Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305111F / *Weather Service*

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	36.524	56.457	26.329	0.000	26.329	28.773	29.650	30.357	32.647	Continuing	Continuing
672738: *Weather Service*	-	36.524	56.457	26.329	0.000	26.329	28.773	29.650	30.357	32.647	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This budget activity funds the operational development necessary to acquire and modernize Air Force Weather Service [AFWS] capabilities in support of the 2022 National Defense Strategy's [NDS] three lines of effort. To improve readiness for a more lethal force, AFWS provides timely, accurate, resilient, and relevant environmental information to enable global battlespace situational awareness for the Air Force [AF], Army, Special Operations Forces [SOF], Space Force [USSF], combatant commands, the Intelligence Community [IC], and other government agencies. AFWS provides climate impacts and assessments, as well as space and terrestrial weather sensing, forecasting, and weather analytic capabilities, at home station and deployed, in order to deliver critical environmental information in support of decision makers to gain the asymmetric advantage during the full spectrum of air and space combat operations. AFWS decreases the risk to mission and risk to force by increasing the lethality, effectiveness, and survivability of Department of Defense [DoD] weapon systems. To strengthen alliances and partnerships, AFWS development efforts integrate DoD, government agency, commercial, and international partner environmental data and software with AFWS information systems for processing, storing, exploiting, and disseminating all-domain weather information for analysis, forecasting, mission integration, and greater interoperability. To ensure greater performance and affordability for the Department of the AF, AFWS sensors and information systems are being modernized through improvements to architecture and system efficiency, cybersecurity, joint all-domain command and control [JADC2] and sensing grid integration, migration to cloud computing, artificial intelligence and machine learning [AI/ML] initiatives, and expanding agile software development, rapid delivery, and integration practices. The AF Weather Enterprise digital transformation and cloud migration effort modernizes key capabilities providing the military advantage to accurately predict environmental impacts optimizing mission planning, targeting, weaponeering, mission execution, battle damage assessment, and space systems operations. AFWS aligns activities under four capability areas: Weather Data Collection, Weather Data Analysis and Dissemination, Weather Forecasting, and Product Tailoring/
Warfighter Applications [PTWA]. This alignment ensures an integrated and systems-oriented approach to program management decisions. Of these four capability areas, three (Weather Data Analysis and Dissemination, Weather Forecasting, and PTWA) are addressed by APPN 3600, BA 07, PE 0305111F, Project 672738 - Weather Service. Effective FY 2021, a portion of the APPN 3600 funding and activities from Weather Data Analysis and Dissemination and Weather Forecasting were migrated to the PTWA capability area to better address development of applications, software, command and control [C2] system integration, and web interfaces that directly impact the warfighter within the Weather Application Rapid Production [WARPspeed] program of record. For FY 2021, WDA Increment 5 and WARPspeed programs of record were approved as Software Acquisition Pathway Programs.

1. Weather Data Collection provides automated atmospheric and ground-based space environmental sensing capabilities at fixed and deployed locations worldwide. The data gathered by multiple sensor systems is exploited for environmental battlespace awareness, characterization, safety of flight, resource protection, and satellite anomaly assessments and impacts.

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2. Weather Data Analysis and Dissemination provides a cybersecure cloud computing-based platform supporting large-scale environmental data ingest, processing, and product generation, Continuous Integration/Continuous Delivery [CI/CD] and AI/ML environments for AFWS software development and deployment, and machine-to-machine dissemination of specific, mission-tailored weather data on-demand to support warfighter operations, weapon system interoperability, rapidly integrating into C2 nodes, and shortening the Combatant Commander kill chain. The Weather Data Analysis and Dissemination capability area includes activities for Weather Data Analysis Increment 5 [WDA Inc 5].

3. Weather Forecasting provides global and regional advanced scientific numerical weather and climate prediction capabilities for automated, high-resolution forecast products supporting mission planning and execution with an emphasis on clouds, theater scale weather, aerosol/chemical constituents, hydrology, machine learning, and space environmental characterization. Weather Forecasting includes activities for Numerical Weather Modeling [NWM] and Space Weather Analysis and Forecast System [SWAFS]. In FY 2023, the SWAFS portion of the APPN 3600 funding and activities from AF PE 0305111F, Weather Service, were transferred to the USSF PE 1203940SF, Space Situational Awareness Operations.

