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**Department of Defense
Fiscal Year (FY) 2024 Budget Estimates**

March 2023



Space Development Agency

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

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Department of Defense
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

<u>Appropriation</u>	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
Research, Development, Test and Evaluation, Defense-Wide	1,376,817				
Total Research, Development, Test, & Evaluation	1,376,817				

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Department of Defense
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
<u>Summary Recap of Budget Activities</u>					
Advanced Technology Development	166,615				
Advanced Component Development & Prototypes	1,160,227				
Management Support	49,975				
Total Research, Development, Test, & Evaluation	1,376,817				
<u>Summary Recap of FYDP Programs</u>					
Research and Development	49,975				
Space	1,326,842				
Total Research, Development, Test, & Evaluation	1,376,817				

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Defense-Wide
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
<u>Summary Recap of Budget Activities</u>					
Advanced Technology Development	166,615				
Advanced Component Development & Prototypes	1,160,227				
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Defense-Wide
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2023

<u>Appropriation</u>	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
Space Development Agency	1,376,817				
Total Research, Development, Test and Evaluation, Defense-Wide	1,376,817				

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Defense-Wide
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

Appropriation: 0400D Research, Development, Test and Evaluation, Defense-Wide

Line No	Program Element Number	Item	Act	Se c	FY 2022	FY 2023 Less	FY 2023	FY 2023 Total
					Actuals	Supplementals Enactment	Supplementals Enactment*	Enactment
73	1206310SDA	Space Science and Technology Research and Development	03	U	166,615			
		Advanced Technology Development			166,615			
127	1206410SDA	Space Technology Development and Prototyping	04	U	1,160,227			
		Advanced Component Development & Prototypes			1,160,227			
169	0605502SDA	Small Business Innovative Research	06	U	49,975			
		Management Support			49,975			
Total Research, Development, Test and Evaluation, Defense-Wide					1,376,817			

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Defense-Wide
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

Appropriation: 0400D Research, Development, Test and Evaluation, Defense-Wide

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>Se c</u>	<u>FY 2024 Request</u>
73	1206310SDA	Space Science and Technology Research and Development Advanced Technology Development	03	U	_____
127	1206410SDA	Space Technology Development and Prototyping Advanced Component Development & Prototypes	04	U	_____
169	0605502SDA	Small Business Innovative Research Management Support	06	U	_____

Total Research, Development, Test and Evaluation, Defense-Wide

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Space Development Agency
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

Appropriation: 0400D Research, Development, Test and Evaluation, Defense-Wide

Line No	Program Element Number	Item	Act	Se c	FY 2022	FY 2023 Less	FY 2023	FY 2023 Total
					Actuals	Supplementals Enactment	Supplementals Enactment*	Enactment
73	1206310SDA	Space Science and Technology Research and Development	03	U	166,615			
		Advanced Technology Development			166,615			
127	1206410SDA	Space Technology Development and Prototyping	04	U	1,160,227			
		Advanced Component Development & Prototypes			1,160,227			
169	0605502SDA	Small Business Innovative Research	06	U	49,975			
		Management Support			49,975			
Total Space Development Agency					1,376,817			

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Space Development Agency
 FY 2024 President's Budget
 Exhibit R-1 FY 2024 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2023

Appropriation: 0400D Research, Development, Test and Evaluation, Defense-Wide

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>Se c</u>	<u>FY 2024 Request</u>
73	1206310SDA	Space Science and Technology Research and Development Advanced Technology Development	03	U	_____
127	1206410SDA	Space Technology Development and Prototyping Advanced Component Development & Prototypes	04	U	_____
169	0605502SDA	Small Business Innovative Research Management Support	06	U	_____

Total Space Development Agency

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Space Development Agency • Budget Estimates FY 2024 • RDT&E Program

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Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line #	Budget Activity	Program Element Number	Program Element Title	Page
73	03	1206310SDA	Space Science and Technology Research and Development.....	Volume 5 - 1

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line #	Budget Activity	Program Element Number	Program Element Title	Page
127	04	1206410SDA	Space Technology Development and Prototyping.....	Volume 5 - 5

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line #	Budget Activity	Program Element Number	Program Element Title	Page
169	06	0605502SDA	Small Business Innovation Research (SBIR).....	Volume 5 - 25

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Small Business Innovation Research (SBIR)	0605502SDA	169	06.....	Volume 5 - 25
Space Science and Technology Research and Development	1206310SDA	73	03.....	Volume 5 - 1
Space Technology Development and Prototyping	1206410SDA	127	04.....	Volume 5 - 5

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)</i>	R-1 Program Element (Number/Name) PE 1206310SDA / <i>Space Science and Technology Research and Development</i>
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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	0.000	166.615	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
012: <i>Space Development Agency R&E</i>	0.000	166.615	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-

