



**Office of the Under Secretary of Defense
(Comptroller)/Chief Financial Officer
March 2024**



Program Acquisition Cost by Weapon System

**United States Department of Defense
Fiscal Year 2025 Budget Request**

The estimated cost of this report or study for the Department of Defense is approximately \$45,000 for the 2024 Fiscal Year. This includes \$12,000 in expenses and \$33,000 in DoD labor.

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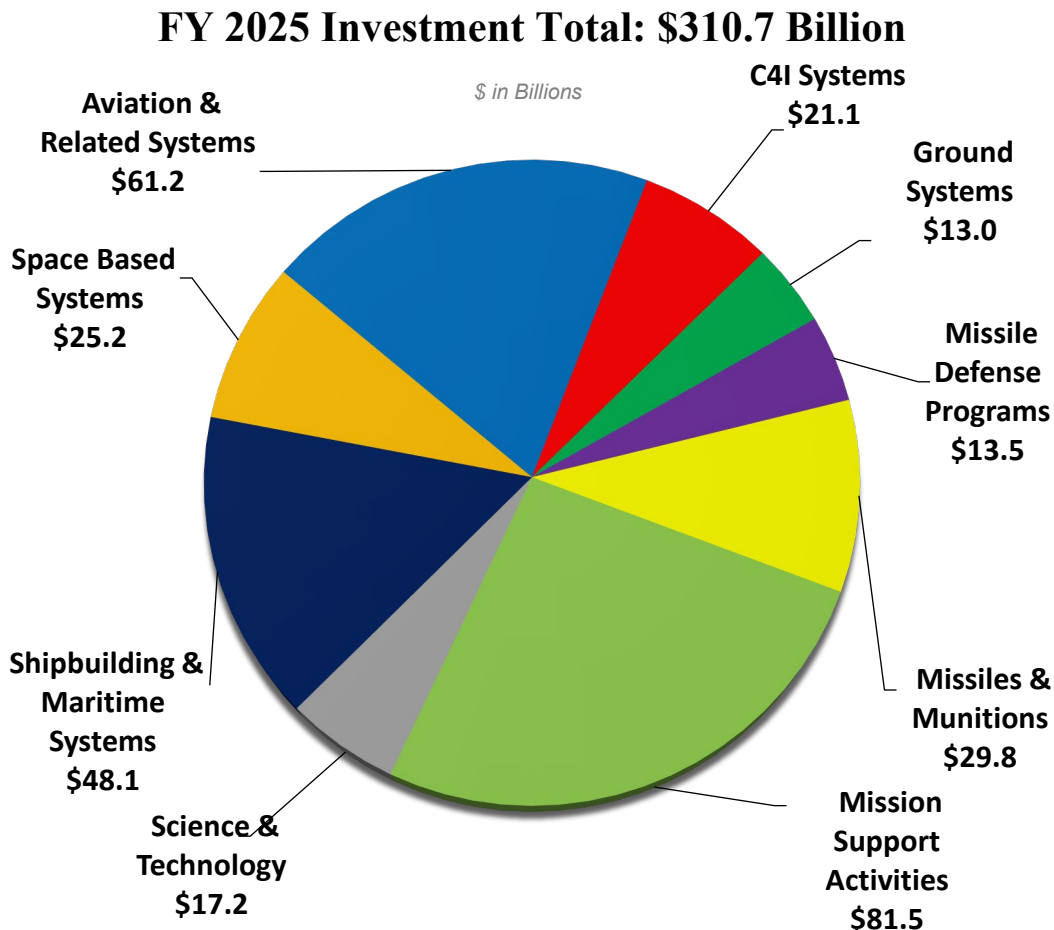
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Major Weapon Systems

Overview

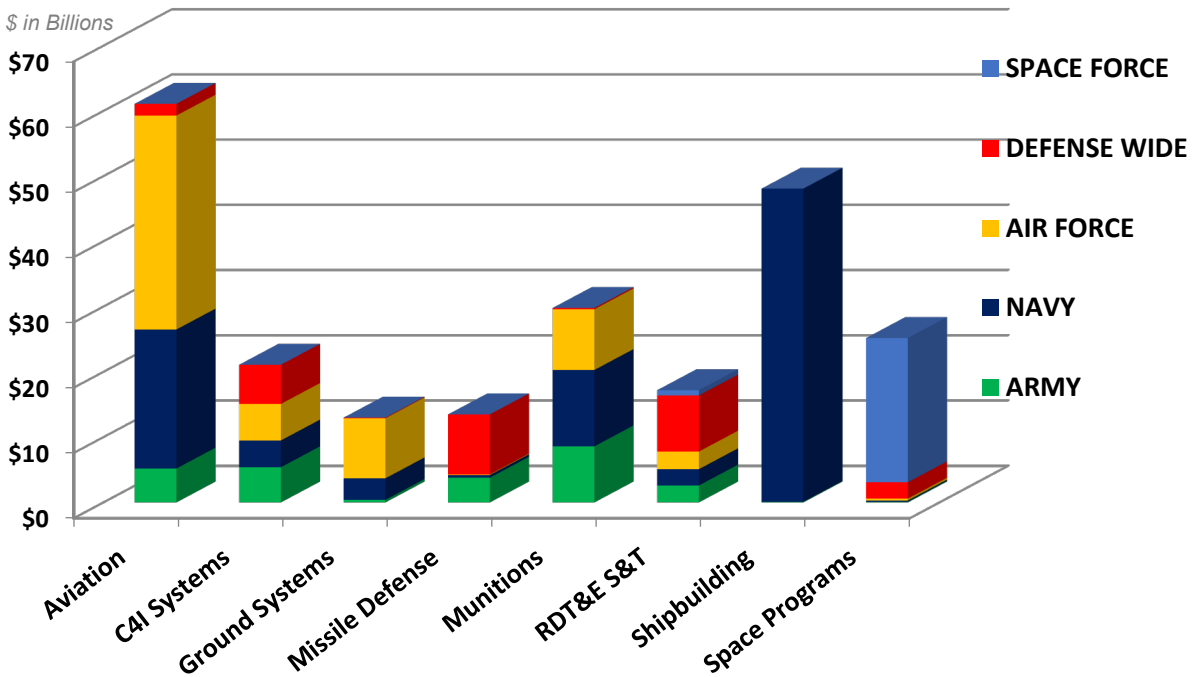
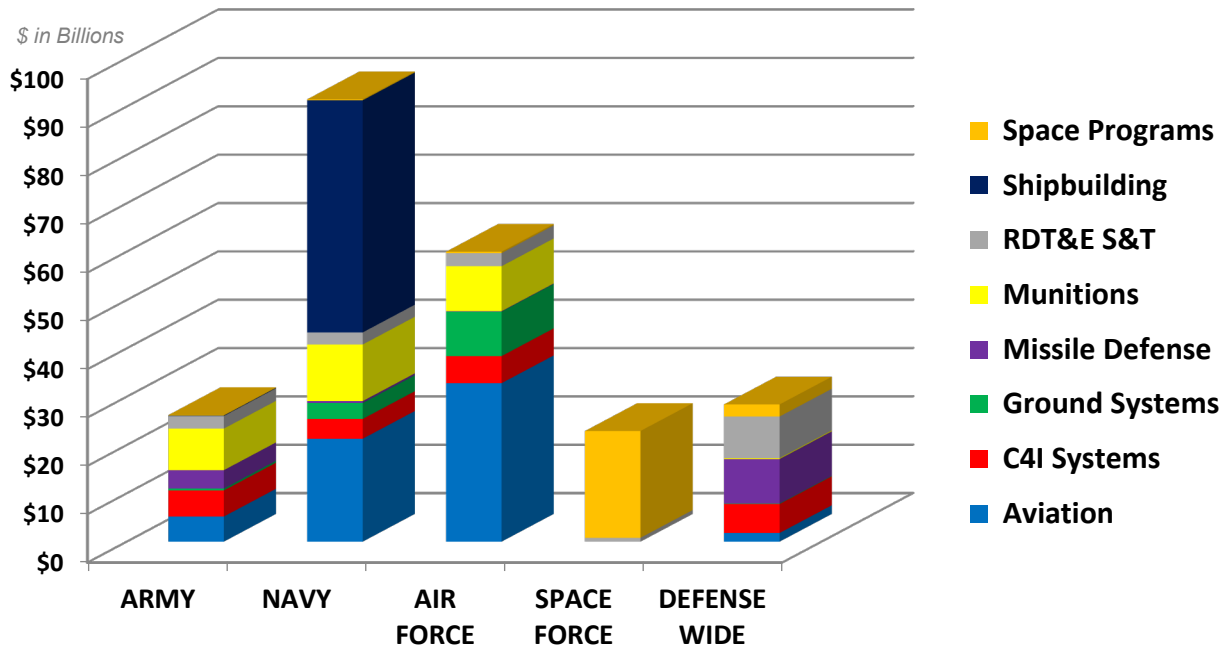
The performance of United States weapon systems are unmatched, ensuring that our military forces have a tactical combat advantage over any adversary in any environmental situation. The Fiscal Year (FY) 2025 Investment (Procurement and Research, Development, Test, and Evaluation (RDT&E)) funding requested by the Department of Defense (DoD) totals \$310.7 billion, which includes \$167.5 billion for Procurement and \$143.2 billion for RDT&E. The funding in the budget request represents a balanced portfolio approach for the implementation of the National Defense Strategy (NDS). To simplify display of the various weapon systems being developed and procured in FY 2025, this book is organized by the following categories:

- Aviation and Related Systems
- Command, Control, Communications, Computers, and Intelligence (C4I) Systems
- Ground Systems
- Missile Defense Programs
- Missiles and Munitions
- Shipbuilding and Maritime Systems
- Space Based Systems
- Science and Technology (S&T)
- Mission Support Activities



Numbers may not add due to rounding

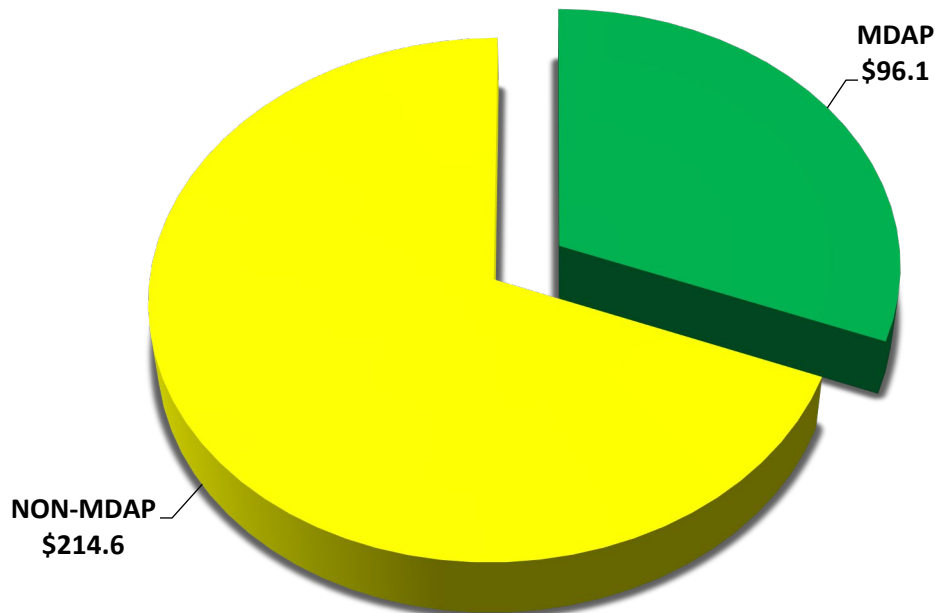
The Distribution of Funding in FY 2025 for Procurement and RDT&E by Component and Category*



* Funding in Mission Support activities are not represented in the above displays.

