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

Appropriation/Budget Activity 3620F: <i>Research, Development, Test & Evaluation, Space Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 1203905SF / <i>Space System Support</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	-	0.000	37.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37.000
646021: <i>Space Warfighting Analysis Center (SWAC)</i>	-	0.000	37.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note
 In FY 2023, this program, BA 4 PE 1203905SF, Space System Support, Project 646021 Space Warfighting Analysis Center efforts were transferred to PE 1203622SF, Space Warfighting Analysis Center.

In FY 2022, Space Warfighting Analysis Center is a new start.

A. Mission Description and Budget Item Justification

The United States Space Force (USSF) initiated and activated the Space Warfighting Analysis Center (SWAC) in mid-FY 2021, and programmed FY 2022 funding to enable the organization to begin conducting its specialized mission. In the absence of a newly-created, SWAC-specific Program Element (PE) at the time of the budget request (FY 2022 President's Budget), the SWAC conducted FY 2022 efforts from Program Element 1203905SF (Space System Support) in the 3620 Research, Development, Test, and Evaluation (RDT&E) appropriation. In FY 2023, SWAC will begin using the newly established PE 1203622SF for all activities, thus, no further funding in FY 2023 will be directed to PE 1203905SF.

It is important to note that PE 1206730SF, Space Security Defense Program (SSDP) mission is distinctly different and intentionally separate from the USSF's SWAC; SSDP focuses its reach across the National Security Space spectrum and Space Control mission area while the SWAC's mission is aligned with Service authorities and focuses on USSF-specific priorities.

This effort is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	37.000	0.000	0.000	0.000
Current President's Budget	0.000	37.000	0.000	0.000	0.000
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• 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	0.000	0.000	0.000	0.000	0.000

Change Summary Explanation

In FY 2022, PE 1203905SF, Space System Support, Project 646021 was used for Space Warfighting Analysis Center (SWAC) activities. SWAC activities will continue efforts in FY 2023 from PE 1203622SF, Space Warfighting Analysis Center, 3620 Research, Development, Test, & Evaluation appropriation.

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 FY 2023 cannot be made in a relevant manner.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
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Title: Space Warfighting Analysis Center (SWAC)	0.000	37.000	0.000
Description: Space Warfighting Analysis Center (SWAC) will be resourced to inform operational concepts and Force Design guidance for United States Space Force (USSF) missions by conducting analysis, modeling, wargaming, and experimentation for Research, Development, Testing, and Evaluation (RDT&E) purposes.			
FY 2022 Plans: FY 2022 funding enables the Space Warfighting Analysis Center (SWAC) to organize and initiate the capability to conduct analysis, modeling, wargaming and experimentation to create operational concepts and develop Force Designs for the full spectrum of United States Space Force (USSF) missions. The SWAC's initial operational capability in FY 2022 specifically focuses on its Multi-Domain Awareness and Spectrum Warfare Centers of Excellence (COE) to plan and execute activities that inform the USSF's most pressing Force Design guidance. The Multi-Domain Awareness and Spectrum Warfare COEs conduct research studies, system design analysis and wargaming experimentation prototyping demonstrations across a variety of domains and mission areas to inform USSF Force designs for Research, Development, Testing, and Evaluation (RDT&E) purposes. SWAC activities discover, analyze, and validate technologies, systems, and architectures for the highest priority mission areas;			

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
<p>their products inform USSF resourcing, policy, and development decisions, as well as operational planning. Embedded in this work, SWAC establishes foundational modeling standards, guidelines, and identifies best practices to enable critical analysis, simulation, and wargaming. Under the Multi-Domain Awareness focus area, SWAC will refine the Missile Warning and Missile Tracking (MW/MT) force design and government reference design to inform the performance and resilience of the path forward for this critical mission area. FY 2022 funding provides an initial look at parametrically evaluated options to provide a missile defense fire control capability. Funding also supports an evaluation of Tactical ISR assessments of space based target tracking options enabling a recommendation for Ground Moving Target Indicator (GMTI). In the Spectrum Warfare mission area, SWAC will develop force designs for Space Data Transport (SDT), assessing priorities of the joint force against options to provide transport capacity.</p> <p>FY 2023 Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: N/A</p>			
Accomplishments/Planned Programs Subtotals	0.000	37.000	0.000

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

Remarks

E. Acquisition Strategy
N/A

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3620F / 4	R-1 Program Element (Number/Name) PE 1203905SF / <i>Space System Support</i>	Project (Number/Name) 646021 / <i>Space Warfighting Analysis Center (SWAC)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Space Warfighting Analysis Center (SWAC)</i>				
Multi-Domain Awareness (MDA) Force Design	3	2022	4	2022
MDA Missile Warning/Missile Tracking (MW.MT)	3	2022	4	2022
MDA-Tactical Intelligence, Surveillance, and Reconnaissance (T-ISR)	3	2022	4	2022
Spectrum Warfare (SW) Force Designs	3	2022	4	2022
SW-Space Data Transport (SDT)	3	2022	4	2022
SW-Navigation Warfare (NAVWAR) & Position, Navigation & Timing (PNT)	3	2022	4	2022
Force Design Integration (FDI)	3	2022	4	2022
FDI-Planning, Programming & Costing (P2C)	3	2022	4	2022
FDI- Annual Conferences; Capability Area Design(s), and Chief of Space Operations' Force Design Guidance	3	2022	4	2022