

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207601F / <i>USAF Modeling and Simulation</i>
--	---

COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	15.243	17.634	17.110	0.000	17.110	-	-	-	-	-	-
674567: <i>M&S Foundations</i>	-	6.943	7.050	7.093	0.000	7.093	-	-	-	-	-	-
675135: <i>Warfighter Readiness</i>	-	8.300	10.584	10.017	0.000	10.017	-	-	-	-	-	-

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, includes the Air Force Modeling and Simulation Training Toolkit (AFMSTT) and its follow on program 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. The primary models in the AFMSTT are the Air Warfare Simulation (AWSIM) and Air Base Simulation (ABS).

The program element also contains Project 674567, M&S Foundations, the Air, Space and Cyberspace Collaborative Environment - Information Operations Suite (ACE-IOS). ACE-IOS is a federation of constructive models for the authoritative representation of Air Force information operations. ACE-IOS is developed and operated by the Air Force Cyber Simulation Center (CSC) to support training and mission rehearsal for the Air Force, Joint Task Force commanders, and Combatant Commanders' battle staffs during Joint and Service exercises, tests, and experiments. The CSC provides cyber live-virtual-constructive (LVC) environments to support the development and fielding of offensive and defensive cyber capabilities for the AF, DoD, and national agencies. This program also supports the DoD Training Transformation Initiative.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force	Date: May 2021
--	-----------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0207601F / <i>USAF Modeling and Simulation</i>
--	---

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 0605831F. In FY20 0.000M was expended for civilian pay expenses in this program element, and in FY21 0.000M 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. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	15.725	17.666	19.042	0.000	19.042
Current President's Budget	15.243	17.634	17.110	0.000	17.110
Total Adjustments	-0.482	-0.032	-1.932	0.000	-1.932
• 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	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-0.482	-0.032	-1.932	0.000	-1.932

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 674567 / M&S Foundations
--	--	--

COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
674567: M&S Foundations	-	6.943	7.050	7.093	0.000	7.093	-	-	-	-	-	-
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.

Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS) project is a federation of constructive models for the authoritative representation of Air Force information operations. ACE-IOS is developed and operated by the Air Force Cyber Simulation Center (CSC) to support training and mission rehearsal for the Air Force, Joint Task Force commanders, and Combatant Commands battle staffs during Joint and Service exercises, tests and experiments.

The CSC provides cyber live-virtual-constructive (LVC) environments to support the development and fielding of offensive and defensive cyber capabilities for the AF, DoD, and national agencies. The CSC is managed by the 90th Cyberspace Operations Squadron, a unit of the 318th Cyberspace Operations Group, 67th Cyberspace Wing, 24th Air Force (AFCYBER). The Distributed Mission Operations Center for Cyberspace (DMOC-C) is a subset of the CSC focused on training and exercising tactical cyber mission forces (CMF) and cyber service providers (CSP) and operational-level command and control, intelligence, and cyber planners and operators. DMOC-C provides the ACE-IOS to support Air Force information operations. DMOC-C, using ACE-IOS, directly supports Air Force, Joint, Coalition composite training and rehearsal, concept development, and acquisition and testing for use by Major and Combatant Commands. DMOC-C thrust areas develop and modernize models and simulations covering cyberspace, intelligence and command and control activities as part of the constructive backbone of Air Force capabilities within DOD and coalition LVC environments.

DMOC-C's development and integration efforts on ACE-IOS 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. 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 Networthiness is maintained via the Information Technology (IT) systems Risk Management Framework (RMF) for seven classified systems and five supported cross domain solutions, which includes code and ruleset development, testing, and fielding, and meets AF Joint Worldwide Intelligence Communications System (JWICS) and AF Secret Internet Protocol Router Network (SIPRNET) net worthiness standards and evaluations.