Major Defense Acquisition Programs Total Requested Procurement and RDT&E Funding During FY 2025 for MDAP* and Non-MDAP Programs

\$ in Billions



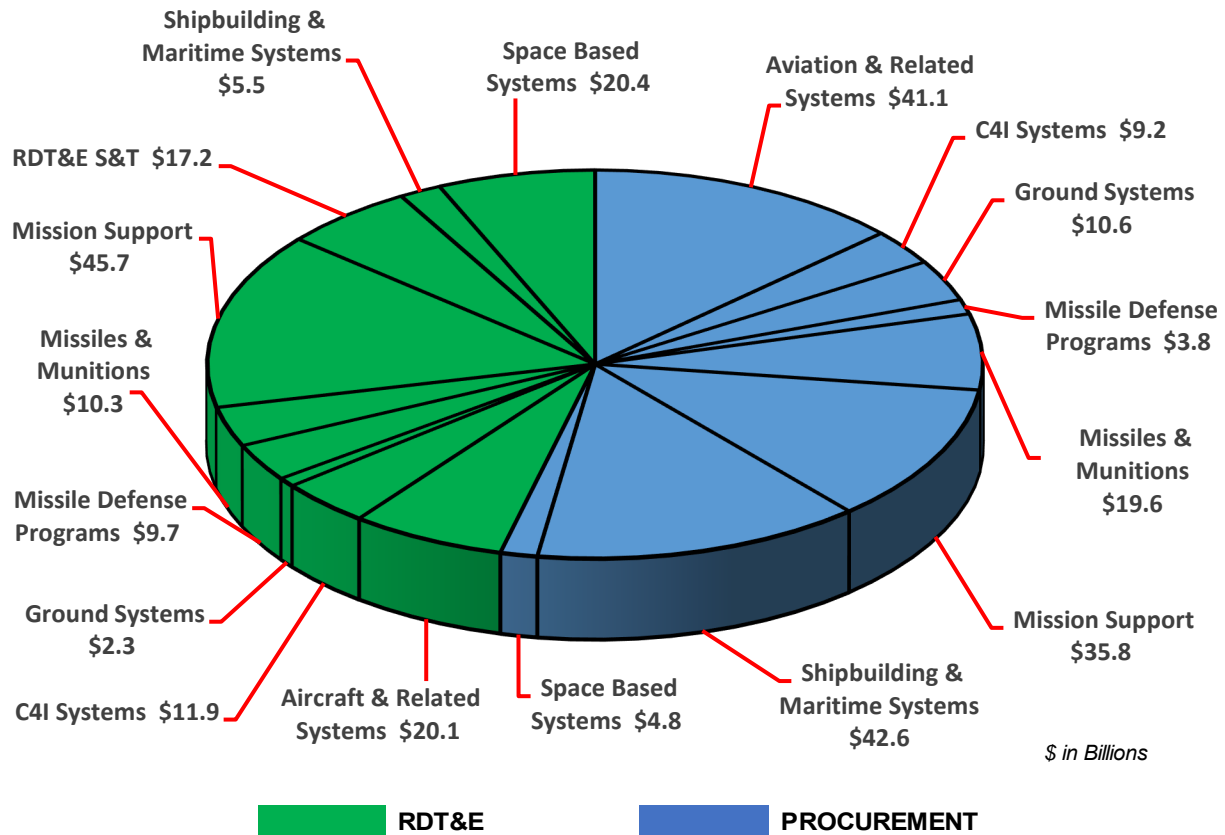
The FY 2025 President’s Budget request for modernization in the RDT&E and Procurement titles is comprised of 2,313 Program, Project, and Activity (PPA) budget line items, of which 1,122 are in RDT&E and 1,191 are in Procurement. Within these budget lines, there are 69 active Major Defense Acquisition Programs (MDAPs); 14 with the Army, 36 with the Navy, and 18 with the Air Force. The Missile Defense programs are the only MDAP still under the Office of the Secretary of Defense. Of the \$310.7 billion in Investment funding, MDAPs accounts for \$96.1 billion, or approximately 31 percent of the total funding.

Not all MDAPs (Acquisition Category (ACAT) I) are represented in this book because they fall below reporting criteria*. Furthermore, while non-MDAP individual programs are smaller in dollar value when compared to MDAPs, these ACAT II and ACAT III programs account for the majority of defense weapon expenditures.

* An MDAP is an acquisition program that is designated by the Under Secretary of Defense for Acquisition and Sustainment (USD (A&S)); or is estimated to require an eventual total expenditure for Research, Development, Test, and Evaluation (RDT&E), including all planned increments, of more than \$480 million in Fiscal Year (FY) 2014 constant dollars or, for Procurement, including all planned increments, of more than \$2.79 billion in FY 2014 constant dollars.

Mission Area Categories

This book shows the major weapon systems funded in the FY 2025 President’s Budget, organized by Mission Area Categories. Mission Area Categories include funding from both the RDT&E and Procurement programs. The below chart illustrates the budget allocation between RDT&E and Procurement with the distribution by each Mission Area Category.



Each Mission Area Category chapter heading further breaks out the funding allocation in FY 2025 by subgroups and provides summary programmatic and financial details of the major weapon systems within each portfolio. The bar charts in the respective mission areas display the relative change in annual funding requested for every fiscal year since FY 2010 for the mission area.

Aviation and Related Systems

\$61.2 billion – 20 percent of the Investment budget request

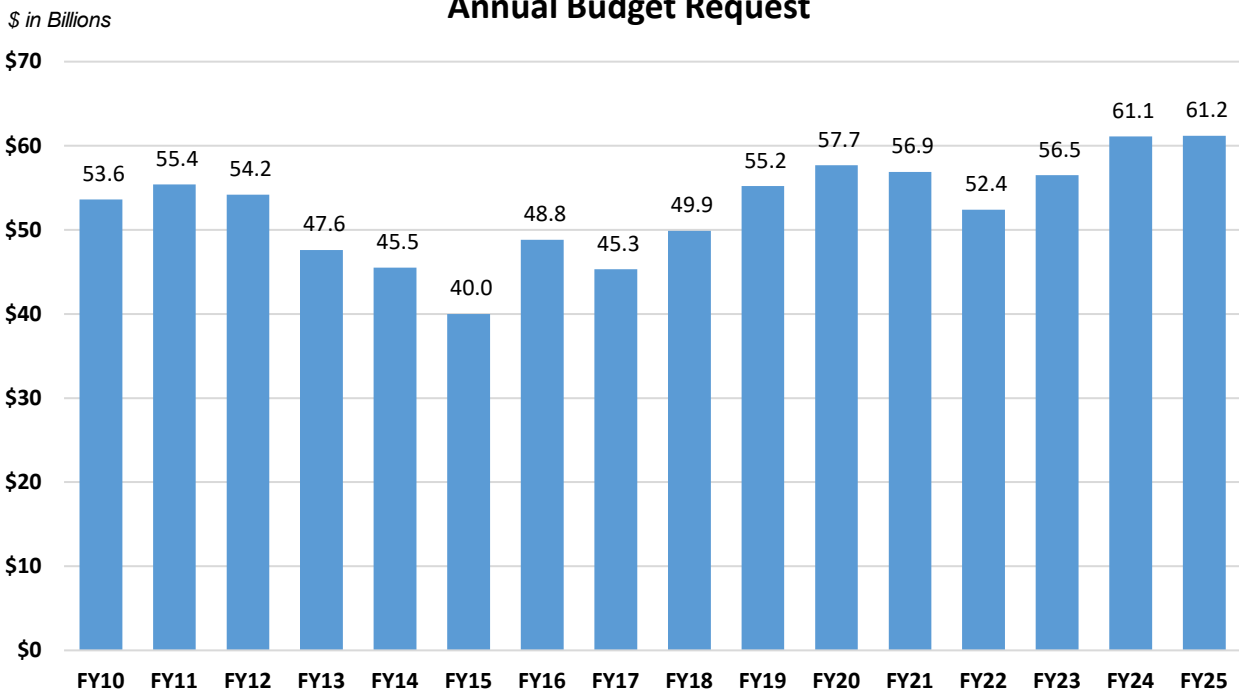
Includes funding for aircraft research and development, aircraft procurement, initial spares, and aircraft support equipment. The single largest defense program, the 5th generation F-35 Joint Strike Fighter (JSF) request of \$12.4 billion for 68 aircraft for the Navy (F-35C), Marine Corps (F-35B & C) and Air Force (F-35A). The program also includes the Continuous Capability Development and Delivery (C2D2) Block IV modification program, which aims to bring aircraft procured in prior fiscal years to the Block IV configuration. Also in the FY 2025 request are 18 - 4th generation F-15EX aircraft to supplement the Air Force Tactical Aviation (TACAIR) strike

capability. The FY 2025 PB program also reflects the Department’s strategy to layer capability to address different threats; 5th generation F-35 jet fighters to address advance technology aircraft being deployed by Russia and China; a modernized 4th generation F-15EX aircraft to supplement the 5th generation systems, which nominally have lower operating costs when compared to 5th generation combat jets such as the F-22 and the F-35. Also in this category is the funding for attack and utility helicopters; Unmanned Aircraft Systems (UAS); manned reconnaissance platforms and systems; the incremental cost for the VC-25B Presidential Aircraft Recapitalization (PAR) aircraft; the KC-46A Pegasus tanker; as well as future platforms such as the B-21 Long Range Strike Bomber and the Next Generation Air Dominance (6th generation fighter).

For display purposes, the aircraft and related systems category includes the following subgroups:

- Combat Aircraft (\$25.4 billion)
- Cargo Aircraft (\$4.5 billion)
- Support Aircraft (\$4.9 billion)
- Unmanned Aircraft Systems (\$2.4 billion)
- Aircraft Support (\$8.6 billion)
- Technology Development (\$5.4 billion)
- Aircraft Modifications (\$9.9 billion)
- System Development (\$0.1 billion)

Aircraft & Related Systems Annual Budget Request



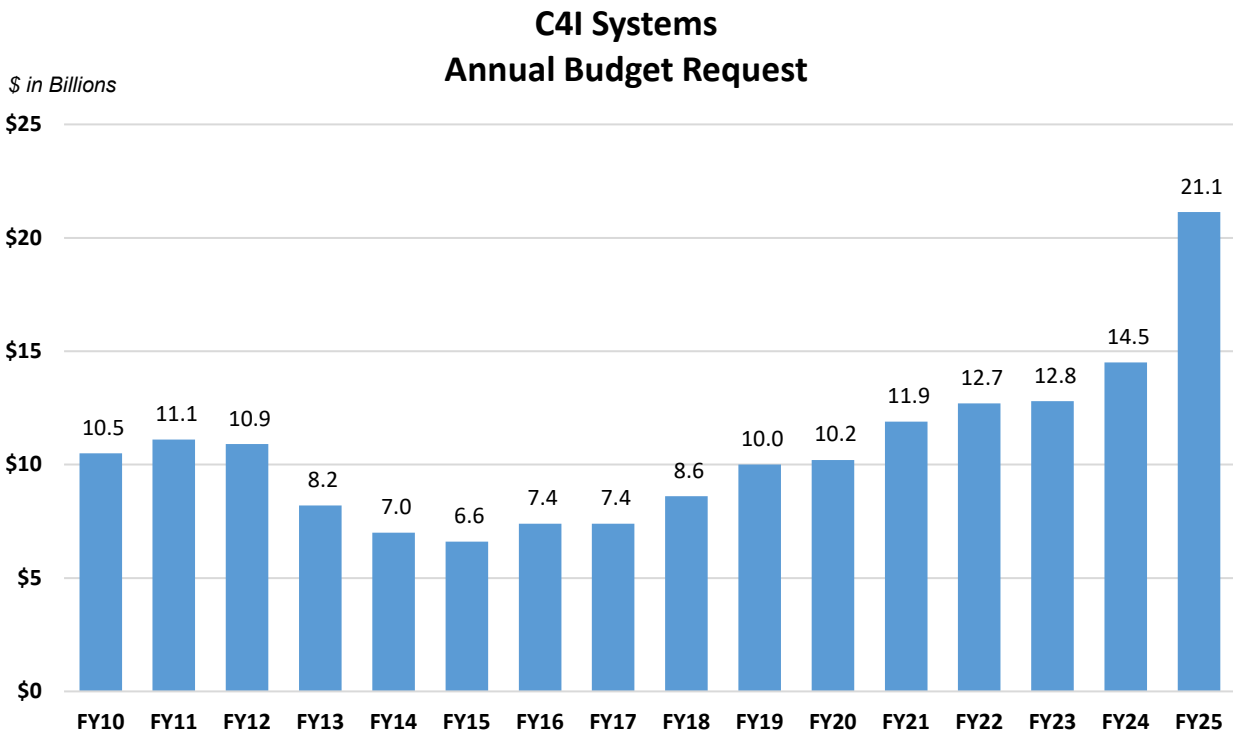
Command, Control, Communications, Computers, and Intelligence (C4I) Systems *\$21.1 billion – 7 percent of the Investment budget request*

Includes funding for various C4I systems, to include command centers; communications gear; air traffic control; night vision equipment; cyberspace activities (cybersecurity, enabling cyberspace operations, and supporting research and development); data processing equipment; fire control systems; other information technology; and related systems. This category includes funding for a

large number of programs such as Tactical Network Transport (TNT), Handheld Manpack Small Form Fit (HMS) radio, Joint Regional Security Stacks (JRSS), Information Systems Security Program (ISSP), Crypto devices and key management infrastructure, Nuclear Command, Control, and Communications (NC3), equipping the Cyber Mission Forces, the Air Force National Airborne Operations Center (NAOC) Recapitalization program, the Navy’s Consolidated Afloat Networks and Enterprise Services (CANES), and the Integrated Personnel and Pay System-Army (IPPS-A). The funding in FY 2025 is substantially higher than the amount requested in the FY 2024 request, primarily because of the recategorization of programs from the Mission Support category and funding changes for Cyberspace, Spectrum, Artificial Intelligence (AI), 5G, Combined Joint All-Domain Command & Control (CJADC2) and other emerging technologies.

