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

<b>Appropriation/Budget Activity</b> 3620F: <i>Research, Development, Test &amp; Evaluation, Space Force I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 1206458SF / <i>Tech Transition (Space)</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	50.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
64S444: <i>Experimentation (Space)</i>	-	0.000	50.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

The Tech Transition (Space) Program addresses the gap between initial system-level technology or concept development and demonstration, and successful acquisition and operational capability implementation. This program also matures new warfighting concepts to rapidly develop and experiment with fieldable prototypes to assess military utility of transition-ready weapon systems. Following the guidance in the National Defense Strategy, the Department of the Air Force has institutionalized Experimentation and Prototyping to achieve smarter, faster, and more efficient acquisitions that move technologies rapidly to support the most critical warfighting capabilities. Project 64S444, Experimentation (Space), explores new space-related concepts and their applications in potential future operating environments within a system-of-systems context, taking risks early in the acquisition process to drive a more optimized and efficient acquisition process and significantly reduce overall acquisitions costs. The Tech Transition Program allows acquisition program managers (the capability developers) and warfighters (the capability recipients and end users) to prototype, integrate, and demonstrate candidate technologies and assess them in an operational system-of-systems environment in partnership with Combatant Commanders, Major and Field Commands, Program Executive Officers, schoolhouses, simulation facilities, and development planning organizations.

This Program was a Congressionally-directed new start in FY 2022. It is a parallel effort to United States Air Force Program Element (PE) 0604858F, Tech Transition Program, Project 645350, Experimentation, and continues space-related work executed in that Program in prior fiscal years.

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>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	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	50.000	0.000	0.000	0.000
Total Adjustments	0.000	50.000	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	50.000			
• 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

**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 64S444: *Experimentation (Space)*

Congressional Add: *Program Increase - Arctic Communications*

Congressional Add Subtotals for Project: 64S444

Congressional Add Totals for all Projects

	<b>FY 2021</b>	<b>FY 2022</b>
	0.000	50.000
Congressional Add Subtotals for Project: 64S444	0.000	50.000
Congressional Add Totals for all Projects	0.000	50.000

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

**Congressional Add:** Program Increase - Arctic Communications

**FY 2021 Accomplishments:** N/A

**FY 2022 Plans:** Conduct Congressionally directed effort.

	<b>FY 2021</b>	<b>FY 2022</b>
<b>Congressional Add:</b> Program Increase - Arctic Communications	0.000	50.000
<b>FY 2021 Accomplishments:</b> N/A		
<b>FY 2022 Plans:</b> Conduct Congressionally directed effort.		
<b>Congressional Adds Subtotals</b>	0.000	50.000

**D. Other Program Funding Summary (\$ in Millions)**

N/A

**Remarks**

**E. Acquisition Strategy**

United States Space Force (USSF) Futures and Integration and the Office of the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics direct experimentation campaigns within this Program. The Air Force Research Lab (AFRL) at Wright-Patterson Air Force Base, Ohio manages and executes these efforts.

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**Appropriation/Budget Activity**  
3620F: *Research, Development, Test & Evaluation, Space Force I BA 4: Advanced Component Development & Prototypes (ACD&P)*

**R-1 Program Element (Number/Name)**  
PE 1206458SF / *Tech Transition (Space)*

The contracting approach includes full-and-open competition using the existing Defense Experimentation Using the Commercial Space Internet (DEUCSI) Acquisition Strategy. A specific Call for this effort has already been released. Contracts are expected to be awarded to Terminal Vendors and Test and Integration Groups.

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

<b>Appropriation/Budget Activity</b> 3620F / 4	<b>R-1 Program Element (Number/Name)</b> PE 1206458SF / <i>Tech Transition (Space)</i>	<b>Project (Number/Name)</b> 64S444 / <i>Experimentation (Space)</i>
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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			
Congressional Add Arctic Comm terminals	Various	Various : Various	-	-		40.000	Jul 2022	-		-		-	Continuing	Continuing	-
<b>Subtotal</b>			-	-		40.000		-		-		-	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			
Congressional Add Arctic Comm Test and Evaluation	Various	Various : Various	-	-		10.000	Dec 2022	-		-		-	Continuing	Continuing	-
<b>Subtotal</b>			-	-		10.000		-		-		-	Continuing	Continuing	N/A

			Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			-	-	50.000	-	-	-	Continuing	Continuing	N/A

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force** **Date:** April 2022

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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><i>Congressional Add Arctic Comm</i></b>	
Congressional Add - Arctic Comm	██████████
<b><i>Experimentation Campaign</i></b>	
Experimentation Campaign	██████████

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2023 Air Force **Date:** April 2022

<b>Appropriation/Budget Activity</b> 3620F / 4	<b>R-1 Program Element (Number/Name)</b> PE 1206458SF / <i>Tech Transition (Space)</i>	<b>Project (Number/Name)</b> 64S444 / <i>Experimentation (Space)</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Congressional Add Arctic Comm</i></b>				
Congressional Add - Arctic Comm	1	2022	4	2022
<b><i>Experimentation Campaign</i></b>				
Experimentation Campaign	1	2023	4	2023