

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0207701F I Full Combat Mission Training							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	8.427	1.015	9.797	0.000	9.797	9.846	7.010	7.138	7.266	Continuing	Continuing
655012: Full Combat Mission Training	-	0.000	1.015	9.797	0.000	9.797	9.846	7.010	7.138	7.266	Continuing	Continuing
655354: F-16 Block 40/50 MTC	-	8.427	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.427

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. FCMT funding provides research in areas benefiting the AF DMO/LVC environment as a whole. Provides research and development to facilitate integration of fielded and newly acquired, Air Force owned 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 and Intelligence, Surveillance, and Reconnaissance systems. Develops, demonstrates and inserts multi-level security capability. This 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.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Full Combat Mission Training capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.

In FY 2019, PE 0207701F, Full Combat Mission Training, Project 655354, F-16 Block (Blk) 40/50 Mission Training Center (MTC) efforts were transferred to PE 0207133F, F-16, Project 672671, F-16 Blk 40/50 MTC, in order to transfer programmatic responsibilities and funding to the F-16 weapon system team.

As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full rate production.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force				Date: February 2019	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)		PE 0207701F I Full Combat Mission Training			
B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	16.727	1.015	9.797	0.000	9.797
Current President's Budget	8.427	1.015	9.797	0.000	9.797
Total Adjustments	-8.300	0.000	0.000	0.000	0.000
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	-8.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.300	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000
Change Summary Explanation					
FY18:					
-\$8.000M for forward financing					
-\$0.300M for SBIR Transfer					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training				Project (Number/Name) 655012 / Full Combat Mission Training			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
655012: Full Combat Mission Training	-	0.000	1.015	9.797	0.000	9.797	9.846	7.010	7.138	7.266	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
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. FCMT funding provides research in areas benefiting the AF DMO/LVC environment as a whole. Provides research and development to facilitate integration of fielded and newly acquired, Air Force owned 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 and Intelligence, Surveillance, and Reconnaissance systems. Develops, demonstrates and inserts multi-level security capability. This 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 Programs (\$ in Millions)									FY 2018	FY 2019	FY 2020	
Title: FCMT Cross Domain Solutions (CDS)									0.000	0.286	1.714	
Description: Development, demonstration, and insertion of multi-level security (MLS) capability.												
FY 2019 Plans:												
- Continue accreditation for coalition rule sets												
- Complete fourth to fifth generation MLS rule development for routine Live, Virtual and Constructive (LVC) environment integration												
- Develop updates for cross domain rule sets												
FY 2020 Plans:												
- Continue accreditation for coalition rule sets												
- Continue fourth to fifth generation MLS rule development for routine LVC environment integration												
- Develop updates for cross domain rule sets												
- Validate CDS at upgraded classification/program levels with local Air Force Research Laboratory space boundary												
FY 2019 to FY 2020 Increase/Decrease Statement:												
FY 2020 increase due to advancements in integrating CDS rule sets into 4th Gen LVC demonstration. Further risk mitigation work required for 5th Gen integration and classification levels.												
Title: FCMT Develop DMO Capabilities									0.000	0.223	4.594	

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019		
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training	Project (Number/Name) 655012 / Full Combat Mission Training		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
<p>Description: Development, demonstrations, studies and insertions of DMO/LVC related technologies and proficiency based continuation training strategies.</p> <p>FY 2019 Plans:</p> <ul style="list-style-type: none">- Complete validation of training environment credibility assessments for an identified set of ACC Virtual and Constructive environments.- Continue to develop metrics and tools to measure training proficiency gained during LVC events- Conclude demonstration of persistent performance measurement and readiness assessment in fourth to fifth LVC training events. <p>FY 2020 Plans:</p> <ul style="list-style-type: none">- Continue validation and accreditation of integrated scenarios and syllabi across DMO environments at a high fidelity to demonstrate persistent performance measurement and readiness assessment in 4th to 5th generation LVC events, and evaluate integration of different data management and tracking methods to support large scale, secure and persistent Joint and Coalition LVC events- Validate MTC code upgrades in testbeds with operators- Bring advanced research training testbeds up to higher classification levels to commence full on fighter integration (F-16, F-22, and F-35) and accomplish accreditations at higher classification and program levels- Develop joint and collation data standards and evaluate data management methods to support LVC events <p>FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 increase to further develop validation and accreditation of integrated scenarios and syllabi across DMO environments and validate MTC code upgrades in research testbeds.</p>				
<p>Title: FCMT Validation of warfighter seasoning and development of objective performance enhancements</p> <p>Description: Studies to assess and validate warfighter seasoning in continuation training and accreditation of portions of this process; studies to develop objective enhancement and measurement tools for the DMO/LVC environment.</p> <p>FY 2019 Plans:</p> <ul style="list-style-type: none">- Continue research and development for the integration of F-35, Joint and Coalition Trainers into the Combat Air Forces (CAF) Distributed Mission Operations (DMO) network- Develop common Joint and Coalition data standards for secure, interoperable training at joint and coalition levels of analysis- Conclude evaluation of the integration of different data management and tracking methods to support large scale, secure and persistent Joint and Coalition LVC events		0.000	0.253	2.104