For display purposes, the C4I System category includes the following subgroups:

- Aviation & Support Equipment (\$1.8 billion)
- Base Communications (\$2.0 billion)
- Communication & Electronic Equipment (\$7.9 billion)
- Information Security (\$0.1 billion)
- Support Equipment (\$0.2 billion)
- Technology Development (\$8.5 billion)
- Ground & Sea Support (\$0.6 billion)



Ground Systems

\$13.0 billion – 4 percent of the Investment budget request

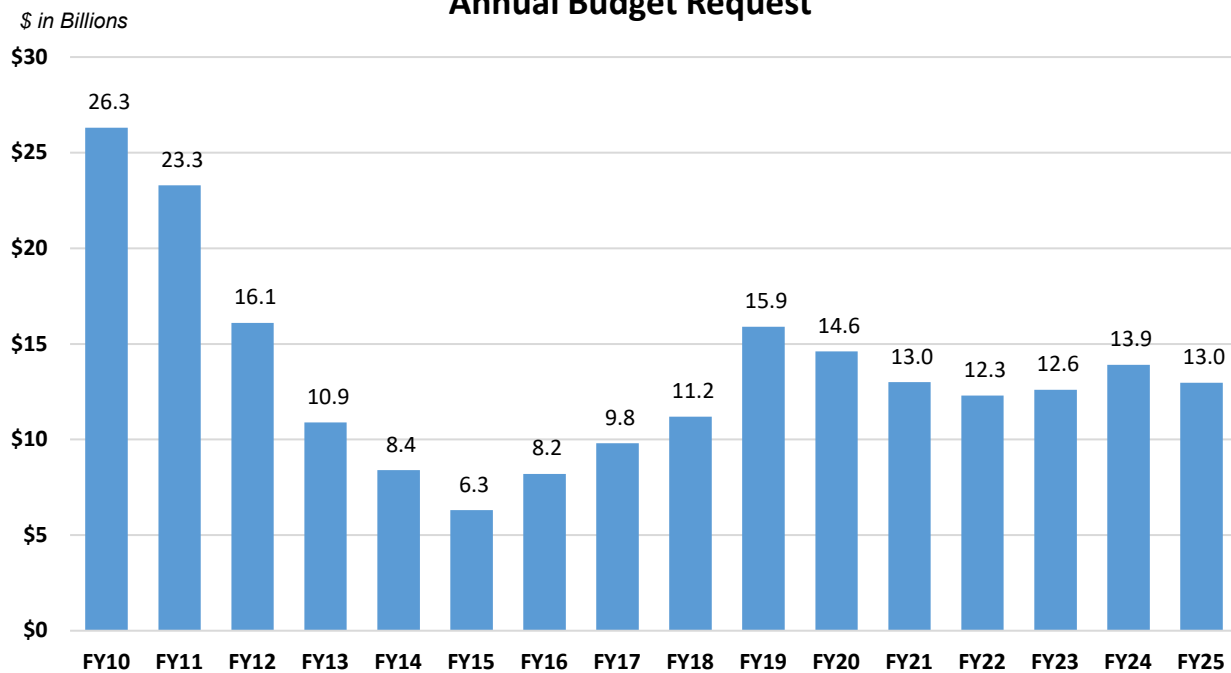
Includes funding for combat vehicles, artillery, infantry support weapons, tactical radar systems, tactical and non-tactical vehicles of all types, physical security equipment, logistics and

engineering equipment, and research and development of various weapons equipment. This category includes funding for new tactical vehicles such as the Army’s new Armored Multi-Purpose Vehicle (AMPV) which will replace the M-113 personnel carrier, and the Marine Corps’ Amphibious Combat Vehicle (ACV) which will replace the Amphibious Assault Vehicle (AAV). The category also includes funding for upgrades to the M1A2 Abrams main battle tank to begin bringing the force up to the M1A2C (System Enhancement Package (SEP) V3) configuration and upgrades to the M109A7 155mm Paladin Integrated Management (PIM) self-propelled artillery vehicle for improved force protection, survivability, and mobility. In addition, the Army is modernizing the tactical wheeled vehicle fleet through new procurement Joint Light Tactical Vehicles (JLTV), engineering changes to Family of Medium Tactical Vehicles (FMTVs) and recapitalizing the Family of Heavy Tactical Vehicles (FHTVs) to continue affordability initiatives.

For display purposes, the Ground Systems category includes the following subgroups:

- Support Vehicles (\$0.4 billion)
- Tracked Combat Vehicles (\$6.2 billion)
- Light Tactical Vehicles (\$0.4 billion)
- Communication & Electronic Equipment (\$1.2 billion)
- Weapons (\$1.5 billion)
- Equipment (\$3.3 billion)

Ground Systems Annual Budget Request



Missile Defense Programs

\$13.5 billion – 4 percent of the Investment budget request

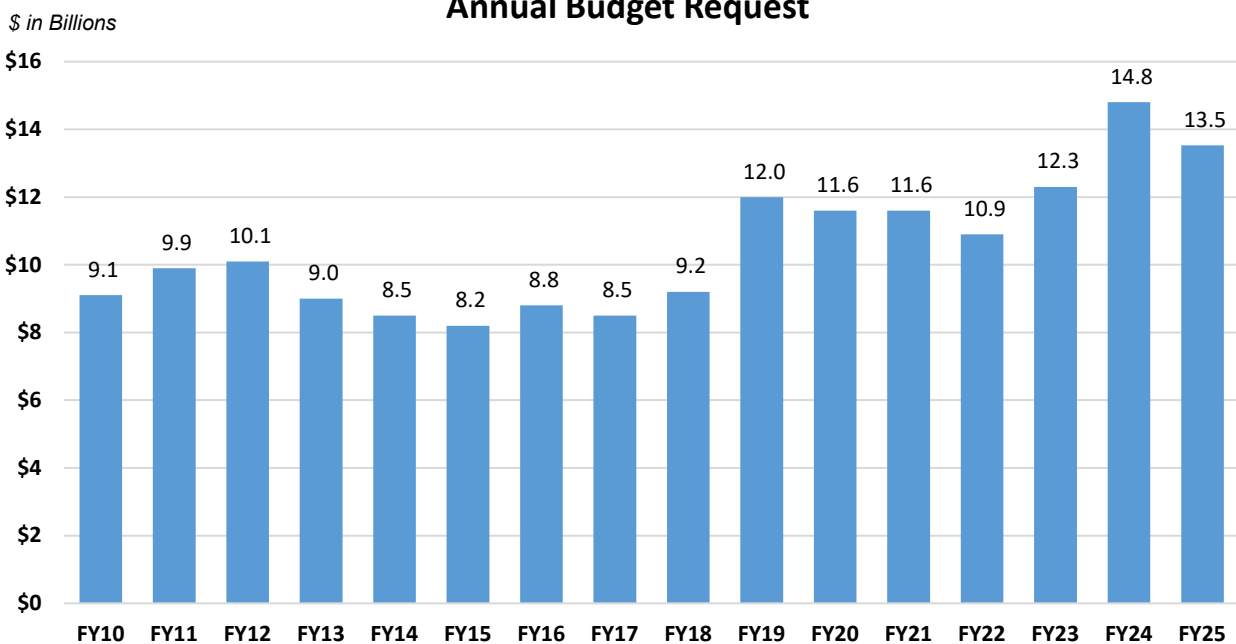
The \$13.5 billion represented in this display includes only those programs that are funded in the Procurement or RDT&E appropriations and are missile defense related such as tactical ballistic missile interceptors and counter-missile programs within each of the Services. Includes funding

for the development and procurement of tactical and strategic ballistic missile defense weapons and systems. Funds improved ballistic missile capabilities against existing and future threats. The FY 2025 budget request maintains a program of 12 SM-3 Block IIA missiles across the Future Year Defense Program (FYDP) and continues procurement of the Terminal High Altitude Area Defense (THAAD) interceptors, as well as efforts to mature technologies and capabilities to address missile threats to the United States. The FY 2025 request continues the development of the Next Generation Interceptor (NGI) to supplement the 44 Ground Based Interceptors (GBI) currently deployed. In addition, the budget funds Missile Defense programs, including efforts to support the Ballistic Missile Defense System, and other Missile Defense activities funded by other DoD Components, including dual use technologies and programs that mitigate ballistic missile threats beyond those funded by the Missile Defense Agency (MDA). The FY 2025 budget request includes \$1.5 billion for the Defense of Guam, supports Land-based Aegis Ashore facilities in Romania and Poland, and continues MDA’s longstanding support of U.S.-Israeli Cooperative Programs to include the co-development and co-production of the David's Sling Weapon System and Upper Tier Interceptor as well as improvements to the Arrow Weapon System, and Iron Dome.

For display purposes, the Missile Defense Programs category includes the following subgroups:

- Advanced Component Development (\$0.5 billion)
- Operational System Development (\$1.0 billion)
- Communications & Electronic Equipment (\$0.6 billion)
- Ballistic Missile Defense Systems (\$8.7 billion)
- Tactical Missile Defense (\$2.7 billion)

Missile Defense Programs Annual Budget Request



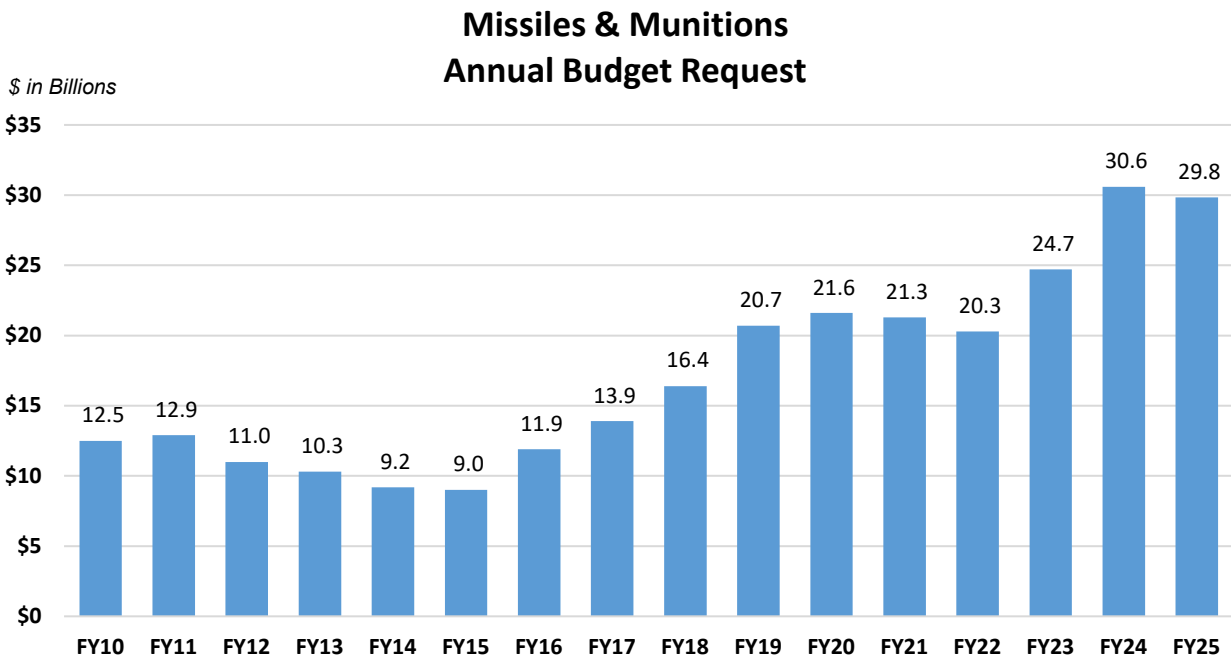
Missiles and Munitions

\$29.8 billion – 10 percent of the Investment budget request

This category includes funding for all types of conventional ammunition and Precision Guided Munitions (PGM). The ammunition category includes bullets, cartridges, mortars, explosives, and artillery projectiles. The PGM portfolio includes weapons which have applicability in both a contested and permissive environment, and includes an assortment of air-to-air, air-to-ground, ground-to-ground, and ground-to-air weapons. The FY 2025 request includes the continuation of the Large Lot Procurement (LLP) multiyear pilot initiated in the FY 2024 Presidents’ Budget for the AIM-120D Advanced Medium-Range Air-to-Air Missile (AMRAAM), the AGM-158B Joint Air-to-Surface Missile (JASSM), the AGM-158C Long Range Anti-Ship Missile (LRASM), and the Standard Missile - 6 (SM-6). The FY 2025 request also funds the procurement of additional Joint Direct Attack Munition (JDAM), the GBU-39 Small Diameter Bomb (SDB) I & SDB II, and the new long-range Precision Strike Missile (PrSM). Also, in the FY 2025 request, funding is being requested to continue the Multiyear Procurement (MYP) for the Army’s Guided Multiple Launch Rocket System (GMLRS), the Patriot Advanced Capability -3 Missile Segment Enhancement (MSE) and the Navy’s Naval Strike Missile (NSM). Also in this category is the funding for the modernization of nuclear weapon delivery systems, such as the existing Trident II D5 Life Extension 2 (D5LE2) Submarine Launch Ballistic Missile (SLBM), the Sentinel Intercontinental Ballistic Missile (ICBM) (previously called the Ground Based Strategic Deterrent (GBSD)), and the B61-12 Tail Kit and Long-Range Standoff (LRSO) nuclear armed weapon programs.