Note

This program and funding continue in FY 2023 forward under Appropriation 3620, Research, Development, Test & Evaluation, Space Force, PE 1206310SF. In accordance with the William M. (Mac) Thornberry National Defense Authorization Act (NDAA) for FY 2021, effective on October 1, 2022, Space Development Agency (SDA) is an element of the U.S. Space Force (USSF), and reports to Assistant Secretary of the Air Force (ASAF) for Space Acquisition and Integration (ASAF/SA&I) with respect to acquisition decisions and directly to the Chief of Space Operations with respect to requirements decisions, personnel decisions, and any other matter not covered by ASAF/SA&I.

A. Mission Description and Budget Item Justification

The Space Development Agency (SDA) is developing and demonstrating next generation space capabilities for the joint warfighter enabled by proliferation of satellites and a new acquisition model utilizing rapid spiral development. SDA is developing capabilities to address a wide range of Department of Defense (DoD) space needs as stated in the National Defense Strategy and DoD Space Vision, including low-latency tactical communication, beyond line of sight targeting, and advanced missile tracking. Specifically, SDA will demonstrate and field persistent, resilient capabilities needed to be responsive to emerging multi-domain threats against the U.S. national interest. SDA is responsible for the overall programmatic development and execution of a Proliferated Warfighter Space Architecture (PWSA). In coordination with other DoD Space stakeholders, SDA will drive the development of space capabilities to achieve the DoD Space Vision and reduce overlap and inefficiency. SDA will expand the DoD's space warfighting capability and foster growth in the U.S. space industrial base, by developing enhanced government-commercial relationships and international collaborations with key allies and partners.

While SDA is not responsible for building and fielding all capabilities within the PWSA, the Agency is responsible for orchestrating and architecting the PWSA and ensuring capability delivery to the warfighter following a spiral development approach. SDA is building and fielding the Transport Layer, a proliferated constellation of satellites to provide low-latency, high-volume data to the warfighter. This transport layer will provide the space-based data transport backbone for Joint All-Domain Command and Control (JADC2).

The establishment of a proliferated data transport layer is essential to developing a new and responsive space architecture. SDA will integrate additional constellations with this transport layer to provide multiple warfighting capabilities, such as advanced missile warning, 24/7/365 custody of time critical targets, and alternative position, navigation and timing (PNT) capabilities in navigation warfare (NAVWAR) resilient environments.

This program element funds efforts to develop and demonstrate a prototype proliferated communications and data transport layer and other capability layers in support of the National Defense Strategy.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Space Development Agency	Date: March 2023
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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)</i>	R-1 Program Element (Number/Name) PE 1206310SDA / <i>Space Science and Technology Research and Development</i>
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B. Program Change Summary (\$ in Millions)	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024 Base</u>	<u>FY 2024 OCO</u>	<u>FY 2024 Total</u>
Previous President's Budget	172.638	0.000	0.000	-	0.000
Current President's Budget	166.615	0.000	0.000	-	0.000
Total Adjustments	-6.023	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-6.023	-			

Change Summary Explanation

Funding continues in FY 2023 and out under Appropriation 3620, Research, Development, Test & Evaluation, Space Force, PE 1206310SF.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 1206310SDA / <i>Space Science and Technology Research and Development</i>	Project (Number/Name) 012 / <i>Space Development Agency R&E</i>
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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
012: <i>Space Development Agency R&E</i>	0.000	166.615	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note

Funding continues in FY 2023 and out under Appropriation 3620, Research, Development, Test & Evaluation, Space Force, PE 1206310SF.

A. Mission Description and Budget Item Justification

The Space Development Agency (SDA) is developing and demonstrating next generation space capabilities for the joint warfighter enabled by proliferation of satellites and a new acquisition model utilizing rapid spiral development. SDA is developing capabilities to address a wide range of Department of Defense (DoD) space needs as stated in the National Defense Strategy and DoD Space Vision, including low-latency tactical communication, beyond line of sight targeting, and advanced missile tracking. SDA will orchestrate the rapid development and fielding of the Proliferated Warfighter Space Architecture (PWSA), a resilient military sensing and data transport capability via a proliferated space architecture in low-earth orbit.

This program element funds the research and development activity to deliver capabilities to U.S. joint warfighting forces in two-year tranches, beginning in FY 2022, including performing trade studies, technical analyses, or modeling and simulation; identifying and maturing enabling technologies; defining and conducting risk reduction demonstrations, prototyping hardware or software systems; and exploring novel concepts for future warfighting capabilities.