4. Product Tailoring Warfighter Applications [PTWA] provides software applications that provide and enhance environmental information to support rapid warfighter decision-making. PTWA includes the program, Weather Applications Rapid Production [WARPspeed], which is a suite of software applications developed and delivered across multiple security classification levels. WARPspeed encompasses weather workflow tools and decision aids used to tailor terrestrial and space environmental information, which include both Forecaster-in-the-Loop [FITL] and automated machine-to-machine processes enhanced by AI/ML. WARPspeed leverages the WDA Inc 5 cloud computing, data processing, and CI/CD and AI/ML platforms to rapidly develop, deliver, and sustain software capabilities, whether deployed into the AF Weather Virtual Private Cloud [AFW-VPC] or to warfighter processing nodes at the edge.

Activities include research and analysis to support current program planning. Management Service costs include Federally Funded Research and Development Centers [FFRDC] and Advisory and Assistance Service [A&AS]. The total cost of the ExMet Rapid Fielding Middle Tier of Acquisition effort is 59M, including RDT&E and procurement of prototype units. ExMet MTA Rapid Fielding program will end in 4FY23 with full funding and will continue through the FYDP as a fully-funded ACAT III program of record.
This requirement supports performance of a full financial audit as required by title 10 U.S.C. Chapter 9A, SEC 240-D.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Weather Service 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 FY22 0 was expended for civilian pay expenses in this program element, and in FY23 0.170M 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.

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
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B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	39.228	11.716	13.318	0.000	13.318
Current President's Budget	36.524	56.457	26.329	0.000	26.329
Total Adjustments	-2.704	44.741	13.011	0.000	13.011
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	31.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-1.390	13.741			
• SBIR/STTR Transfer	-1.314	0.000			
• Other Adjustments	0.000	0.000	13.011	0.000	13.011

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2022	FY 2023
Project: 672738: *Weather Service*		
Congressional Add: *Commercial Weather Data Pilot (CWDP) Program*	9.634	10.000
Congressional Add: *Research on Atmospheric Rivers*	1.500	5.000
Congressional Add: *Dust Emission Forecasting*	-	5.000
Congressional Add: *Air Force Weather Transformation*	-	8.000
Congressional Add: *Machine Learning Weather Forecast*	-	3.000
Congressional Add Subtotals for Project: 672738	11.134	31.000
Congressional Add Totals for all Projects	11.134	31.000

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Expeditionary Weather - MTA Rapid Fielding (ExMet - MTA RF)	-	0.371	0.549	-	0.549
Description: Funding enables rapid fielding of Air Force Weather's Joint All-Domain Command and Control (JADC2) system of systems solution that supports mission specific launch and recovery operations via multi and single person UTCs. ExMet systems and capabilities address AF expeditionary operations needs highlighted in the 2022 NDS and AF/A3 Functional Concept for Expeditionary Weather operations. FY23 funding continues integration of components and applications into ExMET systems which was previously enabled by SBIR funding.					

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force		Date: March 2023
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C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
FY 2023 Plans: Funding will support component integration and testing of forecasting applications. ***FY 2024 Base Plans:*** Funding will support component integration and testing of the Integrated Weather Observing System (IWOS). ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase funds will help in Development, integration, and refinement of SATCOM solutions and cybersecurity requirements.					
Title: Weather Data Analysis Increment 5 (WDA Inc 5) ***Description:*** WDA Inc 5 institutes a cloud computing-based platform enabling a transition from agile development to a CI/CD pipeline for software development and deployment efforts which will enable rapid updates to functionality and security measures. The WDA Inc 5 cloud computing platform will also provide an enterprise big data analytics capability and AI/ML platform, as well as supporting and funding development and deployment of web services, data management, platform monitoring, application on-boarding, and platform user management. Finally, the program will provide both classified and unclassified cloud computing platforms that communicate directly with C2 customers. ***FY 2023 Plans:*** Funding will support the CI/CD pipeline modernization for weather software and applications and will further AI/ML platform integration and new satellite data integration to the AFW-VPC platform. ***FY 2024 Base Plans:*** Funding will support the CI/CD pipeline modernization for weather software and applications and will further AI/ML platform integration and new satellite data integration to the AFW-VPC platform. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Funding increase will be associated CI/CD processes associated with cloud migration	1.969	4.084	4.314	-	4.314
Title: Numerical Weather Modeling (NWM) ***Description:*** The NWM program transitioned High Performance Computing (HPC) System 11 into operations in early FY2022, transitioned legacy weather models to System 11 at the end of FY 2022, which enhanced and expanded the computing	8.734	11.239	12.769	-	12.769