This program also supports the DoD Training Transformation Initiative.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force	Date: May 2021
---	-----------------------

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 674567 / M&S Foundations
--	--	--

This program element may include necessary civilian pay expenses required to manage, execute, and deliver ACE-IOS weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

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

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Title: Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS)</p> <p>Description: Provides the authoritative representation of Air Force information operations. 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.</p> <p>FY 2021 Plans:</p> <ul style="list-style-type: none"> - Commence and completed ACE-IOS version 5.0.22 - Commence database population tools for all parametric data - Commence JNETS scenario builder <p>FY 2022 Base Plans:</p> <ul style="list-style-type: none"> -Will commence and deliver ACE-IOS version 5.0.23 -Will continue model transformation to open architecture -Will deliver re-engineering of all apps from Web Logic app server to Docker containers -Will deliver the new containerized JVET service -Will deliver USMTF Protocol Years and specific theater reporting directives; task will continue thru 2023 until all are delivered -Will deliver message protocols - IBS-I, IBS-S, OTH Gold, JUNIT, CoT, CMF, and VMF; task will continue thru 2023 until all are delivered -Will initiate re-engineering of remaining apps and data base to Docker containers; task will continue thru 2024 until all are delivered -Will deliver the migration of all graphics into a single web-based graphics system <p>FY 2022 OCO Plans: N/A</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Increase due to inflation.</p>	6.943	7.050	7.093	0.000	7.093
Accomplishments/Planned Programs Subtotals	6.943	7.050	7.093	0.000	7.093

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / <i>USAF Modeling and Simulation</i>	Project (Number/Name) 674567 / <i>M&S Foundations</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
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. To meet evolving M&S technology, and the challenges of new requirements arriving almost daily, DMOC-C is an on-going, evolutionary effort to keep pace with those changes by continuously developing and upgrading environment generators, systems, and tools and to ensure integration and interoperability with other LVC systems to provide the best warfighter training possible.		

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 674567 / M&S Foundations

FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

<i>Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS)</i>	
- ACE-IOS v5.0.21	██████████
- ACE-IOS v5.0.22	██████████
- ACE-IOS v5.0.23	██████████

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 674567 / M&S Foundations

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Air, Space and Cyberspace Constructive Environment - Information Operations Suite (ACE-IOS)</i>				
- ACE-IOS v5.0.21	1	2020	4	2020
- ACE-IOS v5.0.22	1	2021	4	2021
- ACE-IOS v5.0.23	1	2022	4	2022

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force										Date: May 2021		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation				Project (Number/Name) 675135 / Warfighter Readiness			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
675135: Warfighter Readiness	-	8.300	10.584	10.017	0.000	10.017	-	-	-	-	-	-
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 presently includes the Air Force Modeling and Simulation Training Toolkit (AFMSTT) and its follow on program 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. The primary models in the AFMSTT are the Air Warfare Simulation (AWSIM) and Air Base Simulation (ABS). C2SET will replace the AFMSTT models with the proven core Advanced Framework for Simulation, Integration, and Modeling (AFSIM) scientific engine under a new AF Software Pathways initiative starting in FY21. The goal is toward more scientific based modeling, simulation, and training stimulation to the Combined Forces Air Component Commander (CFACC). AFMSTT will enter sustainment in FY21 with continued operational updates to maintain operational currency until C2SET fully replaces.

This program is part of the overarching Kessel Run portfolio.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver C2SET weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY19 \$00.000M and in FY20 \$00.000M was expended for civilian pay expenses in this program element

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 675135 / Warfighter Readiness

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Title: Air, Space, and Cyberspace Constructive Environment (ASCCE)/Air Force Modeling & Simulation Training Toolkit (AFMSTT)</p> <p>Description: Provides the authoritative representation of AF and joint theater-level air and space power used to train Air and Space Operations Center (AOC) personnel and Combatant Commanders' battle staffs.</p> <p>FY 2021 Plans:</p> <ul style="list-style-type: none"> - Complete development, test, and fielding of AFMSTT Version 6.3 - Continue integration with spiral Joint Staff/J7 JLVC developments - Continue new joint requirements and model interface changes to the Joint Federate Object Models (FOMs) - Complete modeling of real world environments and new C2 systems' interfaces to ensure accurate and realistic training <p>FY 2022 Base Plans: N/A</p> <p>FY 2022 OCO Plans: N/A</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding decreased due to work being done on C2SET.</p>	7.800	1.100	0.000	0.000	0.000
<p>Title: Command & Control Simulation Environment for Training (C2SET)</p> <p>Description: Provides the authoritative representation of AF and joint theater-level air and space power and is used to train AOC personnel and Combat Commander's battle staffs</p> <p>FY 2021 Plans:</p> <ul style="list-style-type: none"> - Initiate agile rapid C2SET development and engineering efforts - Develop agile requirements and prototyping to address new C2SET requirements <p>FY 2022 Base Plans:</p> <ul style="list-style-type: none"> - Will initiate new C2SET Software Pathways contracting - Will setup and operate AF M&S Software Pathways consortium development effort - Will continue agile rapid development and engineering based on the AF AFSIM scientific modeling engine - Will continue agile software requirements, prototyping, and spiral development to address new C2SET AF 1067 and ever changing operational requirements 	0.500	9.484	10.017	0.000	10.017