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

	FY 2022	FY 2023	FY 2024
Title: Space Development Agency R&E	166.615	-	-
Description: Research and development activities to support development, demonstration, and fielding of a resilient military sensing and data transport capability via a proliferated space architecture in Low Earth Orbit (LEO).			
Accomplishments/Planned Programs Subtotals	166.615	-	-

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

N/A

Remarks

D. Acquisition Strategy

Partners for these activities include DoD research centers, small businesses, large defense contractors, commercial space providers, Federally Funded Research and Development Centers, University Affiliated Research Centers, and Space Systems Command (SSC). SDA is also a transition partner for technology developers seeking to conduct on-orbit experimentation and prototyping.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>
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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	0.000	1,160.227	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
001: <i>Transport</i>	0.000	265.064	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
002: <i>Sensing</i>	0.000	758.905	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
003: <i>Integration and Battle Management</i>	0.000	136.258	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-

Note

This program and funding continue in FY 2023 forward under Appropriation 3620, Research, Development, Test & Evaluation, Space Force, PE 1206410SF. In accordance with the William M. (Mac) Thornberry National Defense Authorization Act (NDAA) for FY 2021, effective on October 1, 2022, Space Development Agency (SDA) is an element of the U.S. Space Force (USSF), and reports to Assistant Secretary of the Air Force (ASAF) for Space Acquisition and Integration (ASAF/SA&I) with respect to acquisition decisions and directly to the Chief of Space Operations with respect to requirements decisions, personnel decisions, and any other matter not covered by ASAF/SA&I.

A. Mission Description and Budget Item Justification

SDA is responsible for developing and demonstrating the next generation space architecture to enable U.S. military operations to be responsive to emerging multi-domain threats against our national security. To achieve that goal, SDA will help inform the Department of Defense (DoD)'s decision to develop and implement a proliferated architecture enabled by lower-cost, mass-produced spacecraft and routine space access; shift the DoD to a development organization focused on experimentation, prototyping, and accelerated fielding. SDA will manage, direct, and execute the development of the space capabilities for the joint warfighter in accordance with DoD's Space Vision and field space capabilities at speed and scale, with the following goals:

- Bold breakthroughs designed to out-pace our competitors,
- Technology maturation and systems engineering,
- Lean engineering, manufacturing, and support,
- Industrial base expansion; streamlined development and acquisition process, and
- Increased acquisition cooperation with the National Reconnaissance Office (NRO).

SDA will rapidly deploy critical elements of next-generation space capabilities, initially focusing on these essential capabilities:

- Persistent global surveillance for advanced missile targeting,
- Indications, warnings, targeting, and tracking for defense against advanced missile threats,
- Alternate position, navigation, and timing (PNT) for a navigation warfare (NAVWAR) resilient environment,
- Global and near-real time space situational awareness,

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>
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- Responsive, resilient, common ground-based space support infrastructure (e.g., ground stations and launch capability),
- Cross-domain, networked, node-independent battle management command, control, and communications (BMC3), and
- Highly-scaled, low-latency, persistent, artificial intelligence-enabled global surveillance.

The establishment of a data transport layer in Low Earth Orbit (LEO) is essential to developing a new, responsive space architecture, and will be SDA's primary initial focus within the Proliferated Warfighter Space Architecture (PWSA). SDA will develop an initial set of sub-constellations on this Transport Layer to provide additional capabilities, such as advanced missile warning.

This program element funds efforts to develop and demonstrate a prototype proliferated Low Earth Orbit (pLEO) communications and data transport layer and its sub-constellations in support of the DoD Space Vision.

B. Program Change Summary (\$ in Millions)	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024 Base</u>	<u>FY 2024 OCO</u>	<u>FY 2024 Total</u>
Previous President's Budget	1,204.179	0.000	0.000	-	0.000
Current President's Budget	1,160.227	0.000	0.000	-	0.000
Total Adjustments	-43.952	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-43.952	-			

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

Project: 001: *Transport*

Congressional Add: *Laser Communication Router Demonstration System*

Congressional Add Subtotals for Project: 001

Project: 002: *Sensing*

Congressional Add: *Missile Tracking Demonstration (Tracking Layer)*

Congressional Add Subtotals for Project: 002

Project: 003: *Integration and Battle Management*

Congressional Add: *Space Networking Centers*

	<u>FY 2022</u>	<u>FY 2023</u>
	12.000	-
	12.000	-
	550.000	-
	550.000	-
	18.000	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Space Development Agency	Date: March 2023
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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>
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Congressional Add Details (\$ in Millions, and Includes General Reductions)

	FY 2022	FY 2023
Congressional Add Subtotals for Project: 003	18.000	-
Congressional Add Totals for all Projects	580.000	-

Change Summary Explanation

Starting in FY 2023, the program and funding for PE 1206410SDA has been transferred to Appropriation 3620, RDT&E, Space Force, PE 1206410SF.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 001 / <i>Transport</i>
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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
001: <i>Transport</i>	0.000	265.064	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

Note

Funding in FY 2023 and future years has been transferred to Program Element (PE) 1206410SF under the U.S. Space Force (USSF).