For display purposes, the Missiles and Munitions category includes the following subgroups:

- Conventional Ammunition (\$5.9 billion)
- Strategic Missiles (\$7.2 billion)
- Tactical Missiles (\$16.0 billion)
- Technology Development (\$0.7 billion)



Shipbuilding and Maritime Systems

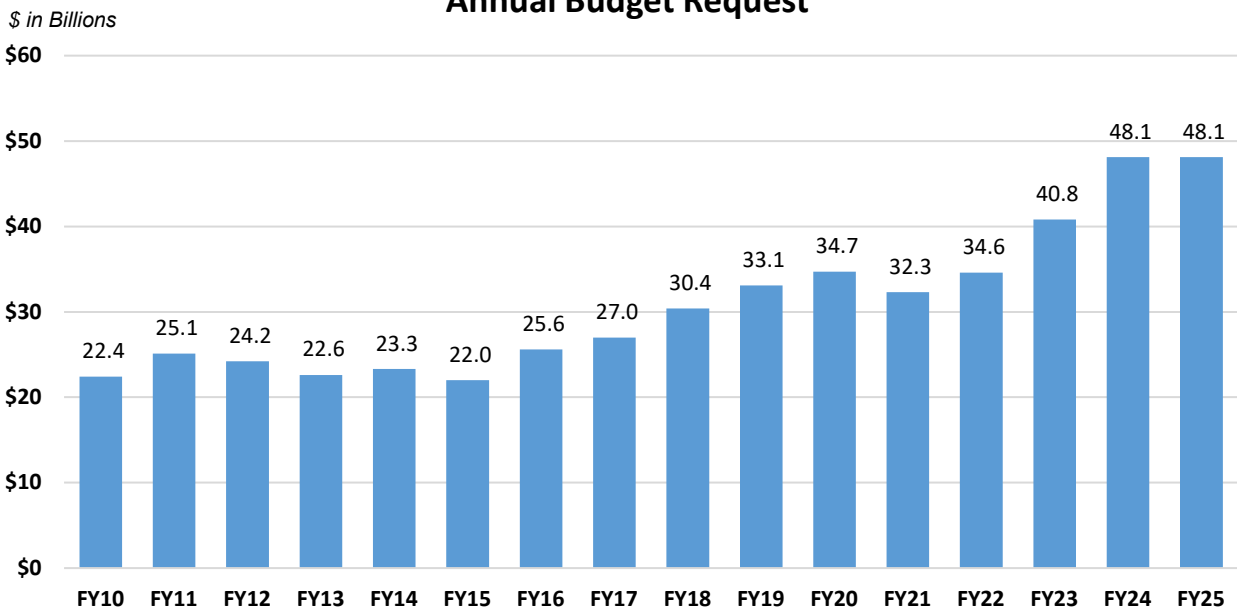
\$48.1 billion – 15 percent of the Investment budget request

Includes RDT&E and Procurement funding for shipbuilding and maritime systems. The FY 2025 budget request provides for the construction of six Battle Force Ships (BFS) plus the development of unmanned surface vessels. The FY 2025 request includes incremental funding for three future FORD class nuclear aircraft carriers: USS John F. Kennedy (CVN 79), USS Enterprise (CVN 80) and USS Doris Miller (CVN 81). The budget request also includes funding for six BFS: two DDG 51 class surface combatants; one Constellation class (FFG 62); one Block VI fast attack Virginia class submarine equipped with the Virginia Payload Module (VPM); one San Antonio class amphibious transport dock ship (LPD 17 Flight II); and one medium landing ship (LSM). Also in this category are the development funds and funds for the construction of the second Columbia class ballistic-missile submarines (SSBN), the USS Wisconsin (SSBN 827) and advance procurement funding for 10 additional Columbia class SSBNs. Also, the budget requests ongoing costs for the USS Harry S. Truman (CVN 75) Refueling and Complex Overhaul (RCOH) and investments in the submarine industrial base. The Department’s FY 2025 request also includes \$4.0 billion for the Submarine Industrial Base (SIB), of which \$3.9 billion is for the Navy and \$0.1 billion is requested in Defense-wide appropriations.

For display purposes, Shipbuilding and Maritime Systems is further categorized by the following subgroups:

- Surface Combatant (\$13.5 billion)
- Submarine Combatant (\$19.6 billion)
- Support Ships (\$2.7 billion)
- Ship Equipment (\$6.8 billion)
- Outfitting & Post Delivery (\$2.6 billion)
- Technology Development (\$2.9 billion)

Shipbuilding & Maritime Systems Annual Budget Request



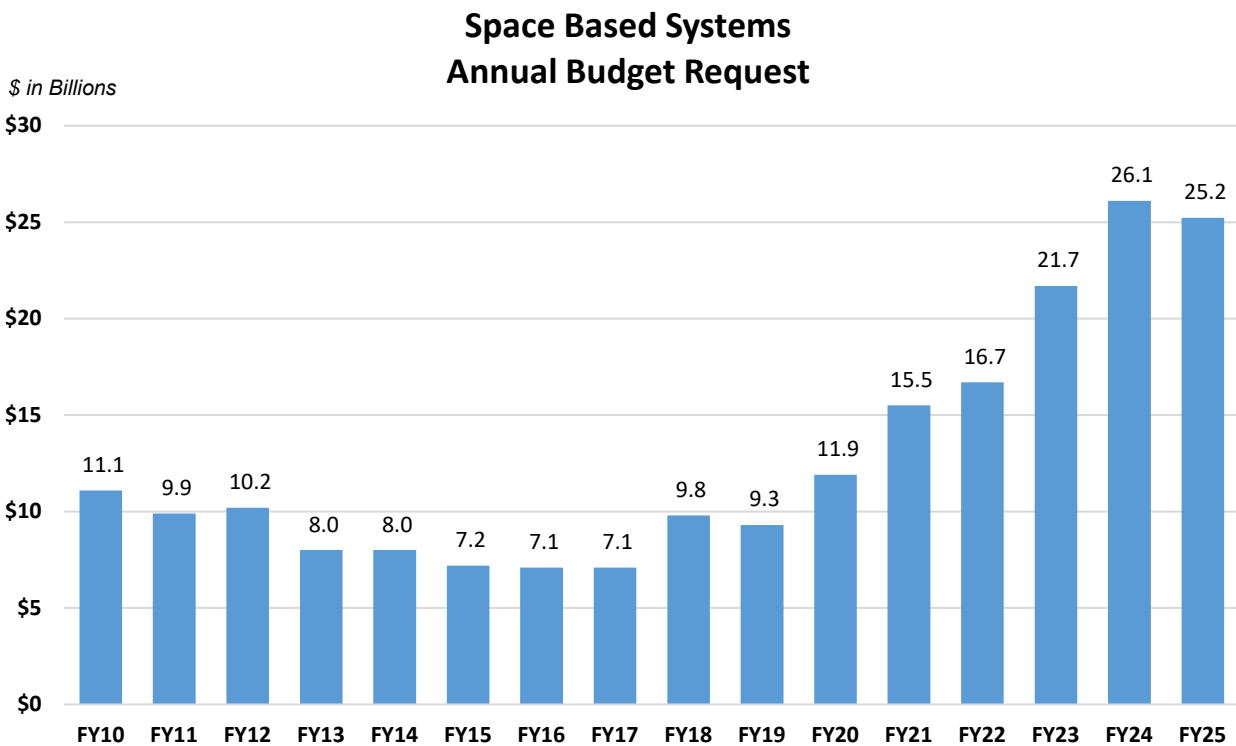
Space Based Systems

\$25.2 billion – 8 percent of the Investment budget request

This category funds development and procurement of spacecraft; launch vehicles; space command and control systems; and terrestrial satellite terminals and equipment. The FY 2025 request continues aggressively integrating the Space Force into the fabric of national and international security by collaborating across the Department of Defense, interagency, commercial industry, and our allies and partners. Space is a warfighting domain critical to the Nation's security, economic prosperity, and scientific knowledge. The FY 2025 request continues development of the Next Generation Overhead Persistent Infrared (Next-Gen OPIR) and provides for the development of a new generation of secure communication and tactical warning and attack assessment satellite constellations. It also includes investments in position, navigation, and timing, critical space situational awareness requirements, the space test program, and classified programs designed to provide assured capability in space.

For display purposes, Space Based Systems is further categorized by the following subgroups:

- Advanced Component Development (\$5.1 billion)
- Operational System Development (\$9.2 billion)
- Space Procurement, SF (\$4.3 billion)
- Management Support (\$0.2 billion)
- Communications & Electronics Equipment (\$0.5 billion)
- Support Activities (\$0.1 billion)
- System Development (\$5.6 billion)
- Technology Development (\$0.2 billion)



* The scope of the Space Based Systems included in this chart has changed between FY 2010 and FY 2025.

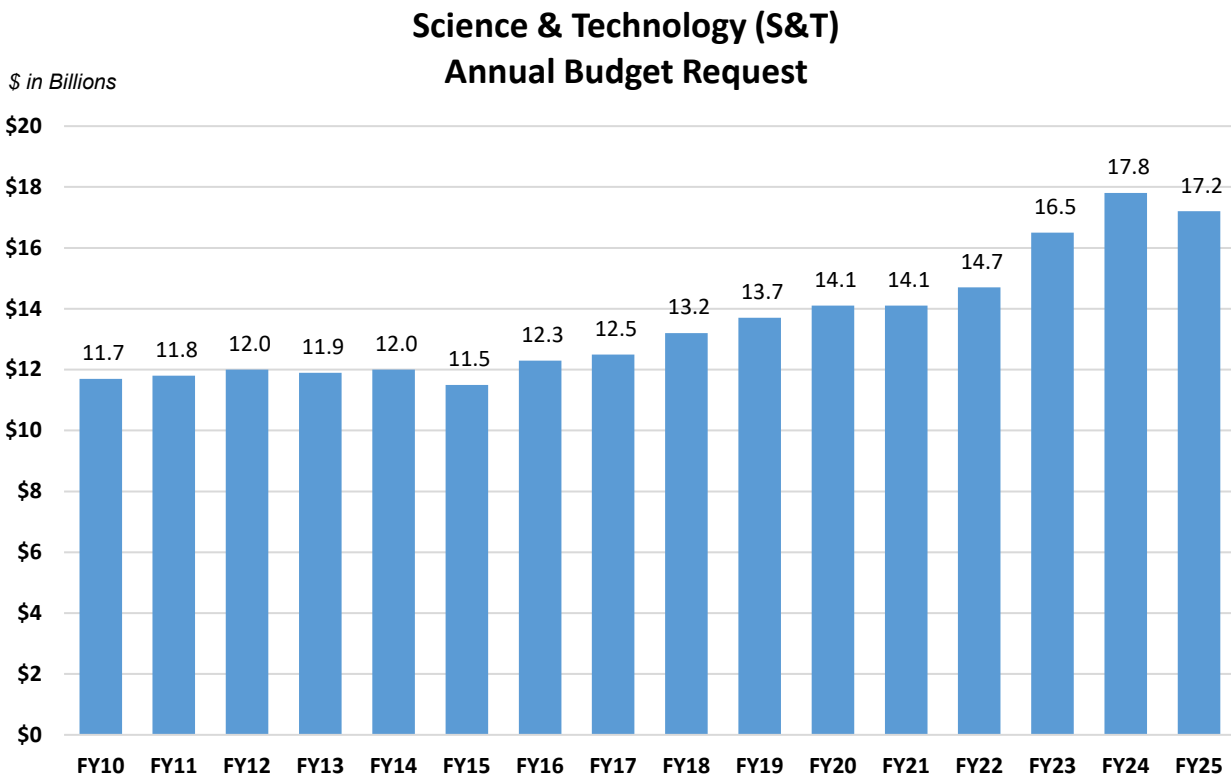
Science and Technology

\$17.2 billion – 6 percent of the Investment budget request

Investing in Science and Technology (S&T) is investing in the future. Given today's globalized access to knowledge and the rapid pace of technology development, innovation, and agility have taken on a greater importance. The FY 2025 funding in this category fosters innovation and develops cutting-edge, state-of-the-art technologies to protect the United States, its allies, and American forces worldwide. These S&T projects aim to develop technologies that will be essential in a future battlefield, include specific scientific and engineering efforts in Artificial Intelligence (AI), Machine Learning applications, Hypersonics (offensive and defensive), Directed Energy (lasers, particle beams, etc.), Microelectronics, Biological Technology, Cyber, Fifth Generation communications (5G), Autonomy, Space, and Quantum sciences. Transitioning these technologies to operational systems will bring vital cutting-edge capabilities to the warfighter.

For display purposes, RDT&E S&T, is further categorized by the following subgroups:

- Basic Research (\$2.5 billion)
- Applied Research (\$5.8 billion)
- Advanced Technology Development (\$9.0 billion)



Mission Support Activities

\$81.5 billion – 26 percent of the Investment budget request

This category includes RDT&E and Procurement funding for various miscellaneous equipment used by combat and non-combat forces, cross departmental capabilities such as live fire test and evaluation (such as testing ranges), chemical demilitarization, test infrastructure, the Rapid Prototyping Program, Office of Strategic Capital, Foreign Materiel Acquisition and Exploitation, Concepts Experimentation Program, Rapid Defense Experimentation Reserve (RDER), Counter - Small Unmanned Aircraft Systems Advanced Development, Warfare Innovation Management, Combined Advanced Applications, National Industrial Security Systems (NISS), Constructive Simulation Systems Development, Logistics Support Activities, Requirements Analysis & Concept Maturation, Chemical Materials Agency, Counter Improvised-Threat Demonstration, Prototype Development, and Testing, Defense Exportability Program, Installation Industrial Support Systems and the Defense Production Act (DPA) industrial base support. Also included in this category are classified programs, activities and capabilities not reflected in the other categories previously identified.

Summary of Account History

FY 2023 Program (Dollars in Billions)	RDT&E	PROCUREMENT
President’s Budget Request	130.1	145.9
Appropriated by the Congress (enacted)	140.1	167.6
Current Funding (actuals)	140.9	182.3

FY 2024 Program (Dollars in Billions)	RDT&E	PROCUREMENT
President’s Budget Request	145.0	170.0

FY 2025 Program (Dollars in Billions)	RDT&E	PROCUREMENT
President’s Budget Request	143.2	167.5

During program execution, funding for weapon system development and procurement often changes because of congressional action and reprogramming actions by the Department to accommodate changes in program scope and to respond to dynamic changes in requirements. As illustrated in the above chart, the available funding in FY 2023 is higher than what was requested by the President and enacted by the Congress.

Display Criteria of Weapon System Funding

The funding amount represents the direct program costs for the development and the acquisition of the Programs, Projects, and Activities (PPA). Not included are the costs associated with initial and replenishment spare parts.

FY 2023 amounts reflect the actual execution as of September 30, 2023, including supplemental funding, but exclude congressional rescissions.

FY 2024 amounts shown at the individual program level reflect the funding requested in the FY 2024 President's Budget by the Department of Defense.

FY 2025 amounts reflect the funding requested in the FY 2025 President's Budget by the Department of Defense.