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force		Date: March 2023
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C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
capability to begin supporting machine learning models' development. NWM also provides data and products used to issue advisories and warnings for DoD resource protection, as well as DoD and IC mission planning. NWM integrates with the Air Force Weather Weapon System's Weather Data Analysis (WDA) Inc 5 processing centers to analyze and predict weather phenomena. ***FY 2023 Plans:*** - Continue METSAT exploitation and integration efforts for cloud forecasting applications. - Continue terrain modeling enhancement and integration, which includes hydrology streamflow capability and seasonal-to- sub-seasonal forecast capability development. - Continue Oak Ridge National Laboratory (ORNL) RDT&E collaboration tasks, focusing on model code optimization and hydrology prediction capabilities. ***FY 2024 Base Plans:*** Continue METSAT exploitation and integration efforts for cloud forecasting applications, terrain modeling, and ORNL model code optimization and hydrology prediction. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Minor budget changes due to consolidation of machine learning projects, specifically GSWR from WARPspeed to NWM, and slight variations in individual project levels of effort.					
Title: Weather Applications Rapid Production (WARPspeed) ***Description:*** WARPspeed develops and delivers a suite of software applications across multiple security classification levels to provide and enhance environmental intelligence to support rapid warfighter decision making. Major software developments include: the BIFROST Portal, Mission Services, Global Synthetic Weather Radar (GSWR), weather C2 visualization plug-ins and integration, and other forecast and climatology applications. ***FY 2023 Plans:*** Continue BIFROST Portal development which will provide a single front entry point into the Air Force Weather Enterprise for all html-based capabilities for environmental content and services on classified enclaves.	8.282	9.763	8.697	-	8.697

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force		Date: March 2023
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C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Continue to enhance Mission Services, to include integration of contrails and cloud-free line of sight (CFLOS) machine learning-based forecasts into environmental impacts web services. - Continue to develop weather C2 visualization plug-ins to integrate weather data and software applications with various C2 systems. - Continue to enhance GSWR via new commercial data sources and improved machine learning techniques. ***FY 2024 Base Plans:*** Continue BIFROST Portal development and mission-focused weather workflow applications for weather and non-weather operators, as well as contrails, CFLOS, C2 integration, and GSWR enhancements. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Funding will remain relatively constant to ensure applications are ready for cloud migration.					
Title: Space Weather Analysis and Forecast System (SWAFS)	3.365	0.000	0.000	-	0.000
Description: In FY 2023, the SWAFS portion of PE 0305111F, Project 672738, Weather Service, was transferred to PE 1203940SF, Space Situational Awareness Operations, Project 67A018, Ground Based Space Environmental Monitoring in order to align current AF ground-based space sensing projects to the USSF. The SWAFS legacy baseline is currently being redesigned and upgraded under the Space Domain Awareness Environmental Toolkit for Defense (SET4D) effort to satisfy Space Domain Awareness goals for a modern cloud hosted infrastructure that is cyber resilient and integrated with the Unified Data Library. The Energetic Charged Particle Hazard Assessment System (ECP HAS) is one of several models and applications within the SET4D environment designed to inform satellite operators of hazards and the impacts of those hazards to their spacecraft that will provide warfighters with the environmental awareness to safely sustain their respective orbits and missions. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:***					

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
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C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** N/A					
Title: JEON EC-0015 ***Description:*** OSD JEON EC-0015 ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** N/A ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** N/A	3.040	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	25.390	25.457	26.329	0.000	26.329

	FY 2022	FY 2023
Congressional Add: Commercial Weather Data Pilot (CWDP) Program ***FY 2022 Accomplishments:*** FY22 CWDP 10M funding, 2.5M went to Tomorrow.io (with AFWERX matching) and 7.5M was dedicated to the DIU Commercial Solution Offerings (CSO) process. ***FY 2023 Plans:*** The plan for FY23 CWDP funds is to award the available options on contracts with the Defense Innovation Unit (DIU) and the Commercial Solutions Offerings (CSO) we established during FY 22, as well as incorporate the data quality and weather model assessment into the JCSDA Data Assimilation contract. Additionally, one new award towards near-earth Radio Occultation improved sensing is likely with residual funding resulting from the aforementioned contract negotiations.	9.634	10.000
Congressional Add: Research on Atmospheric Rivers ***FY 2022 Accomplishments:*** Will analyze and evaluate the impact of assimilating the Atmospheric Rivers (AR) recon flight-level, dropsonde, and buoy data with the JEDI/Model for Prediction Across Scales (MPAS) system,	1.500	5.000