A. Mission Description and Budget Item Justification

SDA is developing and demonstrating next generation space capabilities for the joint warfighter enabled by proliferation of satellites in Low Earth Orbit (LEO) and a new acquisition model utilizing rapid spiral development. SDA is developing capabilities to address a wide range of Department of Defense (DoD) space needs as stated in the National Defense Strategy and DoD Space Vision, including low-latency tactical communication enabling beyond line of sight targeting and advanced missile tracking. SDA is orchestrating the rapid development and fielding of the Proliferated Warfighter Space Architecture (PWSA), a resilient military sensing and data transport capability via a proliferated space architecture in LEO. This program element funds the development and demonstration of space technologies to deliver low-latency data transport and alternate position, navigation, and timing capabilities to U.S. joint warfighting forces in bi-annual tranches, beginning in FY 2022.

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

	FY 2022	FY 2023	FY 2024
Title: Transport	253.064	-	-
Description: Rapidly develop, deploy and demonstrate prototypes that enable a resilient and unified military data transport layer, sensor capabilities, and alternate position, navigation, and timing (APNT) capabilities enabled by a proliferated Low Earth Orbit (pLEO) architecture. This effort will define, demonstrate, and deliver the architectures and standards necessary to rapidly prototype and field new satellite capabilities in LEO.			
Accomplishments/Planned Programs Subtotals	253.064	-	-

	FY 2022	FY 2023
Congressional Add: Laser Communication Router Demonstration System	12.000	-
FY 2022 Accomplishments: Conducting Space-to-Air Free Space Optical demonstration, called STALLION, utilizing laser communication capabilities from a General Atomics (GA) produced laser communication terminal mounted on a MQ-9. Completed final design review in December 2022 and is on track to complete system integration in July 2023. STALLION, mounted to a MQ-9 Reaper for the airborne asset, will test with SDA's Tranche 0 experimental space vehicles (launching March 2023). Additionally, planning the design, development and integration for two satellites that will demonstrate free space optical communication terminals that are		

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 001 / <i>Transport</i>

	FY 2022	FY 2023
modular, scalable, high bandwidth and long range. These satellites will interoperate with SDA's Tranche 1 experimental space vehicles (launching September 2024) as well as planned surface receivers for fielded forces.		
Congressional Adds Subtotals	12.000	-

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

N/A

Remarks

D. Acquisition Strategy

Partners for these activities included Missile Defense Agency (MDA), Space Systems Command (SSC), DoD research centers, small businesses, large defense contractors, commercial space providers, Federally Funded Research and Development Centers, and University Affiliated Research Centers. Tranche 1 has been approved to Middle Tier of Acquisition, enabling rapid prototyping.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 001 / <i>Transport</i>
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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Transport Tranche 0	C/FFP	Lockheed Martin : Littleton, CO	0.000	98.924	Oct 2021	0.000		-		-		-	-	-	-
Transport Tranche 0	C/FFP	York Space Systems : Denver, CO	0.000	50.943	Jan 2022	0.000		-		-		-	-	-	-
Transport Tranche 1	C/FFP	Lockheed Martin : Littleton, CO	0.000	36.958	Feb 2022	0.000		-		-		-	-	-	-
Transport Tranche 1	C/FFP	York Space Systems : Denver, CO	0.000	22.023	Feb 2022	0.000		-		-		-	-	-	-
Transport Tranche 1	C/FFP	Northrop Grumman : Redondo Beach, CA	0.000	7.353	Jun 2022	0.000		-		-		-	-	-	-
Transport Tranche 1	MIPR	Naval Research Laboratory : Washington, DC	0.000	0.277	Jan 2023	0.000		-		-		-	-	-	-
Transport Tranche 1	MIPR	96th Test Wing : Eglin AFB, FL	0.000	0.030	Oct 2022	0.000		-		-		-	-	-	-
Transport Tranche 1	C/FFP	United Launch Services : Centennial, CO	0.000	0.440	Jul 2022	0.000		-		-		-	-	-	-
Transport Tranche 1	C/FFP	SpaceX : Hawthorne, CA	0.000	2.491	Jul 2022	0.000		-		-		-	-	-	-
Tranche 1 Crypto Risk Reduction	SS/TBD	Missile Defense Agency (MDA) : Ft. Belvoir, VA	0.000	1.541	Mar 2022	0.000		-		-		-	-	-	-
Transport Tranche 1 Operations & Integration	C/CPFF	General Dynamics Mission Systems : Scottsdale, AZ	0.000	33.092	May 2022	0.000		-		-		-	-	-	-
Laser Communication Router Demonstration System	C/FFP	General Atomics : San Diego, CA	0.000	9.837	Nov 2022	0.000		-		-		-	-	-	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 001 / <i>Transport</i>

FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
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

Transport	
Complete the development of Transport Tranche 0 space vehicles.	
Launch and early operations of Tranche 0 Transport satellites.	
Begin design and development of Tranche 1 Transport Layer space vehicle systems.	
Begin design and development of Tranche 1 Transport Layer ground systems and operations plans.	
Laser Communication Router Demonstration System	
Perform technology evaluations to inform requirements for space to air capabilities and laser communication router demonstration system.	
Develop laser communication router demonstration system.	
Test and evaluate developed laser communication router demonstration system.	

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 001 / <i>Transport</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Transport</i>				
Complete the development of Transport Tranche 0 space vehicles.	1	2022	4	2023
Launch and early operations of Tranche 0 Transport satellites.	2	2023	3	2023
Begin design and development of Tranche 1 Transport Layer space vehicle systems.	2	2022	4	2023
Begin design and development of Tranche 1 Transport Layer ground systems and operations plans.	3	2022	4	2023
<i>Laser Communication Router Demonstration System</i>				
Perform technology evaluations to inform requirements for space to air capabilities and laser communication router demonstration system.	3	2022	2	2023
Develop laser communication router demonstration system.	2	2023	3	2023
Test and evaluate developed laser communication router demonstration system.	3	2023	4	2023

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 002 / <i>Sensing</i>
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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
002: <i>Sensing</i>	0.000	758.905	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding in FY 2023 and future years has been transferred to Program Element (PE) 1206410SF under the U.S. Space Force (USSF).

A. Mission Description and Budget Item Justification

SDA is developing and demonstrating next generation space capabilities for the joint warfighter enabled by proliferation of satellites in Low Earth Orbit (LEO) and a new acquisition model utilizing rapid spiral development. SDA is developing capabilities to address a wide range of Department of Defense (DoD) space needs as stated in the National Defense Strategy and DoD Space Vision, including advanced missile tracking and global surveillance enabling beyond-line-of-sight targeting. SDA will orchestrate the rapid development and fielding of the Proliferated Warfighter Space Architecture (PWSA), a resilient military sensing and data transport capability via a proliferated space architecture in LEO. This program element funds the development and demonstration of space technologies to deliver advanced missile tracking, global surveillance, and enhanced space domain awareness and deterrence capabilities to U.S. joint warfighting forces in bi-annual tranches, beginning in FY 2022.

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

	FY 2022	FY 2023	FY 2024
Title: Sensing	208.905	-	-
Description: Develop and demonstrate payload prototypes compatible with a proliferated Low Earth Orbit (pLEO) architecture. This effort focused on developing and demonstrating sensors for beyond-line-of-sight targeting, space-to-space data links, space-to-tactical data links, and advanced missile warning/missile tracking capabilities to enable enhanced space domain awareness. On-orbit demonstrations will be tied to existing mission-specific ground infrastructure, when it exists. Ground infrastructure will be linked or developed to support payload integration and data processing.			
Accomplishments/Planned Programs Subtotals	208.905	-	-

	FY 2022	FY 2023
Congressional Add: Missile Tracking Demonstration (Tracking Layer)	550.000	-
FY 2022 Accomplishments: Awarded Tranche 1 (T1) Tracking Other Transaction Authority (OTA) agreements to multiple vendors to develop a total of 28 Wide Field of View (WFOV) satellites. Awarded T1 Medium Field of View (MFOV) demonstration OTAs to multiple vendors leveraging prototypes from MDA's HBTSS program to accelerate fire control integration into future PWSA tranches. Completed WFOV and MFOV program kick-offs and System Requirement Reviews (SRRs). Completed sub-system Preliminary Design Reviews for WFOV and MFOV subsystems for IR payloads, space vehicle busses, and command and control systems. Awarded		

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 002 / <i>Sensing</i>
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	FY 2022	FY 2023
option to integrate Tracking Ground systems into T1 Operations & Integration (O&I) contract. Began integration activities between Real-time Transfer Service (RTS) and T1 Tracking Layer Ground Stations.		
Congressional Adds Subtotals	550.000	-

