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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2023 Air Force **Date:** April 2022

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / <i>USAF Modeling and Simulation</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	17.023	17.110	19.341	0.000	19.341	33.522	29.422	24.226	24.571	Continuing	Continuing
674567: <i>M&amp;S Foundations</i>	-	7.052	7.093	7.468	0.000	7.468	7.620	7.763	7.927	8.103	Continuing	Continuing
675135: <i>Warfighter Readiness</i>	-	9.971	10.017	11.873	0.000	11.873	25.902	21.659	16.299	16.468	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

Modeling and Simulation support to our Warfighter's Readiness is a United States Air Force (USAF) corporate imperative to ensure air, space, cyberspace training, and mission rehearsal activities are supported with realistic, interoperable, and readily available tools, data, services and environments. Warfighter readiness supports Department of Defense (DoD) Training Transformation (T2) and Joint National Training Capability (JNTC) along with the USAF priorities and core functions. Activities also include studies and analysis to support both current program planning, execution, and future program planning.

It includes several complimentary programs, initiatives and areas for investment: Warfighter and Joint Training Integration supports the Chief of Staff of the Air Force (CSAF) directed Live, Virtual, and Constructive (LVC) integration efforts and is a critical piece to the USAF's implementation of the Strategic Plan for Transforming DoD Training. The goal of LVC training and mission rehearsal is to prepare our warfighters for the full range of military operations and maintain the combat readiness levels required by the Combatant Commanders. This can only be accomplished by training and rehearsing in realistic operational environments. These environments include live training ranges and virtual simulators enhanced with constructive entities. Specific training and mission rehearsal events can include some or all of these simultaneously; making the ability to integrate LVC capabilities a necessity.

The Air, Space, and Cyberspace Constructive Environment (ASCCE) is the USAF's authoritative federation of constructive training models and tools realistically representing the tactical and operational capabilities the USAF brings to the joint fight. Project 675135, Warfighter Readiness, provides for the Command & Control Simulation Environment for Training (C2SET) development effort, which is modernizing the authoritative representation of AF and joint theater-level air and space power for training Air and Space Operations Center (AOC) personnel and Combatant Commanders' battle staffs. The primary models in development for C2SET are based on the AF common Advanced Framework for Simulation, Integration, and Modeling (AFSIM). C2SET will replace the current Air Force Modeling and Simulation Training Toolkit (AFMSTT).

The program element also contains Project 674567, M&S Foundations, the Air, Space and Cyberspace Collaborative Environment - Information Operations Suite (ACE-IO). ACE-IO is a federation of constructive models for the authoritative representation of Air Force Intelligence, Surveillance, and Reconnaissance (ISR), Electronic Warfare (EW), Information Operations (IO), and Cyber Effects on AF combat operations. The program supports multifaceted training and mission rehearsal for the Air Force at multiple training tiers, Joint Task Force commanders, and Combatant Commanders' battle staffs covering training from the AF schoolhouse through the Air Combatant Commander staff via Joint and Service exercises, tests, and experiments. This program also supports the DoD Training Transformation Initiative.

This program is part of the overarching Kessel Run portfolio and is leveraging the All Domain Common Platform (ADCP). The ADCP provides an extensible cloud based Infrastructure and Platform as a Service (IaaS/PaaS) hosting platform built to deliver highly resilient mission applications and data to Airmen deployed around the world.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2023 Air Force	<b>Date:</b> April 2022
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<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / <i>USAF Modeling and Simulation</i>
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This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY \$0.720M was expended for civilian pay expenses in this program element, and in CY \$1.155M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>
Previous President's Budget	17.634	17.110	0.000	0.000	0.000
Current President's Budget	17.023	17.110	19.341	0.000	19.341
Total Adjustments	-0.611	0.000	19.341	0.000	19.341
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-0.234	0.000			
• SBIR/STTR Transfer	-0.377	0.000			
• Other Adjustments	0.000	0.000	19.341	0.000	19.341

**Change Summary Explanation**

FY2023: The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY2023 cannot be made in a relevant manner.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation				<b>Project (Number/Name)</b> 674567 / M&S Foundations			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
674567: M&S Foundations	-	7.052	7.093	7.468	0.000	7.468	7.620	7.763	7.927	8.103	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

Modeling and Simulation Foundations (MSF) focuses on integrating foundational capabilities needed to improve the usefulness of Modeling and Simulation (M&S) capabilities derived from the Warfighter Readiness (WR) thrust. The efforts supporting the MSF thrust include both concept exploration and development. MSF provides the capability to rapidly and efficiently create realistic and accurate synthetic operational battlespaces to support the full spectrum of activities associated with concept development to acquisition and testing through composite training and mission rehearsals.