Major Weapon Systems Summary

(\$ in Millions)		FY 2023	FY 2024 *	FY 2025	Page
Aircraft and Related Systems – Joint Service					
F-35	Joint Strike Fighter	11,845.8	13,590.1	12,430.8	1-2
V-22	Osprey	1,094.4	649.5	538.8	1-3
C-130J	Hercules	2,846.9	823.6	806.0	1-4
MQ-1C	Gray Eagle	487.5	21.6	30.5	1-5
MQ-9	Reaper	723.0	529.9	305.1	1-6
MQ-4C / RQ-4	Triton/Global Hawk/NATO AGS	979.1	823.7	750.1	1-7
AO	Armed Overwatch / Targeting	247.2	268.8	337.5	1-8
Aircraft and Related Systems – US Army (USA)					
AH-64E	Apache: Remanufacture/New Build	900.2	952.6	659.9	1-9
CH-47	Chinook	502.9	251.4	720.3	1-10
UH-60	Black Hawk	1,169.1	915.5	792.2	1-11
FLRAA	Future Long-Range Assault Aircraft	664.8	1,044.1	1,260.2	1-12
Aircraft and Related Systems – US Navy (USN) / US Marine Corps (USMC)					
MQ-25	Stingray	1,133.8	969.4	898.0	1-13
F/A-18	Super Hornet	2,064.0	1,832.1	1,805.6	1-14
E-2D	Advanced Hawkeye	1,646.9	582.7	499.1	1-15
CH-53K	Heavy Lift Replacement Helicopter	2,471.6	2,418.3	2,685.0	1-16
Aircraft and Related Systems – US Air Force (USAF)					
B-21	Raider	4,754.3	5,316.2	5,338.5	1-17
B-1, B-2, B-52	Bombers	1,045.4	1,254.7	1,394.4	1-18
KC-46A	Pegasus	2,599.6	3,007.3	2,973.3	1-19
VC-25B	Presidential Aircraft Recapitalization	79.6	490.7	433.9	1-20
F-22	Raptor	1,262.6	1,520.6	1,629.7	1-21
F-15	Eagle	3,538.1	3,378.5	2,361.1	1-22
HH-60W	Combat Rescue Helicopter	1,236.8	330.8	243.9	1-23
T-7A	Advanced Pilot Training	43.0	77.3	319.2	1-24
MH-139A	Grey Wolf	213.3	274.8	333.4	1-25
E-7A	Airborne Warning and Control System Replacement	411.7	681.0	418.5	1-26
C-40	C-40 Fleet Expansion	-	-	328.7	1-27
C4I Systems – USA					
TNT	Tactical Network Technology	362.9	358.6	280.8	2-2
HMS	Handheld, Manpack, and Small Form Fit Radios	664.5	769.4	708.4	2-3
C4I Systems – Joint Service					
Cyberspace	Cyberspace Activities	3,449.9	4,059.9	3,958.8	2-4
CJADC2	CJADC2 Programs	611.0	1,039.0	1,433.0	2-5
Ground Systems – Joint Service					
JLTV	Joint Light Tactical Vehicle	1,429.7	1,191.8	1,179.5	3-2
Ground Systems – USA					
M-1	Abrams Tank Modification/Upgrades	1,297.7	896.5	1,020.2	3-3
AMPV	Armored Multi-Purpose Vehicle	1,237.0	567.1	527.7	3-4
NGSW	Next Generation Squad Weapon	199.6	328.1	389.4	3-5
PIM	Paladin Integrated Management	1,026.8	511.6	460.2	3-6
Stryker	Stryker Family of Armored Vehicles	1,275.0	639.1	469.4	3-7
M10	M10 Booker (Mobile Protected Firepower)	410.5	496.8	508.7	3-8
FMTV	Family of Medium Tactical Vehicles	233.9	142.9	153.5	3-9
FHTV	Family of Heavy Tactical Vehicles	326.3	110.6	148.9	3-10
XM30	XM30 Combat Vehicle	519.1	996.7	504.8	3-11
Ground Systems – USMC					
ACV	Amphibious Combat Vehicle	605.4	660.8	870.5	3-12
Missile Defense Programs – Joint Service					
GMD	Ground-based Midcourse Defense	2,562.2	3,076.3	2,526.2	4-2
THAAD	Terminal High Altitude Area Defense	502.0	484.7	639.9	4-3
Aegis	Sea-Based Weapons System	1,896.3	1,722.6	1,307.7	4-4
Missile Defense Programs – USA					
PATRIOT / PAC-3	PATRIOT Advanced Capability	976.3	1,206.1	1,006.7	4-5
PAC-3 / MSE	PAC-3/Missile Segment Enhancement	2,471.4	1,212.8	963.1	4-6

Major Weapon Systems Summary

(\$ in Millions)		FY 2023	FY 2024 *	FY 2025	Page
Missiles and Munitions – Joint Service					
JDAM	Joint Direct Attack Munition	328.7	206.1	200.4	5-2
SDB I	Small Diameter Bomb I	52.7	48.7	42.3	5-3
SDB II	Small Diameter Bomb II	660.7	447.2	454.1	5-4
JASSM	Joint Air-to-Surface Standoff Missile	958.9	1,818.6	1,008.6	5-5
AIM-9X	Air Intercept Missile - 9X	488.6	252.2	259.4	5-6
AMRAAM	Advanced Medium Range Air-to-Air Missile	773.4	1,223.6	810.2	5-7
Chem-Demil	Chemical Demilitarization	1,059.8	1,091.8	775.5	5-8
JAGM	Joint Air-to-Ground Missile	297.1	386.1	148.1	5-9
LRASM	Long Range Anti-Ship Missile	437.6	827.3	696.8	5-10
AMMO	Ammunition	11,267.7	4,964.0	5,160.0	5-11
AARGM-ER	Advanced Anti-Radiation Guided Missile	591.5	595.8	826.2	5-12
GMLRS	Guided Multiple Launch Rocket System	2,196.9	1,027.2	1,241.9	5-13
Javelin	Javelin Advanced Anti-Tank Weapon System	1,148.3	262.2	398.1	5-14
Missiles and Munitions – USA					
PrSM	Precision Strike Missile	412.9	656.9	676.6	5-15
Missiles and Munitions – USN					
Trident II	Trident II Ballistic Missile Modifications	1,694.5	1,870.2	2,465.7	5-16
SM-6	Standard Missile-6	787.5	1,615.0	1,223.5	5-17
RAM	Rolling Airframe Missile	108.9	126.0	160.2	5-18
NSM	Naval Strike Missile	241.5	249.9	206.1	5-19
Tomahawk	Tactical Tomahawk Cruise Missile	901.5	934.3	765.4	5-20
Missiles and Munitions – USAF					
LGM-35A	Sentinel	3,437.5	4,290.4	3,731.9	5-21
LRSO	Long Range Stand-Off Weapon	953.3	978.2	833.8	5-22
Shipbuilding and Maritime Systems – USN					
CVN 78	<i>Gerald R. Ford</i> Class Nuclear Aircraft Carrier	3,205.7	2,704.4	2,339.4	6-2
SSBN 826	<i>Columbia</i> Class Ballistic Missile Submarine	6,273.2	6,218.0	9,878.7	6-3
SSN 774	<i>Virginia</i> Class Submarine	7,270.7	10,845.6	8,209.3	6-4
DDG 51	<i>Arleigh Burke</i> Class Destroyer	8,220.8	5,074.5	7,071.3	6-5
FFG(X)	<i>Constellation</i> Class Guided Missile Frigate	1,551.1	2,286.7	1,278.1	6-6
CVN	Refueling Complex Overhaul	689.9	895.6	1,738.3	6-7
LPD 17	<i>San Antonio</i> Class Amphibious Ship	2,008.2	77.6	1,653.0	6-8
T-AO 205	<i>John Lewis</i> Class Fleet Replenishment Oiler	1,060.7	967.7	261.2	6-9
USV	Medium and Large Unmanned Surface Vessels	300.1	237.9	185.2	6-10
LHA	<i>America</i> Class Amphibious Assault Ship	1,428.0	1,874.2	234.4	6-11
LSM	Medium Landing Ship	11.1	14.7	274.1	6-12
Space Based Systems – USSF					
NSSL & RSLP	Launch Enterprise	2,305.0	3,003.1	2,397.8	7-2
GPS III & Projects	Global Positioning System Enterprise	1,672.5	1,259.8	1,519.7	7-3
OPIR	Space Based Missile Warning Systems	4,722.1	4,966.4	4,677.8	7-4
SATCOM Projects	Satellite Communications (SATCOM) Projects	2,786.5	4,028.8	4,203.0	7-5

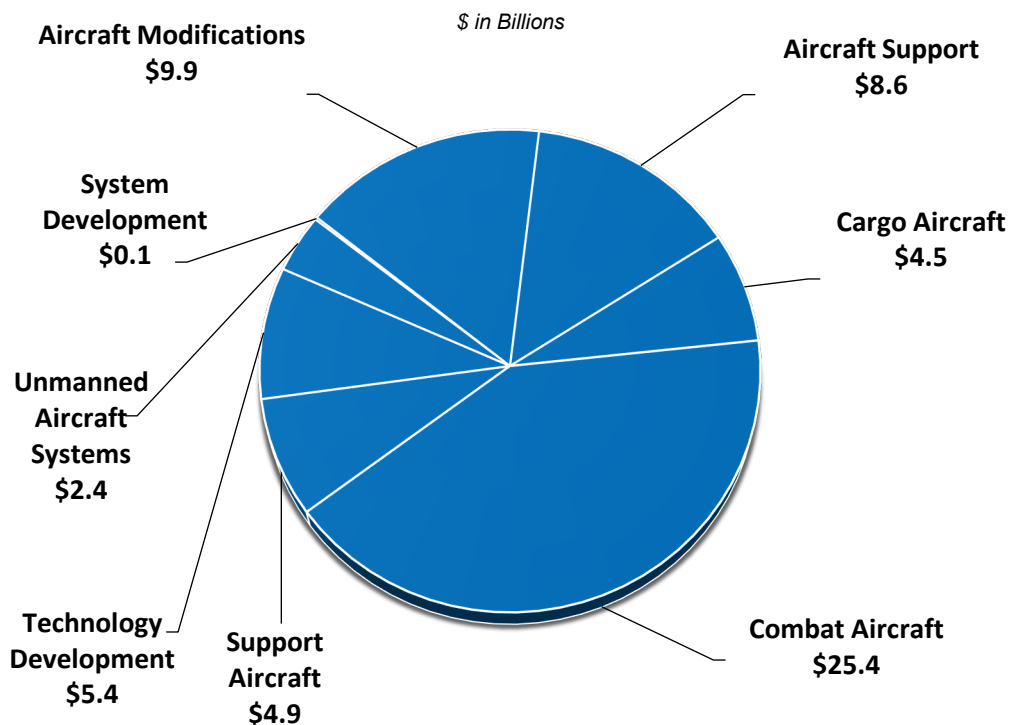
* Reflects the FY 2024 budget request

Aviation and Related Systems

Aviation forces including fighters, bombers, mobility (cargo/tanker), specialized support aircraft, and Unmanned Aerial Vehicles/Unmanned Aircraft Systems (UAV/UAS), provide a versatile strike force capable of rapid deployment worldwide. These forces can quickly gain and sustain air dominance over regional aggressors, permitting rapid attacks on enemy targets while providing security to exploit the air for logistics, command and control, intelligence, and other functions. Fighter/attack aircraft operate from both land bases and aircraft carriers to provide air superiority to combat enemy fighters and attack ground and ship targets. Bombers provide an intercontinental capability to rapidly strike surface targets. The specialized aircraft supporting conventional operations perform functions such as intelligence, surveillance, and reconnaissance; airborne warning and control; air battle management; suppression of enemy air defenses; and combat search and rescue. In addition to these forces, the U.S. military operates a variety of air mobility forces including cargo, aerial-refueling aircraft, helicopters, and support aircraft.

Continuing in the FY 2025 request is the Department’s Tactical Air (TACAIR) strategy to supplement 5th generation fighters like the F-22 and F-35 with 4th generation capability, to more economically address threats that do not require state-of-the-art 5th generation combat jets.

FY 2025 Aviation and Related Systems Total: \$61.2 Billion



Numbers may not add due to rounding

F-35 Joint Strike Fighter

DOD - JOINT

The F-35 Joint Strike Fighter (JSF) is a fifth-generation strike fighter for the Navy, Marine Corps, Air Force, and U.S. Allies. The F-35 consists of three variants: F-35A Conventional Take-Off and Landing (CTOL), the F-35B Short Take-Off and Vertical Landing (STOVL), and the F-35C Carrier variant (CV). The F-35A CTOL replaces the Air Force F-16 and A-10 aircraft and complements the F-22 aircraft; the F-35B STOVL aircraft replaces the Marine Corps AV-8B aircraft and F/A-18A/C/D aircraft; the F-35C CV aircraft complements the F/A-18E/F aircraft for the Navy, and will also be flown by the Marine Corps. The F-35 program is a joint, multi-national program among the United States and seven cooperative international Partners as well as nine current Foreign Military Sales countries. The Marine Corps, Air Force, and Navy have all declared Initial Operational Capability in 2015, 2016, and 2019, respectively.



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Mission: Provides all-weather, precision, stealthy, ground strike and air-to-air capability, including direct attack on the most lethal surface-to-air missiles and air defenses.

FY 2025 Program: Continues systems engineering, development, and operational testing; supports Continuous Capability Development and Delivery (C2D2); and provides service-unique requirements to incremental warfighting capability improvements to maintain joint air dominance against evolving threats. Procures 68 aircraft in FY 2025: 42 CTOL for the Air Force, 13 STOVL for the Marine Corps, and 13 CV for the Department of the Navy (9 Navy and 4 Marine Corps). Provides post-delivery upgrades of hardware and software. Enables the ground and squadron support and site stand-up infrastructure required to support U.S. Services F-35 air systems. Accelerates organic depot maintenance capability to reduce depot repair cycle times to improve air vehicle availability rates.