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

N/A

Remarks

D. Acquisition Strategy

Partners for these activities may include Missile Defense Agency (MDA), Space Systems Command (SSC), DoD Combatant Commands, DoD research centers, small businesses, large defense contractors, commercial space providers, Federally Funded Research and Development Centers, and University Affiliated Research Centers.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / Space Technology Development and Prototyping	Project (Number/Name) 002 / Sensing
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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Tracking Prototype Infrared Payload	C/FFP	Northrop Grumman : Redondo Beach, CA	0.000	0.366	Oct 2021	0.000		-		-		-	-	-	-
Tracking Tranche 0	C/FFP	L3Harris : Palm Bay, FL	0.000	128.667	Nov 2021	0.000		-		-		-	-	-	-
Tracking Tranche 0	C/FFP	SpaceX : Hawthorne, CA	0.000	99.947	Oct 2021	0.000		-		-		-	-	-	-
Tracking Tranche 1	C/FFP	L3Harris : Palm Bay, FL	0.000	269.461	Jul 2022	0.000		-		-		-	-	-	-
Tracking Tranche 1	C/FFP	Northrop Grumman : Redondo Beach, CA	0.000	239.344	Jul 2022	0.000		-		-		-	-	-	-
Tracking Tranche 1	C/CPFF	General Dynamics Mission Systems : Scottsdale, AZ	0.000	14.454	Aug 2022	0.000		-		-		-	-	-	-
Tracking Tranche 1	C/FFP	United Launch Services : Centennial, CO	0.000	0.672	Feb 2023	0.000		-		-		-	-	-	-
Tracking Tranche 1	C/FFP	SpaceX : Hawthorne, CA	0.000	3.491	Jan 2023	0.000		-		-		-	-	-	-
Tracking Tranche 1	MIPR	TBD : TBD	0.000	2.503	Feb 2023	0.000		-		-		-	-	-	-
Subtotal			0.000	758.905		0.000		-		-		-	-	-	N/A

	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	758.905	0.000	-	-	-	-	-	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 002 / <i>Sensing</i>

FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
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

Sensing	
Complete the development of Tracking Tranche 0 space vehicles.	
Launch, integration with Transport Layer, and early operations of Tranche 0 Tracking satellites.	
Begin planning activities for follow-on tranche capabilities.	
Develop multi-INT data fusion and dissemination algorithms.	
Missile Tracking Demonstration (Tracking Layer)	
Develop Tranche 1 Tracking satellites	
Develop Tranche 1 Tracking payload data management	
Develop Tranche 1 Tracking Ground Stations	
Integrate into Real-time Transfer Service (RTS)	

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 002 / <i>Sensing</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Sensing</i>				
Complete the development of Tracking Tranche 0 space vehicles.	1	2022	2	2023
Launch, integration with Transport Layer, and early operations of Tranche 0 Tracking satellites.	2	2023	3	2023
Begin planning activities for follow-on tranche capabilities.	1	2022	4	2023
Develop multi-INT data fusion and dissemination algorithms.	1	2022	4	2023
<i>Missile Tracking Demonstration (Tracking Layer)</i>				
Develop Tranche 1 Tracking satellites	4	2022	2	2025
Develop Tranche 1 Tracking payload data management	4	2022	2	2025
Develop Tranche 1 Tracking Ground Stations	4	2022	2	2025
Integrate into Real-time Transfer Service (RTS)	4	2022	2	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>				Project (Number/Name) 003 / <i>Integration and Battle Management</i>			
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
<i>003: Integration and Battle Management</i>	0.000	136.258	0.000	0.000	-	0.000	0.000	0.000	0.000	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding in FY 2023 and future years has been transferred to Program Element (PE) 1206410SF under the U.S. Space Force (USSF).

A. Mission Description and Budget Item Justification

SDA is developing and demonstrating next generation space capabilities for the joint warfighter enabled by proliferation of satellites in Low Earth Orbit (LEO) and a new acquisition model utilizing rapid spiral development. SDA is developing capabilities to address a wide range of Department of Defense (DoD) space needs as stated in the National Defense Strategy and DoD Space Vision, including space-based battle management and a ground support infrastructure. SDA will orchestrate the rapid development and fielding of the Proliferated Warfighter Space Architecture (PWSA), a resilient military sensing and data transport capability via a proliferated space architecture in LEO. This program element funds the development and demonstration of space technologies to deliver space-based command and control, tasking, mission processing and dissemination capabilities, as well as an integrated, resilient network of ground support capabilities, to U.S. joint warfighting forces in bi-annual tranches, beginning in FY 2023.