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 0207701F / <i>Full Combat Mission Training</i>		Project (Number/Name) 655012 / <i>Full Combat Mission Training</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2018	FY 2019	FY 2020
<p>- Begin demonstrations of persistent performance measurement and readiness assessment in fourth to fifth generation LVC events</p> <p>FY 2020 Plans:</p> <ul style="list-style-type: none"> - Continue research and development for the integration of F-35, Joint and Coalition Trainers into the CAF DMO network - Continue interoperability studies to evaluate the training value of fifth generation interoperable coalition training on the CAF DMO network - Continue the validation of rule sets for the LVC environment and evaluate network architectures and typologies for distributed secure LVC events out across joint and coalition players - Continue to develop metrics and tools to measure training proficiency gained during LVC events <p>FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 increase will further refine and development integration standards for 5th Gen, joint service, and coalition Trainers into the CAF DMO network</p>					
<p>Title: FCMT Other Network Studies</p> <p>Description: Research and development to provide for the integration of fielded and newly introduced, Air Force, Joint and Coalition high-fidelity flight and mission trainers.</p> <p>FY 2019 Plans:</p> <ul style="list-style-type: none"> - Continue research and development for the integration of F-35, Joint and Coalition Trainers into the CAF DMO network - Continue interoperability studies to evaluate the training value of fifth generation interoperable coalition training on the CAF DMO network - Develop common Joint and Coalition data standards for secure, interoperable training at joint and coalition levels of analysis - Conclude evaluation of the integration of different data management and tracking methods to support large scale, secure and persistent Joint and Coalition live, virtual, constructive events - Begin demonstrations of persistent performance measurement and readiness assessment in fourth to fifth generation LVC events - Develop gateways and CDS to integrate high-fidelity trainers with Air Force, joint, and coalition networks <p>FY 2020 Plans:</p> <ul style="list-style-type: none"> - Demonstrate integration of F-35, Joint and Coalition Trainers into the CAF DMO network - Conclude interoperability studies to evaluate the training value of fifth generation interoperable coalition training on the CAF DMO network - Continue development of common Joint and Coalition data standards for secure, interoperable training at joint and coalition levels of analysis 			0.000	0.253	1.385

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019	
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0207701F / <i>Full Combat Mission Training</i>	Project (Number/Name) 655012 / <i>Full Combat Mission Training</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
<ul style="list-style-type: none"> - Continue demonstrations of persistent performance measurement and readiness assessment in fourth to fifth generation LVC events - Continue development of gateways and CDS to integrate high-fidelity trainers with Air Force, joint, and coalition networks 			
FY 2019 to FY 2020 Increase/Decrease Statement:			
FY 2020 increase will further research and development in conducting interoperability studies for 5th gen systems, develop secure data standards, and integrate the F-35, joint, and coalition partners into the DMO network.			
Accomplishments/Planned Programs Subtotals		0.000	1.015
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
Each platform joining the DMO/LVC environment selects its own acquisition strategy based on Using Command needs, Economic Analysis, and the magnitude of the training system changes required to provide DMO capability. The initial systems in the DMO/LVC environment; F-15C/E, Airborne Warning and Control System, and F-16 Block 40/50, all required new training systems. Additionally, the Operations and Integration capability was 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. 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. To accomplish this, the Air Force Research Laboratory will conduct research/studies to Develop/implement CDS, develop DMO capabilities, validate warfighter seasoning, develop objective performance enhancements, and conduct other network studies.			
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.			

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 5						R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training						Project (Number/Name) 655012 / Full Combat Mission Training			
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
FCMT Cross Domain Solutions (CDS): Development, Testing and insertion of Multi-level-security protocols, Cross Domain rule set development and accreditation	Various	Air Force Research Lab, 711 Human Performance Wing, Human : Dayton, OH	-	0.000	Jan 2018	0.285	Jan 2019	1.714	Jan 2020	-		1.714	Continuing	Continuing	-
FCMT Develop DMO Capabilities: demonstration, studies and insertion of distributed mission ops related technologies and proficiency based continuation training	Various	Air Force Research Lab, 711 Human Performance Wing : Dayton, OH	-	0.000	Jan 2018	0.223	Jan 2019	4.594	Jan 2020	-		4.594	Continuing	Continuing	-
FCMT Validation of warfighter seasoning and development of objective performance enhancements for DMO/ LVC environment	Various	Air Force Research Lab, 711 Human Performance Wing : Dayton, OH	-	0.000	Jan 2018	0.254	Jan 2019	2.104	Jan 2020	-		2.104	Continuing	Continuing	-
FCMT Other Network Studies: Research and Development to support integration of newly fielded high-fidelity training systems and networks	Various	Air Force Research Lab, 711 Human Performance Wing : Dayton, OH	-	0.000	Jan 2018	0.253	Jan 2019	1.385	Jan 2020	-		1.385	Continuing	Continuing	-
Subtotal			-	0.000		1.015		9.797		-		9.797	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	0.000		1.015		9.797		-		9.797	Continuing	Continuing	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force