	FY 2022	FY 2023
with the goal to generate improved initial conditions and short-range forecasts and simulations of cloud fields in the presence of atmospheric rivers. ***FY 2023 Plans:*** Atmospheric Rivers (AR) Phase II tasks: Task 1: Impact of AR Recon Flight-level, Dropsonde, and Buoy Data Task 2: Impact of Global Navigation Satellite System (GNSS) RO data on AR Prediction Task 3: Impact of ARO data on the Prediction of ARs Task 4: Modeling Resilience During Loss of Foundational Data Potential tasks for AR Phase 3 - Tied to FY23 funding. Roughly 50% will be pushed to the 53 WRS for dropsondes - leaving $2.5M in FY23. The NAVGEM includes an aerosol component and will need a method to determine how to inject aerosols in the project. The drought/flood component of ARs (trafficability) could be some of the UNL GCDI/LIS data into the project. An outlook could incorporate ML and the use of ensembles for better forecasting/probability forecasting.		
Congressional Add: Dust Emission Forecasting ***FY 2023 Plans:*** This is a new effort to provide funds to conduct research and development work with dust emission forecast analysis.	-	5.000
Congressional Add: Air Force Weather Transformation ***FY 2023 Plans:*** Funding will incorporate cloud migrating updates for the enterprise to continue their efforts into cloud operations while enhancing software applications and security. This funding will also provide capabilities into enhancing our data structure to VAULTIS which ensures we are aligned to DoD's authoritative C2 databases.	-	8.000
Congressional Add: Machine Learning Weather Forecast ***FY 2023 Plans:*** Research machine learning forecasting capabilities and incorporate them into the Air Force Weather Enterprise modeling to assist in existing AI/ML functions.	-	3.000
Congressional Adds Subtotals	11.134	31.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
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D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• OPAF 03 Line Item 833070: *Weather Observation Forecast*	32.376	20.548	28.592	-	28.592	31.710	32.116	33.061	33.793	0.000	212.196
• RDTE 04 0604002F: *Air Force Weather Services Research*	0.951	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.951

Remarks

E. Acquisition Strategy

AF Weather has adopted a CI/CD approach to delivering capabilities rapidly and routinely using multiple contracts to support a family of systems through development, fielding and sustainment.

Cost Plus contracts are utilized for software development and sustainment and Fixed Firm Price contracts for Commercial-off-the-shelf [COTS] systems and Contract Logistics Support [CLS] efforts. Pre-competed General Services Administration [GSA], Defense Logistics Agency, and Defense Micro-Electronics Activity [DMEA] contract vehicles are leveraged when appropriate, and competitive and small-business awards are favored.

AFWS is jointly managed by the Air Force and the Space Force's Space Systems Command (SSC). The Air Force Program Executive Officer for Digital (AFPEO Digital) manages the ground-based atmospheric sensing and data analysis, atmospheric forecast systems, and PTWA. The Space Force Program Executive Officer for Space Domain Awareness and Combat Power (SFPEO/SDACP) manages the ground-based segments of space environment collection platforms as well as SWAFS.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force			Date: March 2023
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305111F / *Weather Service*	Project (Number/Name) 672738 / *Weather Service*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ExMet	C/CPAF	Not specified. : TBD	-	-		0.000	Mar 2023	0.549	Mar 2024	-		0.549	Continuing	Continuing	-
WDA INC 5, Develop web service, big data analytics, and ML/AI platform capabilities	C/CPAF	NextGen Federal Systems : Morgantown, WV	-	1.773	Feb 2022	3.638	Feb 2023	4.314	Feb 2024	-		4.314	Continuing	Continuing	-
WARPspeed (BIFROST, Mission Services, GSWR)	Various	Various : Various	-	8.245	Feb 2022	9.103	Feb 2023	8.697	Feb 2024	-		8.697	Continuing	Continuing	-
Commercial Weather Pilot Program	C/FFP	Various : Various	-	9.634	Jun 2022	10.000		-		-		-	Continuing	Continuing	-
Research on Atmospheric Rivers	Various	Various : Various	-	1.500	Jun 2022	5.000		-		-		-	Continuing	Continuing	-
Machine Learning	Various	Various : Various	-	-		3.000		-		-		-	Continuing	Continuing	-
AF Weather Transformation	Various	Various : Various	-	-		8.000		-		-		-	Continuing	Continuing	-
Dust Emission Forecasting	Various	Various : TBD	-	-		5.000		-		-		-	Continuing	Continuing	-
NWM 1 - Perform software enhancements to the mesoscale production model	MIPR	NCAR : Boulder, CO	-	-		-		-		-		-	Continuing	Continuing	-
NWM 2 - Improve land information system (LIS) application, providing earth surface boundary characterization for numerical modeling	Reqn	NASA : Greenbelt, MD	-	-		-		-		-		-	Continuing	Continuing	-
NWM - Develop and improve data assimilation techniques, system/ software optimization, and expanded system ingest/ integration for enhanced modeling capabilities	Various	Various : Various	-	9.315	Jan 2022	9.412	Jan 2023	12.769	Jan 2024	-		12.769	Continuing	Continuing	-
SWAFS Magnetospheric Energized Charged Particle (ECP) Hazard	PO	AFRL : Annapolis, MD	-	2.659	Jan 2022	0.000		0.000		-		0.000	0.000	2.659	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force			Date: March 2023
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Assessment System (HAS) Model Integration															
		Subtotal	-	33.126		53.153		26.329		-		26.329	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
46th TS/JITC AFLCMC	WR	46 TS : Offutt AFB, NE	-	0.166	Dec 2021	0.675	Dec 2022	-		-		-	Continuing	Continuing	-
		Subtotal	-	0.166		0.675		-		-		-	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Administration AFLCMC	C/CPFF	AFLCMC : Hanscom AFB, MA	-	2.526	Oct 2021	2.629	Oct 2022	-		-		-	Continuing	Continuing	-
FFRDC SMC	RO	Aerospace Corp : El Segundo, CA	-	0.706	Jan 2022	-		-		-		-	Continuing	Continuing	-
		Subtotal	-	3.232		2.629		-		-		-	Continuing	Continuing	N/A