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

	FY 2022	FY 2023	FY 2024
Title: Integration and Battle Management	118.258	-	-
Description: Deliver capabilities to U.S. joint warfighting forces in two-year enhanced capability tranches, beginning in FY 2023. Products include but are not limited to performing trade studies, technical analyses, or modeling and simulation; identifying and maturing enabling technologies; defining and conducting ground-based and on-orbit risk reduction demonstrations, prototyping hardware or software systems; and exploring novel concepts for future warfighting capabilities augmented by a resilient proliferated Low Earth Orbit (pLEO) satellite architecture.			
Accomplishments/Planned Programs Subtotals	118.258	-	-

	FY 2022	FY 2023
Congressional Add: Space Networking Centers	18.000	-
FY 2022 Accomplishments: Finalized plans for SDA Space Networking Centers (SNCs) and Ground Entry Points with host installations. Modification/reassembly of facility space for SDA's networking and operations centers underway at both SNC-North (Grand Forks, ND) and SNC-South (Redstone Arsenal, AL). Assessed existing utilities (HVAC, power, water, etc..) for SDA operations and upgrades are in progress. Upgrades in		

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 003 / <i>Integration and Battle Management</i>

	FY 2022	FY 2023
progress for host installation operational/administrative terrestrial networking services. Conducting development and integration/functionality testing for mission readiness. Preparing SDA's SNCs (North and South) for Tranche 1 network operations. Establishing SDA ground capability and preparing for Tranche 1 network operations.		
Congressional Adds Subtotals	18.000	-

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

N/A

Remarks

D. Acquisition Strategy

Partners for these activities included a large defense contractor, United States Army Corps of Engineers (USACE), United States Army Garrison Redstone Arsenal, and the Defense Information Systems Agency (DISA).

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 1206410SDA / <i>Space Technology Development and Prototyping</i>	Project (Number/Name) 003 / <i>Integration and Battle Management</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Integration and Battle Management</i>				
Complete the development of an initial battle management architecture.	1	2022	4	2023
Complete the development of Tranche 0 ground support infrastructure.	1	2022	4	2023
Manage Tranche 0 constellation operations.	2	2023	4	2023
Begin planning activities for follow-on tranche capabilities.	1	2022	4	2023
<i>Space Networking Centers</i>				
Modify/reassemble facility space, and upgrade existing utilities and terrestrial networking services for SDA's networking and operations centers.	3	2022	4	2023
Prepare Space Networking Centers and establish SDA ground capability for Tranche 1 network operations.	4	2022	4	2023

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Space Development Agency **Date:** March 2023

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605502SDA I <i>Small Business Innovation Research (SBIR)</i>
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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	9.249	49.975	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	Continuing	Continuing
197: <i>Small Business Innovation Research</i>	8.109	43.814	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	Continuing	Continuing
198: <i>Small Business Technology Transfer</i>	1.140	6.161	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The goals of the Small Business Innovation Research (SBIR) program are to stimulate technological innovation, increase private sector commercialization of federal research and development (R&D), increase small business participation in federally funded R&D, and foster participation by minority and disadvantaged firms in technological innovation. Leveraging the innovation of small business concerns is an important contributor to the development of the cutting edge technologies that will generate decisive and sustained U.S. military advantages by increasing the readiness, modernization and lethality of the Joint Force. This program supports high priority projects within the DoD Components, their missions, and the Warfighter. The goals of the Small Business Technology Transfer (STTR) program are to stimulate a partnership of ideas between small business concerns (SBCs) and research institutions through DoD funded research or research and development (R/R&D). By providing awards to SBCs or cooperative R/R&D efforts with research institutions, the DoD supports innovation and economic growth to generate decisive and sustained U.S. military advantages. This program supports high priority projects within the DoD Components, their missions, and the Warfighter.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	49.975	0.000	0.000	-	0.000
Total Adjustments	49.975	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	49.975	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency										Date: March 2023		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605502SDA / <i>Small Business Innovation Research (SBIR)</i>			Project (Number/Name) 197 / <i>Small Business Innovation Research</i>				
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
197: <i>Small Business Innovation Research</i>	8.109	43.814	0.000	0.000	-	0.000	0.000	0.000	0.000	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In accordance with the William M. (Mac) Thornberry National Defense Authorization Act (NDAA) for FY 2021, effective on October 1, 2022, SDA is an element of the U.S. Space Force (USSF), and reports to Assistant Secretary of the Air Force (ASAF) for Space Acquisition and Integration (ASAF/SA&I) with respect to acquisition decisions and directly to the Chief of Space Operations with respect to requirements decisions, personnel decisions, and any other matter not covered by ASAF/SA&I.

A. Mission Description and Budget Item Justification

The goals of the Small Business Innovation Research (SBIR) program are to stimulate technological innovation, increase private sector commercialization of federal research and development (R&D), increase small business participation in federally funded R&D, and foster participation by minority and disadvantaged firms in technological innovation. Leveraging the innovation of small business concerns is an important contributor to the development of the cutting edge technologies that will generate decisive and sustained U.S. military advantages by increasing the readiness, modernization and lethality of the Joint Force. This program supports high priority projects within the DoD Components, their missions, and the Warfighter.