Date: February 2019

Appropriation/Budget Activity

3600 / 5

R-1 Program Element (Number/Name)

PE 0207701F / Full Combat Mission Training

Project (Number/Name)

655012 / Full Combat Mission Training

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Full Combat Mission Training																												
Develop Multi-Level Security testbed and support testing on 5th Gen systems																												
Develop 4th to 5th generation rule sets for coalition integration																												
Evaluate and assess commercial and government off-the-shelf cross domain solution devices																												
Perform accreditation for cross domain solution rule sets																												
Develop rule sets for routine LVC environment integration																												
Continue to develop CDS rule sets																												
Integrate scenarios and syllabi across DMO environments																												
Develop metrics for routine proficiency evaluations and determine standard format for storing/analyzing proficiency data																												
Create and evaluate alternative data formats for routinely tracking and storing performance and proficiency data																												
Refine learning managed scenario and integrate with live, virtual, constructive events																												
Validate training environment credibility assessments for an identified set of Air Combat Command Virtual and Constructive Environments																												

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force																								Date: February 2019													
Appropriation/Budget Activity										R-1 Program Element (Number/Name)										Project (Number/Name)																	
3600 / 5										PE 0207701F / Full Combat Mission Training										655012 / Full Combat Mission Training																	
										FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Develop and integrate After Action Review tools for Mission Training Centers																																					
Develop metrics and tools to measure training proficiency gained during LVC events																																					
Integrate 5th generation systems into DMO network																																					
Conduct interoperability studies to evaluate the training value of fifth generation interoperable coalition training on the CAF DMO network																																					
Develop joint and coalition data standards and evaluate data management methods to support live, virtual, and constructive events																																					
Evaluation of the integration of different data management and tracking methods to support large scale, secure and persistent Joint and Coalition LVC events.																																					
Demonstrate persistent performance measurement and readiness assessment in fourth to fifth generation LVC events																																					
Evaluate network architectures and typologies for distributed secure LVC events																																					
Develop gateways and cross domain solutions to integrate high-fidelity trainers with Air Force, joint, and coalition networks																																					
Evaluate compressed DIS network standards for CDS in DMO																																					
Integrate and evaluate multi-domain operations and kill-chain training scenarios for contested environments																																					

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force																								Date: February 2019													
Appropriation/Budget Activity 3600 / 5										R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training										Project (Number/Name) 655012 / Full Combat Mission Training																	
										FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Evaluate multi-national mission planning and debrief technologies in research training events																																					
Implement, evaluate, and field technologies aligned with future training strategies for LVC																																					

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0207701F / <i>Full Combat Mission Training</i>	Project (Number/Name) 655012 / <i>Full Combat Mission Training</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Full Combat Mission Training</i>				
Develop Multi-Level Security testbed and support testing on 5th Gen systems	1	2018	4	2018
Develop 4th to 5th generation rule sets for coalition integration	1	2018	4	2020
Evaluate and assess commercial and government off-the-shelf cross domain solution devices	1	2018	2	2018
Perform accreditation for cross domain solution rule sets	3	2018	3	2021
Develop rule sets for routine LVC environment integration	4	2018	3	2021
Continue to develop CDS rule sets	1	2018	1	2020
Integrate scenarios and syllabi across DMO environments	1	2018	1	2019
Develop metrics for routine proficiency evaluations and determine standard format for storing/analyzing proficiency data	1	2018	2	2018
Create and evaluate alternative data formats for routinely tracking and storing performance and proficiency data	1	2018	1	2021
Refine learning managed scenario and integrate with live, virtual, constructive events	3	2018	4	2023
Validate training environment credibility assessments for an identified set of Air Combat Command Virtual and Constructive Environments	1	2018	1	2019
Develop and integrate After Action Review tools for Mission Training Centers	1	2018	4	2018
Develop metrics and tools to measure training proficiency gained during LVC events	3	2018	4	2022
Integrate 5th generation systems into DMO network	1	2018	3	2020
Conduct interoperability studies to evaluate the training value of fifth generation interoperable coalition training on the CAF DMO network	1	2018	3	2021
Develop joint and coalition data standards and evaluate data management methods to support live, virtual, and constructive events	1	2019	2	2023