ACE-IOS project is a federation of constructive models for the authoritative representation of Air Force ISR and Information Operations. ACE-IOS provides simulation modeling and stimulation systems, software, and contract support in support of ISR/Cyber training from the AF ISR Schoolhouse to Joint mission rehearsal for the Air Force, Joint Task Force commanders, and Combatant Commands battle staffs during Joint and Service exercises, tests and experiments.

ACE-IOS provides ISR and Cyber live-virtual-constructive (LVC) environments to support the Joint training of offensive and defensive ISR/Cyber capabilities for the AF, DoD, select Coalition, and national agencies. AF Joint ISR operational training is conducted by the AF Simulation centers worldwide using the ACE-IOS M&S models and stimulations with specific extensions in support of the Air Force Cyber Simulation Center (CSC) and the AF ISR schoolhouse. Overall development and integration efforts of the ACE-IOS program are imperative to ensure that air, space, and cyberspace training and mission rehearsal activities are supported with realistic, interoperable, and readily available tools, data, and services. Specific ACE-IOS capability enhancements are built in direct support of the Distributed Mission Operations Center for Cyberspace (DMOC-C) and the AF ISR schoolhouse. The specific cyber effects software extensions for DMOC-C are in support of the training and exercising of tactical cyber mission forces (CMF), cyber service providers (CSP), and operational-level command and control, intelligence, and cyber planners and operators supporting global operations.

LVC environments today are used as one of the most cost effective and practical means to meet mission needs. These efforts enable more efficient delivery of effective capabilities to the warfighter while reducing the time and resources required for design, development, test and evaluation, maintainability and sustainment.

Authorization and Accreditation and Networkiness is maintained via the Information Technology (IT) systems Risk Management Framework (RMF) for seven classified ACE-IOS configurations and three supported cross domain solutions, which includes code and ruleset development, testing, and fielding, and meets AF Joint Worldwide Intelligence Communications System (JWICS), AF Secret Internet Protocol Router Network (SIPRNET) and AF and Joint Staff training network net worthiness standards and evaluations.

This program also supports the DoD Training Transformation Initiative.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force	<b>Date:</b> April 2022
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<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 674567 / M&S Foundations
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This program is part of the overarching Kessel Run portfolio and is leveraging the All Domain Common Platform (ADCP). The ADCP provides an extensible cloud based Infrastructure and Platform as a Service (IaaS/PaaS) hosting platform built to deliver highly resilient mission applications and data to Airmen deployed around the world.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY \$0.000M was expended for civilian pay expenses in this program element, and in CY \$0.000M is forecasted for civilian pay expenses in this program element.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p><b>Title:</b> Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS)</p> <p><b>Description:</b> Provides the authoritative representation of the AF ACE-IOS program. ACE- IOS is comprised of models that support training and mission rehearsal for the Air Force, Joint Task Force commanders, and Combatant Commander battle staffs during Joint and Service exercises and experimentations. Also supports shared ACE-IOS development in support of the AF ISR schoolhouse and DMOC-C extensions.</p> <p><b>FY 2022 Plans:</b></p> <ul style="list-style-type: none"> <li>-Delivered ACE-IOS version 5.0.23</li> <li>-Delivered early model transformations to open architecture and aligned with Kessel Run common development processes</li> <li>-Delivered re-engineering of apps from Web Logic app server to Docker containers</li> <li>-Delivered new JVET service</li> <li>-Delivered select USMTF Protocol years and updated specific theater reporting directives</li> <li>-Delivered select updates to supported message protocols and simulations - IBS, OTH Gold, JUNIT, CMF and VMF.</li> <li>-Delivered graphics into a single web-based graphic system</li> </ul> <p><b>FY 2023 Base Plans:</b></p> <ul style="list-style-type: none"> <li>-Will commence and deliver ACE-IOS version &amp; deployment</li> <li>-Will continue ACE-IOS agile development</li> <li>-Will continue integration with M&amp;S support to Kessel Run common development</li> </ul> <p><b>FY 2023 OCO Plans:</b></p> <p>N/A</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b></p>	7.052	7.093	7.468	0.000	7.468

