained by CLS using Operations and Maintenance funds.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655354: *F-16 Block 40/50 MTC*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
L3 Comm	C/Various	LINK SIMULATION & TRAINING Arlington,TX	0.000	56.564		41.239		0.000		41.239	Continuing	Continuing	0.000
		Subtotal	0.000	56.564		41.239		0.000		41.239			0.000

Remarks

FY 08 & FY09 Funding contained in BPAC 655012.

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Program Office Support	TBD/TBD	677 AESG AFMC Wright Patterson AFB, OH	0.000	1.393		2.000		0.000		2.000	Continuing	Continuing	0.000
		Subtotal	0.000	1.393		2.000		0.000		2.000			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655354: *F-16 Block 40/50 MTC*

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	57.957		43.239		0.000		43.239			0.000

Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655354: *F-16 Block 40/50 MTC*

F-16 Block 40/50 MTC Schedule

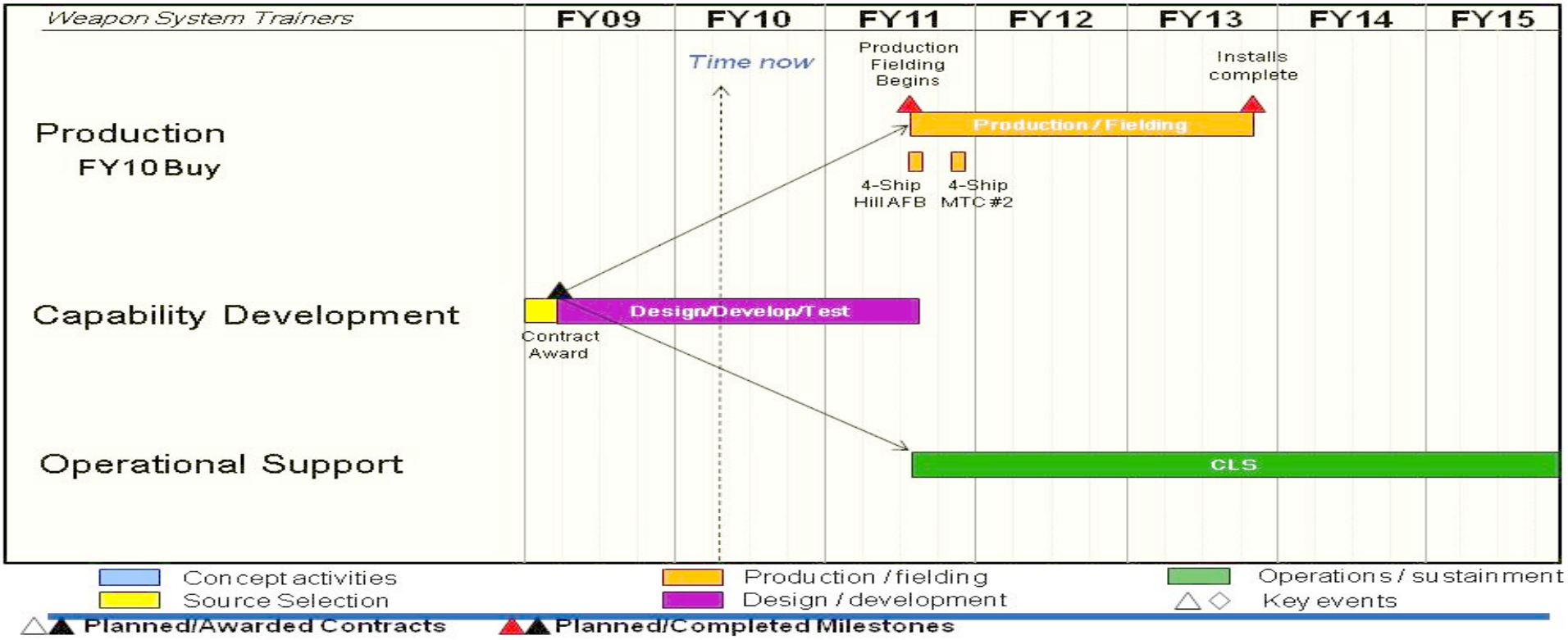

Exhibit R-4A, **RDT&E Schedule Details:** PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0207701F: *Full Combat Mission Training*	**PROJECT** 655354: *F-16 Block 40/50 MTC*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
F-16 Mission Training Center Recompete Contract Award	1	2009	1	2009
Hill AFB UT Fielded	3	2011	3	2011
F-16 MTC #2 Fielded	4	2011	4	2011