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**Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603790F / NATO Research and Development
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	-	4.295	2.208	4.498	0.000	4.498	4.610	4.706	4.876	4.972	0.000	30.165
64NATO: <i>Nato Coop R&amp;D</i>	-	4.295	2.208	4.498	0.000	4.498	4.610	4.706	4.876	4.972	0.000	30.165
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Funds are used for air, space, and cyber international cooperative research, and development (ICR&D) agreements with North Atlantic Treaty Organization (NATO) member states, major non-NATO allies and friendly foreign countries. Each of the approved ICR&D projects are required to have a concluded international agreement (IA), prior to funds being released, that implements the provisions of Title 10 U.S. Code, Section 2350a. This legislation (Title 10 U.S. Code, Section 2350a) authorizes funds to significantly improve U.S. and allied conventional defense capabilities by leveraging the best defense technologies, eliminating costly duplication of R&D efforts, accelerating the availability of defense systems, and promoting US and allied interoperability or commonality. These funds will not be used for government civilian salaries, permanent construction, or spent overseas. This program element funds the implementation of DAF ICR&D agreements in (1) Basic Research (2) Applied Research (3) Advanced Technology Development (4) Advanced Component Development and Prototypes (5) System Development and Demonstration and (6) RDT&E Management Support.

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.

<b>B. Program Change Summary (\$ in Millions)</b>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>
Previous President's Budget	4.295	2.208	4.490	0.000	4.490
Current President's Budget	4.295	2.208	4.498	0.000	4.498
Total Adjustments	0.000	0.000	0.008	0.000	0.008
• 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	0.008	0.000	0.008

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

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<b>Title:</b> International Cooperative Research and Development	4.295	2.208	4.498	0.000	4.498

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

**Description:** Supports bi- and multi-lateral international agreements that meet DAF RDT&E objectives and goals. Each of the projects receiving NATO R&D funding must meet 2 or more of the following requirements: enhance warfighter capabilities; increase coalition interoperability; accelerate the availability of defense systems; strengthen coalition partnerships; gain access to the best technologies, capabilities, techniques, and/or facilities/ test ranges; build or sustain partnerships/influence with strategically important nations; and eliminate duplication of R&D efforts.

**FY 2024 Plans:**

FY2024 ICR&D projects involved RDT&E in the areas of: directed energy; hypersonics; autonomy; human performance; information systems; aerospace systems; munitions; materials and manufacturing; sensors; machine learning; space situational awareness; missile warning; military satellite communications; global positioning systems; responsive space capabilities; cyber network defense; quantum communication; deep space imaging; synthetic aviation fuel; information assurance; and space vehicles. Bilateral and multilateral cooperative agreements, in the above areas, are with the following countries: Australia, Canada, Estonia, France, Germany, India, Israel, Netherlands, Norway, Singapore, South Korea, Spain, Sweden, and the United Kingdom.

**FY 2025 Base Plans:**

Continue FY2024 ICR&D projects in: directed energy; hypersonics; autonomy; information systems; munitions; materials and manufacturing; sensors; space situational awareness; military satellite communications; global positioning systems; responsive space capabilities; cyber network defense; quantum communication; deep space imaging; synthetic aviation fuel; and space vehicles. FY2025 will focus on: artificial intelligence; positioning, navigation, and timing; non-chrome engine coating; unmanned aerial vehicles; collision avoidance; counter agile radar; small scalable kinetic weapons; fabrication; 3D printing; mission resilience; wearable sensors; deep space radars, and compact high power microwave. Bilateral and multilateral cooperative agreements, in the above areas, are with the following countries: Australia, Canada, Denmark, Estonia, Germany, India, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Singapore, South Korea, Sweden, and the United Kingdom.

**FY 2025 OCO Plans:**

\$0 are planned for FY 2024 OCO Plan.

**FY 2024 to FY 2025 Increase/Decrease Statement:**

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total

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<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603790F / NATO Research and Development
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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Funding increase will return the ICR&D effort to full funding ensuring the DAF can strengthen strategically important global partnerships and meet wafighter needs for the best capabilities to meet national security objectives.					
<b>Accomplishments/Planned Programs Subtotals</b>	4.295	2.208	4.498	0.000	4.498

<b>D. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• RDTE 04 0603790F: <i>NATO Research and Development</i>	-	-	0.000	0.000	0.000	-	-	-	-	0.000	0.000

**Remarks**

**E. Acquisition Strategy**

A principal goal of the NATO Cooperative R&D program is to effectively utilize the resources invested by the US and our allies in air, space, and cyber ICR&D projects. This program element provides the critical funding incentive needed to pursue air, space and cyber related ICR&D agreements and helps to (a) leverage USAF and allied resources through cost sharing and economies of scale; (b) exploit the best US and allied technologies for equipping coalition forces; (c) demonstrate areas of commonality or interoperability with our allies; and (d) accelerate the availability of defense technology and systems. Candidate projects are reviewed against DAF goals, DoD objectives, and warfighter needs prior to being approved. An international agreement defining project objectives, responsibilities, and costs is required prior to release of funds. To obtain these funds and ensure service commitment, projects are selected from existing or new RDT&E programs funded in the Future Years Defense Plan (FYDP). At a minimum, approved ICR&D projects must show that the project office is matching approved funding and allied funding will be equal to the total US DoD funding. Additional funding outside NATO Cooperative R&D program is the responsibility of the project/program office.





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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603790F / NATO Research and Development	<b>Project (Number/Name)</b> 64NATO / Nato Coop R&D

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>NATO Coop R&amp;D</b>				
FY 2025 Projects - Call Letter	1	2023	2	2023
FY 2025 Projects - Initial Project Review	2	2023	3	2023
FY 2025 Projects - Agreement developent	3	2023	1	2024
FY 2025 Projects - DAF Project Review Panel	1	2024	1	2024
FY 2025 Projects - International Agreement is staffed, negotiated, and concluded	1	2024	4	2024
FY 2025 Projects - RDT&E cooperative project work	1	2025	4	2029