Prime Contractor(s): Airframe: Lockheed Martin Corporation; Fort Worth, TX
 Engine: Pratt & Whitney; Hartford, CT

F-35 Joint Strike Fighter						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USN/USMC	-	993.7	-	1,088.5	-	946.9
USAF	-	1,055.4	-	1,372.5	-	1,171.3
Subtotal	-	2,049.1	-	2,461.0	-	2,118.2
Procurement						
USN/USMC	34	4,618.6	35	4,919.4	26	4,339.3
USAF	43	4,482.2	48	5,279.1	42	4,956.7
Subtotal	77	9,100.7	83	10,198.5	68	9,296.0
Mods	-	696.0	-	930.6	-	1,016.6
Total	77	11,845.8	83	13,590.1	68	12,430.8

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

V-22 Osprey

DOD - JOINT

The V-22 Osprey is a tilt-rotor, vertical takeoff and landing aircraft designed to meet the amphibious/vertical assault needs of the Marine Corps, the strike rescue and Carrier Onboard Delivery (COD) needs of the Navy, and the long-range special operations forces missions for United States Special Operations Command. Designed to fly 2,100 miles with one in-flight refueling, the V-22 gives the Services the advantage of a vertical and short takeoff and landing aircraft that can rapidly self-deploy to any worldwide location.



Mission: Conducts airborne assault, vertical lift, combat search and rescue, and special operations missions. The CMV-22 variant replaces the Navy’s C-2A Greyhound for the COD mission.

FY 2025 Program: Funds MV-22 and CMV-22 production line shutdown to include material, tooling, test equipment disposition, and storage requirements. The modification program continues to focus on reducing flight hour costs and improving time on wing availability through standard configurations, structural safety and reliability improvements, and enhanced capability. Ongoing V-22 modifications specifically focus on readiness (reducing configurations and increasing maintenance efficiencies), reliability (improving the nacelles to increase aircraft availability), and relevance (improving joint airborne mission networking).

Prime Contractor(s): Airframe: Bell Helicopter Textron, Incorporated; Amarillo, TX
 The Boeing Company; Philadelphia, PA
 Engines: Rolls Royce; Indianapolis, IN

V-22 Osprey						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USN	-	106.5	-	137.6	-	109.4
USAF & SOCOM	-	21.4	-	39.7	-	42.0
Subtotal	-	127.9	-	177.3	-	151.4
Procurement						
USN	5	734.7	-	243.2	-	295.2
USAF & SOCOM	-	231.8	-	229.0	-	92.2
Subtotal	5	966.5	-	472.2	-	387.4
Total	5	1,094.4	-	649.5	-	538.8

Note: Includes Modification Program

Numbers may not add due to rounding

C-130J Hercules

DOD - JOINT

The C-130J Hercules is a medium-sized tactical transport airlift aircraft that modernizes the United States tactical airlift capability. It is capable of performing a variety of combat delivery (tactical airlift) operations across a broad range of mission environments, including deployment and redeployment of troops and supplies within/between command areas in a theater of operation, aeromedical evacuation, air logistics support, air refueling, special operations, firefighting, weather reconnaissance, and augmentation of strategic airlift forces. Specific mission variants of the C-130J conduct weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J and AC-130J). The KC-130J provides the Marine Corps air-to-air refueling/tactical transport capability; airborne radio relay; intelligence, surveillance, and reconnaissance; and close air support to replace the KC-130 F/R/T aircraft.



Mission: Provides responsive air movement and delivery of combat troops/supplies directly into objective areas through air landing, extraction, airdrop, and the air logistics support of theater forces.

FY 2025 Program: Funds capability upgrades (Block 8.1 and Communication Modernization), logistics support services, diminishing manufacturing sources, and post-delivery support.

Prime Contractor(s): Lockheed Martin Corporation; Marietta, GA

C-130J Hercules						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
C-130J	-	9.8	-	19.1	-	34.4
HC/MC-130J	-	46.1	-	36.5	-	24.9
Subtotal		55.9		55.6		59.4
Procurement						
C-130J	16	1,775.3	-	34.9	-	2.4
MC-130J	-	17.5	-	-	-	-
KC-130J	5	468.6	2	241.3	-	33.4
Subtotal	21	2,261.4	2	276.2	-	35.8
Mods	-	529.6	-	491.7	-	710.8
Total	21	2,846.9	2	823.6	-	806.0

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

MQ-1C Gray Eagle



The U.S. Army MQ-1C Gray Eagle Unmanned Aircraft Systems is comprised of aircraft configured with multi-spectral targeting systems (electro-optical, infrared, laser designator, and IR illuminator) providing real-time full motion video, weapons, data links; and ground control stations with communications equipment providing line-of-sight and beyond-line-of-sight control. The system is a single-engine, propeller-driven unmanned aircraft and includes the Gray Eagle Extended Range Engineering Change Proposal, which extends the aircraft's range and endurance. The Air Force completed divestment of MQ-1B in FY 2018 and replaced all aircraft with MQ-9 Reapers.



Mission: Operates over-the-horizon at medium altitude for long endurance and provides real-time intelligence, surveillance, reconnaissance, target acquisition, and strike capability to aggressively prosecute time-sensitive targets. The system includes a Synthetic Aperture Radar, Ground Moving Target Indicator, a communications relay capability, a heavy fuel engine, encrypted tactical common data link, and greater weapons capability.

FY 2025 Program: Supports the procurement of Heavy Fuel Engines for the Gray Eagle air vehicle. The new engine propulsion system provides a viable solution to ensure operational readiness for the enduring MQ-1C Gray Eagle fleet and associated weapons systems. Funding also supports the development and procurement of Assured Position Navigation & Timing (A-PNT) kits for the Vision Based Navigation (VBN), which includes a processor, down facing camera, and associated cabling. VBN provides a "non-GPS" based navigation solution on the Gray Eagle aircraft to operate in a GPS denied environment. VBN provides an alternate means of estimating aircraft position during GPS denial/outage by tracking aircraft movement using video imagery.

Prime Contractor(s): General Atomics-Aeronautical Systems Incorporated; San Diego, CA

MQ-1C Gray Eagle						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
Gray Eagle USA	-	4.5	-	6.6	-	6.7
Procurement						
Gray Eagle USA	12	483.0	-	15.0	-	23.9
Total	12	487.5	-	21.6	-	30.5

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

MQ-9 Reaper / USMC Group 5 UAS



The U.S. Air Force (USAF) MQ-9 Reaper Unmanned Aircraft System (UAS) and the United States Marine Corps (USMC) Group 5 UAS programs are comprised of an aircraft segment configured with an array of sensors; to include day/night Full Motion Video, Signals Intelligence, and Synthetic Aperture Radar sensor payloads; avionics, data links and weapons; a ground control segment consisting of a Launch and Recovery Element; and a Mission Control Element with embedded Line-of-Sight and Beyond-Line-of-Sight communications equipment. The Reaper is a single-engine, turbo-prop, remotely piloted armed reconnaissance aircraft designed to operate over-the-horizon at medium altitude for long endurance. MQ-9 provides the interim solution for the USMC Group 5 UAS requirement. Funding for U.S. Special Operations Command (USSOCOM) procures Special Operations Force (SOF) peculiar kits, payloads, and modifications.



USAF Photo

Mission: Provides reconnaissance and embedded strike capability against time-critical targets.

FY 2025 Program: Continues to develop, test, and integrate USMC-unique sensors and SOF-peculiar emerging technology mission kits, weapons, and modifications on USMC Group 5 UAS (MQ-9) Extended Range air vehicles. This request funds support equipment and primary satellite link equipment. The USAF MQ-9 program will continue MQ-9 Multi-Domain Operations (M2DO) capability enhancements. The USAF program will focus on accelerating C2 Resiliency development and fielding efforts.

Prime Contractor(s): General Atomics–Aeronautical Systems Incorporated; San Diego, CA

MQ-9 Reaper / USMC Group 5 UAS						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USAF	-	144.8	-	81.1	-	7.1
USN/USMC	-	96.3	-	108.2	-	99.9
SOCOM	-	43.3	-	37.2	-	34.9
Subtotal	-	284.4	-	226.5	-	141.9
Procurement						
USAF	-	234.6	-	98.1	-	12.4
USN/USMC	5	190.0	5	187.6	-	131.8
SOCOM	-	14.0	-	17.7	-	19.1
Subtotal	5	438.6	5	303.4	-	163.2
Total	5	723.0	5	529.9	-	305.1

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

MQ-4C Triton/RQ-4 Global Hawk/NATO AGS

DOD - JOINT

The Navy (USN) MQ-4C Triton, U.S. Air Force (USAF) RQ-4 Global Hawk, and North Atlantic Treaty Organization (NATO) Alliance Ground Surveillance (AGS) Unmanned Aircraft Systems (UAS) provide high altitude long endurance Intelligence, Surveillance, and Reconnaissance (ISR) capabilities. The MQ-4C provides the Navy with a persistent maritime ISR capability.



US Navy Photo

Mission systems include inverse Synthetic Aperture Radar (SAR), Electro-optical/Infra-red Full Motion Video maritime moving target detection, Electronic Support Measures, Automatic Identification System, a basic communications relay capability, and Link-16. The RQ-4 Block 40 includes multi-platform radar technology for SAR imaging and moving target detection. All RQ-4 aircraft have been delivered.

Mission: The Navy MQ-4C provides persistent maritime ISR and Multi-Intelligence (Multi-INT), while the USAF and NATO AGS RQ-4 systems perform high-altitude, near-real-time, high-resolution ISR collection. Both systems support Combatant Commander requirements while the MQ-4C also supports the numbered Fleet commanders with three worldwide orbits.

FY 2025 Program: Continues to provide funding for airframe support and training equipment. In addition, it continues to fund software and hardware development for Multi-INT Increment 1 (IOC) correction of deficiencies and Increment 2 enhanced Multi-INT capabilities. RQ-4 funds support infrastructure and system sustainment efforts, and the U.S. contribution to the NATO AGS during program office liquidation. FY 2024 was the last year of procurement for MQ-4C.

Prime Contractor(s): Northrop Grumman; Rancho Bernardo, CA

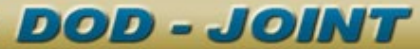
MQ-4C Triton / RQ-4 Global Hawk / NATO AGS						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
RQ-4, USAF	-	36.8	-	1.2	-	9.5
RQ-4, NATO	-	0.8	-	0.0	-	0.9
MQ-4, USN	-	164.0	-	312.5	-	458.4
Subtotal	-	201.6	-	313.7	-	468.8
Procurement						
RQ-4, USAF	-	41.0	-	-	-	-
MQ-4, USN	3	736.5	2	510.0	-	281.3
Subtotal	3	777.5	2	510.0	-	281.3
Total	3	979.1	2	823.7	-	750.1

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

Armed Overwatch/ Targeting



Armed Overwatch provides Special Operations Forces (SOF) with crewed deployable, affordable, and sustainable manned aircraft systems capable of executing Close Air Support (CAS), precision strike, and armed Intelligence, Surveillance, and Reconnaissance (ISR) requirements in austere and permissive environments for use in irregular warfare operations in support of the National Defense Strategy.



Mission: Provides CAS, precision strike, and armed ISR.

FY 2025 Program: Funds the procurement and fielding of 12 Armed Overwatch aircraft, initial spares, prime contractor systems engineering and program management, support equipment, interim contract support, two cockpit familiarization training devices, two weapon system trainers, mission planning systems, and other government costs to include emerging system safety enhancements. RDT&E investments continue for SOF integration, testing and aircraft certifications and necessary verification testing. Initial developments begin for modular payload integration activities and required operational testing.

Prime Contractor(s): L-3 Harris; Waco, TX

Armed Overwatch / Targeting						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	1.2	-	2.0	-	2.0
Procurement	9	246.0	12	266.8	12	335.5
Total	9	247.2	12	268.8	12	337.5

Numbers may not add due to rounding

Aircraft & Related Systems

AH-64E Apache

USA

The AH-64E Apache program is a remanufacture effort that integrates a mast-mounted fire control radar into an upgraded and enhanced AH-64 airframe. The remanufacture effort results in a zero-time Longbow Apache, which restarts its service life and modernizes the aircraft with updated technologies and performance enhancements to keep it viable throughout its lifecycle. The AH-64E program incorporates a new power train system that restores the aircraft to its previous flight performance capabilities that have been reduced over the years due to added weight. The AH-64E has all-new open architecture computer systems, including an all-digital cockpit flight control. The aircraft also has manned/unmanned teaming capability with the Army’s Unmanned Aerial Systems, giving the system far greater targeting distances. Additionally, the AH-64E can share targeting data with Joint Forces via its onboard Link 16 system.



US Army Photo

Mission: Conducts armed reconnaissance, close combat, mobile strike, and vertical maneuver missions in day, night, obscured battlefields, and adverse weather conditions.

FY 2025 Program: Funds the procurement of 31 AH-64E remanufactured aircraft. FY 2025 is the fourth year in a Multiyear Procurement Contract (FY 2022 – FY 2025). For capability enhancements, the FY 2025 program includes funding to begin designing, integrating, and qualifying an oil-cooled generator for the AH-64E to resolve issues with the current legacy air-cooled generator.