	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	36.524		56.457		26.329		-		26.329	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305111F / *Weather Service*	**Project (Number/Name)** 672738 / *Weather Service*

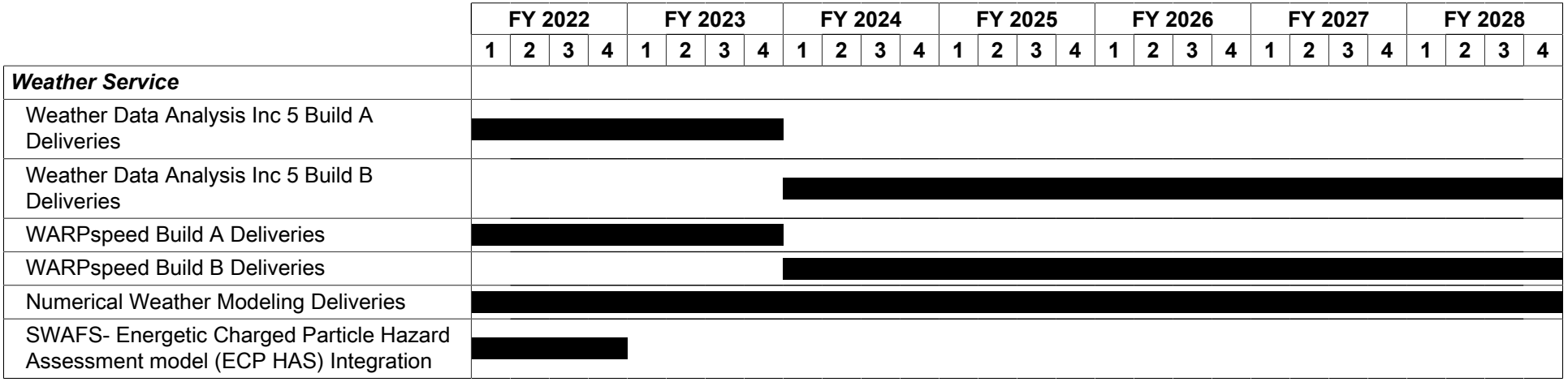

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305111F / *Weather Service*	**Project (Number/Name)** 672738 / *Weather Service*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Weather Service				
Weather Data Analysis Inc 5 Build A Deliveries	1	2022	4	2023
Weather Data Analysis Inc 5 Build B Deliveries	1	2024	4	2028
WARPspeed Build A Deliveries	1	2022	4	2023
WARPspeed Build B Deliveries	1	2024	4	2028
Numerical Weather Modeling Deliveries	1	2022	4	2028
SWAFS- Energetic Charged Particle Hazard Assessment model (ECP HAS) Integration	1	2022	4	2022