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 675135 / Warfighter Readiness

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
- Will develop new Joint Federate Object Models (FOMs) and C2 System interface updates as required in support of AOC WS Block 20 field training and continued Joint and Coalition integration - Will continue modeling of real world environments and new weapons systems worldwide to ensure continued accurate and realistic training is supported FY 2022 OCO Plans: N/A FY 2021 to FY 2022 Increase/Decrease Statement: Funding increased due to work being done on C2SET.					
Accomplishments/Planned Programs Subtotals	8.300	10.584	10.017	0.000	10.017

C. Other Program Funding Summary (\$ in Millions)
 N/A

Remarks
 N/A

D. Acquisition Strategy
 The Air Force Life Cycle Management Center (AFLCMC) at Hanscom AFB, MA manages the project's acquisition process. AFLCMC develops the Air C2 constructive M&S models in direct support of AFAMS and the warfighter simulation centers. Their acquisition goals are achieved through incremental development in a sustainment and modernization through modification approach. All major contracts are awarded using full and open competition.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force												Date: May 2021			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 7				PE 0207601F / USAF Modeling and Simulation				675135 / Warfighter Readiness							
Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
AFMSTT	C/T&M	Cole Engineering Services, Inc : Orlando, FL	-	5.812	Mar 2020	0.322	Dec 2020	-		-		-	-	-	-
C2SET (Cole)	C/T&M	Cole Engineering Services, Inc : Orlando, FL	-	0.280	Mar 2020	1.889	Dec 2020	-		-		-	-	-	-
C2SET	C/TBD	TBD : TBD	-	-		5.738	Mar 2021	8.482	Mar 2022	-		8.482	-	-	-
Subtotal			-	6.092		7.949		8.482		-		8.482	-	-	N/A
Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Hanscom Collaboration and Innovation Center	C/Variou	AFLCMC : Hanscom AFB, MA	-	0.092	Oct 2019	0.000	Oct 2020	-		-		-	-	-	-
AFMSTT/C2SET Civilian Direct Cite Authorizations for Product Development	Allot	AFLCMC/FZA : TBD	-	-		0.960	Jun 2021	-		-		-	-	-	-
Subtotal			-	0.092		0.960		-		-		-	-	-	N/A
Management Services (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Program Management Administration	C/Variou	AFLCMC : Hanscom AFB, MA	-	1.966	Oct 2019	1.299	Oct 2020	1.153	Oct 2021	-		1.153	-	-	-
Systems Engineering	SS/ Various	MITRE : Bedford, MA	-	0.150	Oct 2019	0.376	Oct 2020	0.382	Oct 2021	-		0.382	-	-	-
Subtotal			-	2.116		1.675		1.535		-		1.535	-	-	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force								Date: May 2021					
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation				Project (Number/Name) 675135 / Warfighter Readiness					
	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	8.300		10.584		10.017		-		10.017	-	-	N/A

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 675135 / Warfighter Readiness

	FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
	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

Air, Space, and Cyberspace Constructive Environment (ASCCE)	
AFMSTT v6.3.1.0 (formerly v6.5)	████████████████████
C2SET Software Pathways	██

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207601F / USAF Modeling and Simulation	Project (Number/Name) 675135 / Warfighter Readiness

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Air, Space, and Cyberspace Constructive Environment (ASCCE)</i>				
AFMSTT v6.3.1.0 (formerly v6.5)	2	2020	2	2021
C2SET Software Pathways	2	2021	4	2022