Prime Contractor(s): The Boeing Company; Mesa, AZ

AH-64E Apache						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	26.6	-	10.5	-	8.2
Procurement						
AH-64E Reman	38	787.8	42	828.9	31	570.7
Modifications	-	85.8	-	113.1	-	81.0
Total	38	900.2	42	952.6	31	659.9

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

CH-47 Chinook

USA

The CH-47F Improved Cargo Helicopter program procures new and remanufactured Service Life Extension Program CH-47F helicopters. The aircraft includes an upgraded digital cockpit and modifications to the airframe to reduce vibration. The upgraded cockpit contains a digital data bus that permits enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. The new aircraft uses more powerful T55-GA-714A engines, improving fuel efficiency and lift performance. The primary users of these aircraft are heavy helicopter companies (CH-47F) and Special Operations Aviation (MH-47G). The Army plans to use the CH-47F as its heavy-lift helicopter until the late 2030s. The recapitalization of the MH-47G airframes is required to extend the useful life of legacy aircraft. The CH-47F Block II development effort is in Engineering and Manufacturing Development. Improvements include increased lift, engine control, upgraded drive train components, and advanced flight controls.



US Army Photo

Mission: Performs heavy lift missions, including troop transport, air assault, resupply in combat, combat support, and combat service support.

FY 2025 Program: Procures four MH-47G aircraft and six CH-47F aircraft. Funds the continued modernization of the Army’s only heavy lift helicopter, including integration and improvements through the program of record.

Prime Contractor(s): The Boeing Company; Philadelphia, PA.

CH-47 Chinook						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	65.6	-	9.3	-	4.8
Procurement						
MH-47G Production	4	187.9	6	221.4	4	234.5
CH-47F Production	3	200.0	-	-	6	465.2
Modifications	-	49.4	-	20.7	-	15.8
Total	7	502.9	6	251.4	10	720.3

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

UH-60 Black Hawk

USA

The UH-60 Black Hawk is a twin-engine, single-rotor, four-bladed utility helicopter designed to carry a crew of four and a combat-equipped squad of 11 soldiers or an external load of up to 9,000 pounds. The UH-60 comes in many variants, with many modifications and capabilities to fulfill different roles. The Army variants can be fitted with stub wings to carry additional fuel tanks or weapons. The UH-60M Black Hawk is a digital



US Army Photo

networked platform with improved range and lift to support operational Commanders through air assault, general support command and control, and aeromedical evacuation. An HH-60M is a UH-60M Black Hawk integrated with the medical evacuation mission kit, which provides day/night and adverse weather emergency evacuation of casualties.

Mission: Provides a highly maneuverable, air transportable, troop-carrying helicopter for all intensities of conflict without regard to geographical location or environmental conditions. It moves troops, equipment, and supplies into combat, performing aeromedical evacuation and multiple functions supporting the Army’s air mobility doctrine.

FY 2025 Program: Funds procurement of 24 aircraft (9 UH-60M and 15 HH-60M), related installations, and government-furnished equipment. FY 2025 is the fourth year of a five-year multiyear procurement contract (FY 2022 – FY 2026).

Prime Contractor(s): UH-60M: Airframe/CFE - Sikorsky, A Lockheed Martin Company; Stratford, CT

UH-60 Black Hawk						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	1.5	-	25.0
Procurement						
UH-60M	35	990.5	24	760.8	24	767.2
UH-60V	21	178.7	26	153.2	-	-
Total	56	1,169.1	50	915.5	24	792.2

Numbers may not add due to rounding

Aircraft & Related Systems

Future Long-Range Assault Aircraft

USA

The Future Long Range Assault Aircraft (FLRAA) is a major defense acquisition program that will develop and field the next generation of affordable vertical lift tactical assault/utility aircraft for the Army. This medium-lift tactical assault and medical evacuation aircraft will augment the Army’s H-60 Black Hawk utility helicopter fleet to provide the combat aviation brigades with long-range, high-speed, survivable options in contested environments. The Army competitively awarded the weapon system development contract in December 2022.



Mission: Conducts air assault, urban assault/security, maritime interdiction, medical evacuation, humanitarian assistance/disaster relief, tactical resupply, direct action, noncombatant evacuation, and combat search and rescue operations. FLRAA will support the Army, including Special Operations Command (USSOCOM) and the Joint Force, in a contested, near-peer threat environment. The FLRAA weapon system will retain the Army’s ability to project combat power with transformational increases in range, speed, mobility, and payload over current Army and USSOCOM aircraft.

FY 2025 Program: Funds post Milestone B activities and continued development of a digital backbone architected to meet modular open system approach objectives and developmental prototype assembly and integration for qualification and test.

Prime Contractor(s): Bell Helicopter Textron, Incorporated; Ft. Worth, TX

Future Long-Range Assault Aircraft						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	664.8	-	1,044.1	-	1,260.2
Procurement	-	-	-	-	-	-
Total	-	664.8	-	1,044.1	-	1,260.2

Numbers may not add due to rounding

Aircraft & Related Systems

MQ-25 Stingray/Unmanned Carrier Aviation



The United States Navy MQ-25A Stingray and the Unmanned Carrier Aviation (UCA) Mission Control System (UMCS) programs are developing an unmanned capability to embark as part of the Carrier Air Wing (CVW) for aerial refueling and Intelligence, Surveillance, and Reconnaissance missions. The MQ-25 will extend the CVW mission effectiveness range and mitigate the current Carrier Strike Group organic ISR shortfall. As the first carrier-based Group 5 Unmanned Aircraft System, the MQ-25 will pioneer the integration of manned and unmanned operations; demonstrate complex sea-based Command, Control, Communications, Computers, and Intelligence technologies; and pave the way for future multi-mission



UAS to pace emerging threats. The MQ-25 was previously funded under the Unmanned Carrier Launched Airborne Surveillance and Strike program. The program entered Engineering and Manufacturing Development in the fourth quarter of FY 2018. The Navy expects to provide the fleet with an Initial Operational Capability (IOC) for MQ-25 by FY 2026.

Mission: Conducts aerial refueling as a primary mission and provides ISR as a secondary mission.

FY 2025 Program: Funds continuation of Ground Control Station integration and begins ground and flight tests with the air vehicles. All four Engineering Development Models (EDMs) and one of the three System Demonstration Test Articles (SDTAs) will be delivered to the test program and be available for ground and flight testing. The FY 2025 budget funds three Low-Rate Initial Production (LRIP) MQ-25 aircraft and advanced procurement supporting LRIP Lot 2 (three MQ-25 aircraft) long lead materials. Also, it funds the UMCS program that builds, integrates, installs, and sustains the systems (control station, communications, and networks) required to operate the MQ-25 and performs ship installations associated with the MQ-25. In FY 2025, the UMCS program will finalize the interface design and install the MD-5E Embarkable system.

Prime Contractor(s): Airframe: Boeing; St. Louis, MO
UMCS: Lockheed Martin; Fort Worth, TX

MQ-25 Stingray/Unmanned Carrier Aviation						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	250.9	-	220.4	-	214.9
Procurement - MQ-25	1	748.2	3	596.3	3	553.0
Procurement - UMCS	-	134.7	-	152.7	-	130.1
Total	1	1,133.8	3	969.4	3	898.0

Numbers may not add due to rounding

Aircraft & Related Systems

F/A-18 Super Hornet



The F/A-18 E/F Super Hornet is a carrier-based multi-role tactical fighter and attack aircraft. Two versions are in production: the single-seat E model and the two-seat F model. The Super Hornet is an attack aircraft as well as a fighter through selected use of external equipment and advanced networking capabilities to accomplish specific missions. This “force multiplier” capability gives the operational commander more flexibility in employing tactical aircraft in a rapidly changing battle scenario. In its fighter mode, the aircraft serves as escort and fleet air defense. In its attack mode, the aircraft provides force projection, interdiction, and close and deep air support.



US Navy Photo

Mission: Provides multi-role attack and strike fighter capability, which includes the traditional applications, such as fighter escort and fleet air defense, combined with the attack applications, such as interdiction and close air support.

FY 2025 Program: Continues Production Line Shutdown as FY 2023 is the last year of the E/F model multiyear procurement contract (FY 2021 - FY 2023). Continues to fund spares, repair parts, and the Service Life Extension Program to maintain sufficient aircraft inventory to meet fleet operational requirements through FY 2046. Development and integration of critical aircraft systems, like the Infrared Search and Track (IRST) pod, continues to ensure the F/A-18 E/F can meet advanced threats expected in 2025 and beyond.

Prime Contractor(s): Airframe: Boeing; St. Louis, MO
 Engine: General Electric Company; Lynn, MA

F/A-18 E/F Super Hornet						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	283.7	-	365.9	-	382.8
Procurement	8	1,780.3	-	1,466.2	-	1,422.8
Total	8	2,064.0	-	1,832.1	-	1,805.6

NOTE: Includes IRST and Modification funding.

Numbers may not add due to rounding

Aircraft & Related Systems

E-2D Advance Hawkeye



The E-2D Advanced Hawkeye is an airborne early warning, all weather, twin-engine, carrier-based aircraft designed to extend task force defense perimeters. The Advanced Hawkeye provides improved battlespace target detection and situational awareness, especially in the littorals; supports the Theater Air and Missile Defense operations; and improves operational availability for the radar system. Relative to the E-2C aircraft, the E-2D aircraft provides increased electrical power, a strengthened fuselage, an upgraded radar system, communications suite, and mission computer.



Mission: Provides theater air and missile sensing and early warning; battlefield management command and control; acquisition tracking and targeting of surface warfare contacts; surveillance of littoral area objectives and targets; and tracking of strike warfare assets.

FY 2025 Program: Continues production line shutdown as FY 2023 was the last year of the E-2D multiyear procurement contract (FY 2019 – FY 2023). Production line shutdown will occur in 2029 unless new orders are received. Continues funding for associated support and continued development of systems, in addition to the procurement of various equipment required to establish organic depot capability.

Prime Contractor(s): Airframe: Northrop Grumman Corporation;
 Bethpage, NY (Engineering)
 St. Augustine, FL (Manufacturing)
 Engine: Rolls-Royce Corporation; Indianapolis, IN
 Radar: Lockheed Martin Corporation; Syracuse, NY

E-2D Advanced Hawkeye						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	440.7	-	399.9	-	301.4
Procurement	7	1,206.2	-	182.8	-	197.7
Total	7	1,646.9	-	582.7	-	499.1

Numbers may not add due to rounding

Aircraft & Related Systems

CH-53K Heavy Lift Helicopter



The CH-53K King Stallion is the only marinated heavy-lift helicopter and replaces the United States Marine Corps CH-53E Super Stallion, which was introduced in 1980. The CH-53K provides improved lift and range capabilities, payload, performance, cargo handling, reliability and maintainability, interoperability,



survivability, ship integration, and force protection. The CH-53K is designed to support Marine Air-Ground Task Force (MAGTF) heavy-lift requirements in the 21st-century joint environment and is the only heavy-lift platform that can lift the MAGTF ashore. The CH-53K provides an unparalleled high-altitude lift capability with nearly three times the external lift capacity of the CH-53E. The total CH-53K program of record quantity is 200 operational aircraft with 4 System Demonstration Test Articles and 196 aircraft funded with Aircraft Procurement, Navy. The Navy completed initial operational test & evaluation in April 2022, achieved initial operational capability in May 2022, and approved full-rate production in December 2022.

Mission: Conducts expeditionary heavy-lift assault transport of armored vehicles, equipment, and personnel to support distributed operations deep inland from a sea-based center of operations.

FY 2025 Program: Funds procurement of 19 aircraft, advance procurement for long-lead materials, and T-408 engine economic order quantity requirements. FY 2025 is the first year of a new two-year block buy contract for airframes (FY 2025 – FY 2026) and a new five-year multi-year procurement contract for engines (FY 2025 – FY 2029). The program also includes development funds for follow-on improvements and to stand up government test capabilities.

Prime Contractor(s): Airframe: Sikorsky Aircraft Corporation; Stratford, CT
Engines: General Electric Company; Lynn, MA

CH-53K Heavy Lift Replacement Helicopter						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	213.6	-	222.3	-	86.1
Procurement	12	2,258.0	15	2,196.0	19	2,598.9
Total	12	2,471.6	15	2,418.3	19	2,685.0

Note: Includes Modification Program

Numbers may not add due to rounding

B-21 Raider



The B-21 Raider, previously referred to as the Long Range Strike-Bomber, is a new, high-tech long range bomber that will replace B-1 and B-2 bombers. The B-21 will be a key component of the joint portfolio of conventional and nuclear capable deep-strike capabilities. The B-21 will be delivered to operational bases in the mid-2020's. The B-21 has been designed as a dual capable aircraft, with the ability to employ nuclear weapons, per congressional direction, not later than 2 years after conventional Initial Operational Capability (IOC). The B-21 program is planning to achieve nuclear certification at the earliest opportunity. Highly survivable, the B-21 Raider will have the ability to penetrate modern air defenses. The Air Force plans to procure a minimum of 100 aircraft. Manufacturing of the test aircraft is underway at Northrop Grumman's facility in Air Force Plant 42. The 420th Flight Test Squadron at Edwards Air Force Base (AFB) was reactivated on October 4, 2019 to prepare for B-21 flight test. On March 27, 2019, the Secretary of the Air Force announced that Ellsworth AFB, South Dakota, Whiteman AFB, Missouri and Dyess AFB, Texas are the preferred Main Operating Base locations. Ellsworth AFB, South Dakota was approved as MOB #1 on June 3, 2021.



Mission: Destroys strategic targets to debilitate an adversary's capacity and capability to wage war. The B-21 will deliver the capability to operate in contested environments, counter emerging threats, and support the nuclear triad by providing a visible and flexible nuclear deterrent capability. Additional details are classified.