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training		Project (Number/Name) 655012 / Full Combat Mission Training	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Evaluation of the integration of different data management and tracking methods to support large scale, secure and persistent Joint and Coalition LVC events.		2	2018	3	2020
Demonstrate persistent performance measurement and readiness assessment in fourth to fifth generation LVC events		4	2019	2	2024
Evaluate network architectures and typologies for distributed secure LVC events		1	2018	1	2020
Develop gateways and cross domain solutions to integrate high-fidelity trainers with Air Force, joint, and coalition networks		3	2019	4	2024
Evaluate compressed DIS network standards for CDS in DMO		3	2019	4	2024
Integrate and evaluate multi-domain operations and kill-chain training scenarios for contested environments		2	2020	4	2024
Evaluate multi-national mission planning and debrief technologies in research training events		2	2020	3	2023
Implement, evaluate, and field technologies aligned with future training strategies for LVC		3	2019	4	2024

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training				Project (Number/Name) 655354 / F-16 Block 40/50 MTC			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
655354: F-16 Block 40/50 MTC	-	8.427	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.427
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

F-16 Block 40/50 Mission Training Center (MTC) supports the development, acquisition, fielding and integration of high fidelity, 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 and Intelligence, Surveillance, and Reconnaissance systems. This 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. Funds may be used to address emerging and short-notice Diminishing Manufacturing Sources(DMS) issues. DMS efforts to include removal of end-of-life software/hardware within simulators systems and move to a modular, common open system architecture that is sustainable and cyber-resilient. Implement requirements and standards defined under the Simulator Common Architecture Requirements and Standards initiative.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Full Combat Mission Training capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.

In FY 2019, PE 0207701F, Full Combat Mission Training, Project 655354, F-16 Blk 40/50 MTC efforts were transferred to PE 0207133F, F-16, Project 672671, F-16 Blk 40/50 MTC, in order to transfer programmatic responsibilities and funding to the F-16 weapon system team.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
Title: F-16 MTC Modification Development	8.427	0.000	0.000
Description: Development and testing of modifications to the F-16 MTC to maintain concurrency with F-16 aircraft.			
FY 2019 Plans: N/A			
FY 2020 Plans: N/A			
Accomplishments/Planned Programs Subtotals	8.427	0.000	0.000

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019	
Appropriation/Budget Activity 3600 / 5				R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training				Project (Number/Name) 655354 / F-16 Block 40/50 MTC			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• APAF 05 Line Item OTHACF: Other Aircraft	9.876	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• APAF 06 Line item 000999: Initial Spares/Repair Parts	0.219	0.000	0.000	-	0.000	0.000	0.000	0.111	0.113	Continuing	Continuing
Remarks											
In FY 2019, the APAF funds were transferred from Other Aircraft to PE 0207133F, F0160P, in order to transfer programmatic responsibilities and funding to the F-16 weapon system team.											
D. Acquisition Strategy											
F-16 Block 40/50 MTCs are being developed, fielded, and modified under a competitively awarded Federal Acquisition Regulation Part 15 Supply contract with RDT&E and APAF funds. The MTCs are sustained by Contract Logistic Support using Operations and Maintenance funds. Physical changes to the MTC cockpits required by any Operational Flight Program update will be funded in the F-16 APAF Mod Line.											
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.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 5						R-1 Program Element (Number/Name) PE 0207701F / Full Combat Mission Training						Project (Number/Name) 655354 / F-16 Block 40/50 MTC			
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
F-16 Blk 40/50 Mission Training Center (MTC)	C/Various	L3 Comm, Link Simulation & Training : Arlington, TX	-	8.180	Dec 2017	-		0.000		-		0.000	Continuing	Continuing	-
Subtotal			-	8.180		-		0.000		-		0.000	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
F-16 Blk 40/50 Mission Training Center (MTC) Program Management Administration- Over Gov't Costs	C/FFP	AFLCMC/WNS AFMC : Dayton, OH	-	0.247	Dec 2017	-		-		-		-	Continuing	Continuing	-
Subtotal			-	0.247		-		-		-		-	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	8.427		0.000		0.000		-		0.000	Continuing	Continuing	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity		R-1 Program Element (Number/Name)		Project (Number/Name)	
3600 / 5		PE 0207701F / Full Combat Mission Training		655354 / F-16 Block 40/50 MTC	

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
F-16 BLK 40/50																												
OFP M7.1+																												
OFP M7.2+																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0207701F / <i>Full Combat Mission Training</i>	Project (Number/Name) 655354 / <i>F-16 Block 40/50 MTC</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>F-16 BLK 40/50</i>				
OFP M7.1+	1	2018	3	2018
OFP M7.2+	2	2018	4	2018