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 674567 / M&S Foundations

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>
Funding increased due to increase in development efforts.					
<b>Accomplishments/Planned Programs Subtotals</b>	7.052	7.093	7.468	0.000	7.468

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• OPAF 03 833140: <i>Strategic Command And Control</i>	0.000	3.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDTE 07 0303248F: <i>All Domain Common Platform</i>	0.000	64.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDTE 08 0308606F: <i>All Domain Common Platform (ADCP) - Software Pilot Program</i>	0.000	0.000	190.112	0.000	190.112	175.196	190.889	187.666	188.307	Continuing	Continuing

**Remarks**  
N/A

**D. Acquisition Strategy**  
The Acquisition goals of the Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS) are achieved through incremental development of the project's M&S activities; all contracts are awarded using full and open competition. In order to meet evolving M&S technology and requirements and its modernization effort, the ACE-IOS program will leverage commercial best practices for agile software development.



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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 674567 / M&S Foundations

FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
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

<b>Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS)</b>	
- ACE-IOS v5.0.22	
- ACE-IOS v5.0.23	
-ACE-IOS v5.0.24	
-ACE-IOS v5.0.25	
-ACE-IOS v5.0.26	
-ACE-IOS v5.0.27	
-ACE-IOS v5.0.28	

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 674567 / M&S Foundations

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS)</i></b>				
- ACE-IOS v5.0.22	1	2021	4	2021
- ACE-IOS v5.0.23	1	2022	4	2022
-ACE-IOS v5.0.24	1	2023	4	2023
-ACE-IOS v5.0.25	1	2024	4	2024
-ACE-IOS v5.0.26	1	2025	4	2025
-ACE-IOS v5.0.27	1	2026	4	2026
-ACE-IOS v5.0.28	1	2027	4	2027

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation				<b>Project (Number/Name)</b> 675135 / Warfighter Readiness			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675135: Warfighter Readiness	-	9.971	10.017	11.873	0.000	11.873	25.902	21.659	16.299	16.468	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

Modeling and Simulation support to our Warfighter's Readiness is a United States Air Force (USAF) corporate imperative to ensure air, space, cyberspace training, and mission rehearsal activities are supported with realistic, interoperable, and readily available, tools, data, services and environments. Warfighter Readiness supports Department of Defense (DoD) Training Transformation (T2) and Joint National Training Capability (JNTC) along with the USAF priorities and core functions. Activities also include studies and analysis to support both current program planning, execution, and future program planning.

It includes several complimentary programs, initiatives and areas for investment: Warfighter and Joint Training Integration supports the Chief of Staff of the Air Force (CSAF) directed Live, Virtual, and Constructive (LVC) integration efforts and is a critical piece to the USAF's implementation of the Strategic Plan for Transforming DoD Training. The goal of LVC training and mission rehearsal is to prepare our warfighters for the full range of military operations and maintain the combat readiness levels required by the Combatant Commands. This can only be accomplished by training and rehearsing in realistic operational environments. These environments include live training ranges and virtual simulators enhanced with constructive entities. Specific training and mission rehearsal events can include some or all of these simultaneously; making the ability to integrate LVC capabilities a necessity.

The Air, Space, and Cyberspace Constructive Environment (ASCCE) is the USAF's authoritative federation of constructive training models and tools realistically representing the tactical and operational capabilities the USAF brings to the joint fight. This includes development effort for Command & Control Simulation Environment for Training (C2SET), which provides the authoritative representation of AF and Joint theater-level air and space power and is used to train Air and Space Operations Center (AOC) personnel and Combatant Commanders' battle staffs. C2SET is replacing the AFMSTT models with the proven core Advanced Framework for Simulation, Integration, and Modeling (AFSIM) scientific engine. The goal is toward a fully scalable and more scientific based modeling, simulation, and training stimulation to the Combined Forces Air Component Commander (CFACC). AFMSTT entered full sustainment in FY21 and continues to receive operational updates to maintain operational currency until C2SET fully replaces.