Numerous, capable small businesses are driving down the cost of accessing and utilizing space, which is accelerating the commoditization of space hardware and software. The SDA highly leverages the SBIR program to invest in the research, development, and demonstration of innovative technologies from these small businesses that support the modernization of our national defense space capabilities. These SBIR opportunities have the potential to enhance future tranches and inform the spiral development projects that demonstrate enhanced warfighter capability via proliferated a low Earth orbit architecture. This program has sought investments in the following space-based technology areas : laser communications; novel antenna steering methods; data networking; automated encryption; on-orbit data fusion algorithms; reduced size, weight, and power multi-modal sensors; higher accuracy, low latency information processing; and space-related modeling and simulation testbeds.

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

	FY 2022	FY 2023	FY 2024
Title: Small Business Innovation Research	43.814	-	-
Description: This project funds small business research and development activities providing analysis products and enabling technologies and capabilities for the Proliferated Warfighter Space Architecture (PWSA).			
In FY 2022, SDA funded proposals from the following topics:			
- Free-Space Optical Communication (FSOC) Technology for Optical Intersatellite Links (OISLs)			
- Integrated Architecture Technology (IAT)			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605502SDA / <i>Small Business Innovation Research (SBIR)</i>	Project (Number/Name) 197 / <i>Small Business Innovation Research</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
- Mesh Network NSA Certifiable Cryptographic Solution - Prototype On-Orbit Experimental Testbed (POET)			
A portion of the remaining funding will be sent to AFWERX, a United States Air Force program with the goal of fostering a culture of innovation within the service. SDA will work with AFWERX to release agency-specific topics and potentially fund proposals submitted through their open solicitation.			
Accomplishments/Planned Programs Subtotals	43.814	-	-

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

N/A

Remarks

D. Acquisition Strategy

Partners for these activities include small businesses.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency										Date: March 2023		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605502SDA / <i>Small Business Innovation Research (SBIR)</i>				Project (Number/Name) 198 / <i>Small Business Technology Transfer</i>			
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
198: <i>Small Business Technology Transfer</i>	1.140	6.161	0.000	0.000	-	0.000	0.000	0.000	0.000	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In accordance with the William M. (Mac) Thornberry National Defense Authorization Act (NDAA) for FY 2021, effective on October 1, 2022, SDA is an element of the U.S. Space Force (USSF), and reports to Assistant Secretary of the Air Force (ASAF) for Space Acquisition and Integration (ASAF/SA&I) with respect to acquisition decisions and directly to the Chief of Space Operations with respect to requirements decisions, personnel decisions, and any other matter not covered by ASAF/SA&I.

A. Mission Description and Budget Item Justification

The goals of the Small Business Technology Transfer (STTR) program are to stimulate a partnership of ideas between small business concerns (SBCs) and research institutions through DoD funded research or research and development (R/R&D). By providing awards to SBCs or cooperative R/R&D efforts with research institutions, DoD supports innovation and economic growth to generate decisive and sustained U.S. military advantages. This program supports high priority projects within the DoD Components, their missions, and the Warfighter.

SDA leverages STTR funds to support the collaborative development of defense space technologies by small businesses partnering with U.S. research institutions. By supporting such partnerships between emerging technology development companies and leading research organizations, SDA will help to foster the growth of a stronger, more integrated space industrial base while addressing our nation's greatest technical challenges in space. These STTR opportunities have the potential to enhance future tranches and inform the overall architecture of spiral development projects to demonstrate warfighter capability via proliferated low Earth orbit.

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

	FY 2022	FY 2023	FY 2024
Title: Small Business Technology Transfer	6.161	-	-
Description: This project supports collaborative research and development activities by small businesses and research institutions providing enabling technologies and capabilities for the Proliferated Warfighter Space Architecture (PWSA).			
In FY 2022, SDA funded proposals from the following topics: - Mesh Network NSA Certifiable Cryptographic Solution - Target Recognition and Acquisition in Complex Environments (TRACE)			
A portion of the remaining funding will be sent to AFWERX, a United States Air Force program with the goal of fostering a culture of innovation within the service. SDA will work with AFWERX to release agency-specific topics and potentially fund proposals submitted through their open solicitation.			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Space Development Agency		Date: March 2023
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605502SDA / <i>Small Business Innovation Research (SBIR)</i>	Project (Number/Name) 198 / <i>Small Business Technology Transfer</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Accomplishments/Planned Programs Subtotals	6.161	-	-

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

N/A

Remarks

D. Acquisition Strategy

Partners for these activities include small businesses teamed with a non-profit research institution.

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