This program is part of the overarching Kessel Run portfolio and is leveraging the All Domain Common Platform (ADCP). The ADCP provides an extensible cloud based Infrastructure and Platform as a Service (IaaS/PaaS) hosting platform built to deliver highly resilient mission applications and data to Airmen deployed around the world.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY \$0.720M was expended for civilian pay expenses in this program element, and in CY \$1.155M is forecasted for civilian pay expenses in this program element.



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 675135 / Warfighter Readiness

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>
Funding increased to support team expansion to accomplish required parallel development efforts, capability modernization and legacy deprecation.					
<b>Accomplishments/Planned Programs Subtotals</b>	9.971	10.017	11.873	0.000	11.873

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• OPAF 03 833140: <i>Strategic Command And Control</i>	0.000	3.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDTE 07 0303248F: <i>All Domain Common Platform</i>	0.000	64.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• RDTE 08 0308606F: <i>All Domain Common Platform (ADCP) - Software Pilot Program</i>	0.000	0.000	190.112	0.000	190.112	175.196	190.889	187.666	188.307	Continuing	Continuing

**Remarks**  
N/A

**D. Acquisition Strategy**  
The Acquisition goals of the Command & Control Simulation Environment for Training (C2SET) are achieved through incremental development of the project's M&S activities; all contracts are awarded using full and open competition. C2SET operates under authority of a Software Acquisition Pathway following DoDI 5000.87, Operation of a Software Acquisition Pathway Guidance. The desired end state is continuous delivery of all C2SET software.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force** **Date:** April 2022

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 675135 / Warfighter Readiness
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<b>Product Development (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFMSTT	C/T&M	Cole Engineering Services, Inc : Orlando, FL	-	3.045	Dec 2020	-		-		-		-	Continuing	Continuing	-
C2SET (FSO)	C/T&M	Full Spectrum Operations : Fairfax, VA	-	1.953	Jul 2021	2.961	Jul 2022	1.628	Jul 2023	-		1.628	Continuing	Continuing	19.100
C2SET (Omni)	C/T&M	Omni Federal : Gainesville, VA	-	1.953	Jul 2021	2.961	Jul 2022	1.629	Jul 2023	-		1.629	Continuing	Continuing	19.100
<b>Subtotal</b>			-	6.951		5.922		3.257		-		3.257	Continuing	Continuing	N/A

<b>Support (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFMSTT/C2SET Direct Mission Support	C/TBD	Various : TBD	-	0.404	Oct 2020	1.577		5.895	Oct 2022	-		5.895	Continuing	Continuing	-
AFMSTT/C2SET Civilian Direct Cite Authorizations for Product Development	Allot	AFLCMC/FZA : TBD	-	0.720	Oct 2020	1.155	Oct 2021	1.349	Oct 2022	-		1.349	Continuing	Continuing	-
<b>Subtotal</b>			-	1.124		2.732		7.244		-		7.244	Continuing	Continuing	N/A

<b>Management Services (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Administration	C/Variou	AFLCMC : Hanscom AFB, MA	-	1.586	Oct 2020	0.980	Oct 2021	0.981	Oct 2022	-		0.981	Continuing	Continuing	-
Systems Engineering	SS/ Variou	MITRE : Bedford, MA	-	0.310	Oct 2020	0.383	Oct 2021	0.391	Oct 2022	-		0.391	Continuing	Continuing	-
<b>Subtotal</b>			-	1.896		1.363		1.372		-		1.372	Continuing	Continuing	N/A

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2023 Air Force</b>								<b>Date: April 2022</b>			
<b>Appropriation/Budget Activity</b> 3600 / 7				<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation				<b>Project (Number/Name)</b> 675135 / Warfighter Readiness			
	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>		
<b>Project Cost Totals</b>	-	9.971	10.017	11.873	-	11.873	Continuing	Continuing	N/A		

**Remarks**

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2023 Air Force</b>		<b>Date: April 2022</b>
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 675135 / Warfighter Readiness

FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
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

<b>Air, Space, and Cyberspace Constructive Environment (ASCCE)</b>	
C2SET	

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2023 Air Force		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207601F / USAF Modeling and Simulation	<b>Project (Number/Name)</b> 675135 / Warfighter Readiness

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Air, Space, and Cyberspace Constructive Environment (ASCCE)</i>				
C2SET	1	2021	4	2027