FY 2025 Program: Continues Engineering and Manufacturing Development of the B-21. Procurement funds continue the transition into low rate initial production, which includes long lead parts. Additional details are classified.

Prime Contractor(s): Northrop Grumman Corporation; Falls Church, VA

B-21 Raider						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	3,037.5	-	2,984.1	-	2,654.1
Procurement	-	1,716.8	-	2,332.1	-	2,684.4
Total	-	4,754.3	-	5,316.2	-	5,338.5

Numbers may not add due to rounding

Aircraft & Related Systems

Bombers



Bombers provide an intercontinental capability to rapidly strike surface targets. The Air Force legacy bomber fleet includes the B-1B, B-2, and B-52H aircraft. The B-1B Lancer, fielding completed in 1988, is a swing-wing, supersonic, long-range conventional bomber and carries the largest payload of both guided and unguided weapons in the Air Force inventory. The multi-mission B-1B is the backbone of the U.S. long-range conventional bomber force and can rapidly deliver massive quantities of both precision and non-precision weapons against any adversary, any place in the world, at any time. The B-2 Spirit, fielded in the 1997, is a multi-engine, long range conventional and nuclear bomber incorporating low-observable technology that enables the B-2 to penetrate enemy air defenses and strike high-value targets. The B-52H Stratofortress, fielding completed in 1962, is a long range, subsonic, strategic bomber that provides nuclear and conventional missions.



Mission: Fly into enemy territory to destroy strategic targets such as major military installations, factories, and ports to debilitate an adversary’s capacity to wage war. The B-1B bomber can perform a variety of missions, including that of conventional carrier for theater operations and can rapidly deliver massive quantities of both precision and non-precision weapons against any adversary, worldwide, at any time. The B-2 aircraft delivers both conventional and nuclear munitions, capable of massive firepower in short time anywhere, is the only aircraft capable of penetrating enemy defenses to bomb heavily defended targets, and the only aircraft to carry the 30,000 pound GBU-57 Massive Ordnance Penetrator. The B-52H aircraft conducts both nuclear and conventional missions and carries the widest variety of weapons of all the bombers, including the only aircraft to carry the AGM-86 Air Launched Cruise Missile, a nuclear cruise missile.

FY 2025 Program: Continues upgrades to modernize legacy bombers including avionics, communications, radar, engine, and weapons efforts.

Prime Contractor(s): B-2: Northrop Grumman Aerospace Systems; Palmdale, CA
 B-1B, B-52H: Boeing Defense; Oklahoma City, OK

Bombers						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	821.9	-	1,051.1	-	1,104.7
Procurement	-	223.5	-	203.6	-	289.7
Total	-	1,045.4	-	1,254.7	-	1,394.4

Note: Includes Modification Program

Numbers may not add due to rounding
 Aircraft & Related Systems

KC-46A Tanker



The KC-46A Pegasus provides aerial refueling support to Air Force, Navy, Marine Corps, and allied aircraft. The aircraft offers increased refueling capacity, improved efficiency, and cargo and aeromedical evacuation capability over the current KC-135 Stratotanker, which is over 50 years old. The KC-46A is the first phase of aerial refueling tanker



USAF Photo

recapitalization, replacing approximately one-third of the current legacy tanker fleet. The KC-46A aircraft is assembled on the existing commercial 767 production line and militarized in the Everett Modification Center, both in Everett, Washington. Follow-on aerial refueling tanker programs will ultimately recapitalize the entire fleet over more than 30 years. Boeing has delivered 80 aircraft to the USAF as of January 13, 2024.

Mission: Provides the capability to refuel joint and coalition receivers via a boom or drogue system and will augment the airlift fleet with cargo, passenger, and aeromedical evacuation capabilities. The Air Force uses tanker aircraft to support these strategic, operational, and tactical missions across the entire spectrum of military operations. The KC-46A aircraft will operate in day, night, and adverse weather to enable deployment, employment, and redeployment of United States and coalition forces.

FY 2025 Program: Procures 15 aircraft and continues the Air Force’s development efforts of a militarized variant of the Boeing 767-2C aircraft to integrate military capabilities into four development aircraft and the associated developmental and operational testing. Funds also support the development of technical manuals, training systems, and a collection of simulator and maintenance data.

Prime Contractor(s): The Boeing Company; Seattle, WA

KC-46A Tanker						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	140.4	-	124.7	-	93.6
Procurement	15	2,458.7	15	2,882.6	15	2,854.7
Mods	-	0.5	-	-	-	25.0
Total	15	2,599.6	15	3,007.3	15	2,973.3

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

VC-25B Presidential Aircraft Recapitalization



The VC-25B Presidential Aircraft Recapitalization program will replace the current VC-25A (Boeing 747-200) “Air Force One” aircraft with a new, modified 747-8. The VC-25B will provide the President, staff, and guests with safe and reliable air transportation at the same level of security and communications capability available in the White House. The 747-8 aircraft modifications will include an electrical power upgrade, dual auxiliary power units usable in flight, a mission communication system, an executive interior, military avionics, a self-defense system, autonomous enplaning and deplaning, and autonomous baggage loading. The Air Force awarded the \$3.9 billion firm-fixed-price contract for engineering and manufacturing development, detailed design, modification, certification, and fielding of two presidential, mission-ready 747-8 aircraft in July 2018.



Mission: Provides safe, secure, worldwide transport to ensure the President can execute the constitutional roles of Commander-in-Chief, Head of State, and Chief Executive.

FY 2025 Program: Continues the Engineering and Manufacturing Development phase of acquiring and modifying two commercial aircraft to field the capability by 2028.

Prime Contractor(s): The Boeing Company; Seattle, WA

VC-25B Presidential Aircraft Recapitalization						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	79.6	-	490.7	-	433.9
Procurement	-	-	-	-	-	-
Total	-	79.6	-	490.7	-	433.9

Numbers may not add due to rounding

F-22 Raptor



The F-22 Raptor is a fifth-generation air superiority fighter aircraft. The Raptor is designed to penetrate enemy airspace and achieve first-look, first-shot, first-kill capability against multiple targets. It has unprecedented survivability and lethality, ensuring the Joint Forces have freedom from attack, freedom to maneuver, and freedom to attack in the assurance of world-wide air dominance.



Mission: Provides the U.S. enhanced air superiority/global strike capability to counter and defeat air-to-air and air-to-ground threats in highly contested environment by conducting counter-air, destruction of enemy air defenses, and cruise missile defense missions.

FY 2025 Program: Continues deliberate investments via the Raptor Agile Capability Release program to ensure F-22s are upgraded with state-of-the-art sensors, improved survivability, enhanced interoperability, and extended range and time on station. The FY 2025 program continues critical planned modernization for F-22 aircraft via incremental capability upgrades, incremental development efforts, and key reliability and maintainability improvements that will enhance the F-22 Air Superiority and Global Strike capabilities in highly contested environments. With the completion of Increment 3.2B modernization, F-22 programs will continue to release upgraded communications systems, navigation systems, reliability and maintainability improvements, critical sensor enhancement capabilities, and low drag tanks/pylons capabilities to meet advanced threats expected in 2026 and beyond.

Prime Contractor(s): Airframe: Lockheed Martin; Marietta, GA and Fort Worth, TX
 Engine: Pratt & Whitney; Hartford, CT

F-22 Raptor						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	542.7	-	725.9	-	768.6
Procurement	-	719.9	-	794.7	-	861.1
Total	-	1,262.6	-	1,520.6	-	1,629.7

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

F-15 Eagle



The F-15E is a twin engine, dual seat, supersonic dual-role, all-weather, deep interdiction fighter with multi-role air-to-air/air-to-ground capabilities. The F-15EX is a modernized derivative of the F-15E with advanced flight controls, superior sensors, and increased weapons capacity and range needed to defend critical



locations in highly contested environments by recapitalizing the divesting F-15C/D fleet. The F-15 C/D is a twin engine (F-15C single seat; F-15D dual seat), supersonic, all-weather, day/night, air superiority fourth-generation fighter aircraft (projected divestment target date of FY 2026).

Mission: Supports the fifth-generation fighter fleet to gain and maintain air superiority and provide global precision attack over the battlefield.

FY 2025 Program: Continues the procurement of the F-15EX aircraft and funds weapon system requirements needed for operational conversion from F-15C/D to F-15EX. The Eagle Passive/Active Warning Survivability System production and installation efforts will improve F-15E/EX survivability by enhancing the ability to detect, deny, or defeat air and ground threats. Continues F-15E modernization investment, focusing development efforts on the Operational Flight Program, weapons integration efforts, and test aircraft upgrades to meet the Air Force’s developmental and operational test requirements. Procurement funding continues modification and support investments in Advanced Display Core Processor II, Data Transfer Module II, Multifunctional Information Distribution System – Joint Tactical Radio System, and Mobile User Objective System / Second Generation Anti-Jam Tactical UHF Radio for NATO. The FY 2024 began realigning the FYDP to Air Force divestment plans, projecting F-15C/D divestment completions by FY 2026, while initiating partial divestment of F-15E fleet in FY 2025.

Prime Contractor(s): Boeing; St. Louis, MO

F-15EX Eagle II / F-15E Eagle						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
F-15EX						
RDT&E	-	91.2	-	100.0	-	56.2
Procurement	24	2,735.8	24	2,898.0	18	1,808.5
Subtotal	24	2,826.9	24	2,998.0	18	1,864.7
F-15E Mods						
RDT&E	-	258.9	-	64.9	-	178.6
Procurement	-	452.2	-	315.5	-	317.8
Subtotal	-	711.1	-	380.4	-	496.4
Total	24	3,538.1	24	3,378.5	18	2,361.1

Note: Includes Modification Program

Numbers may not add due to rounding

HH-60W Combat Rescue Helicopter



The HH-60W Program, formerly called the Combat Rescue Helicopter (CRH) and the HH-60 Recapitalization, replaces the aging HH-60G Pave Hawk helicopter. The HH-60W Jolly Green II design is based on the Army’s UH-60M Black Hawk, tailored for Combat Search and Rescue (CSAR) in all-weather situations. The HH-60W program leverages in-service air vehicle designs and training systems and integrates existing technologies and mission systems to build and acquire a new system. Onboard defensive capabilities and planned upgrades will permit the HH-60W to operate in an environment with increased threats. An in-flight refueling capability will provide an airborne-ready alert capability and extend its combat mission range. The Air Force acquired the last lot of aircraft in FY 2023, which completes the planned procurement of 86 HH-60W aircraft.



USAF Photo

Mission: Conducts day and night marginal weather CSAR to recover downed aircrew and isolated personnel in hostile environments. The HH-60W will perform various collateral missions, including casualty evacuation, medical evacuation, non-combat evacuation operations, civil search and rescue, international aid, disaster humanitarian relief, and insertion/extraction of combat forces.

FY 2025 Program: Procures training devices, interim supply, contractor support for fielding aircraft, and continued depot stand-up. The funding also provides training for converting Kadena AFB and the Air National Guard to the HH-60W.

Prime Contractor(s): Sikorsky Aircraft Corporation (a Lockheed Martin Company); Stratford, CT

HH-60W Combat Rescue Helicopter						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	27.7	-	48.3	-	52.3
Procurement	20	1,209.1	-	282.5	-	191.6
Total	20	1,236.8	-	330.8	-	243.9

Note: Includes Modification Program

Numbers may not add due to rounding

Aircraft & Related Systems

Advanced Pilot Training (T-7A)



The Advanced Pilot Training (APT) System, T-7A, Red Hawk, will replace the Air Education and Training Command’s fleet of T-38C aircraft, currently based in Mississippi, Oklahoma, and Texas. The APT program will provide aircraft, simulators,



and advanced training capabilities needed to train future Air Force pilots to fly fourth and fifth generation fighter aircraft. The aircraft, with modern simulators, will enable a pilot training process that produces pilots at a rate that meets the needs of the Air Force for the next several decades.

Mission: Provides student pilots in the Specialized Undergraduate Pilot Training advanced phase and Introduction to Fighter Fundamentals, the skills and competencies required to transition more effectively into fourth and fifth-generation fighter and bomber aircraft. The aircraft and maintenance simulators will encompass a full range of physical devices and instructional techniques (e.g., traditional classroom, online training, and virtual training).

FY 2025 Program: Continues execution of the fixed price Engineering and Manufacturing Development (EMD) pending Milestone C scheduled to occur in FY 2025 with the subsequent purchase of Low-Rate Production (LRIP) 1. The production contract will include aircraft, spares, and Ground Based Training Systems. Continues development, test, and evaluation efforts for the program.

Prime Contractor(s): The Boeing Company; St. Louis, MO

Advanced Pilot Training (T-7A)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	32.5	-	77.3	-	84.0
Procurement	-	10.5	-	-	7	235.2
Total	-	43.0	-	77.3	7	319.2

Numbers may not add due to rounding

Aircraft & Related Systems

MH-139A Grey Wolf



The MH-139A program will procure 42 MH-139As to replace the UH-1N fleet, which has significant capability gaps in the areas of speed, range, endurance, payload capacity, and aircraft self-protection. The MH-139A helicopters will eliminate these capability gaps, and the program will procure comprehensive Training Systems. The replacement MH-139A aircraft will provide vertical airlift and support the requirements of three Air Force major commands and operating agencies: Air Force Global Strike Command (AFGSC), Air Force Reserve Command, and Air Force Material Command. AFGSC is the Air Force lead command and operational capability requirements sponsor. This program is an element of the Air Force's nuclear enterprise reform initiatives.



Mission: Partially replaces the Vietnam-era UH-1N fleet that provides emergency response and convoy support for the nuclear forces and address capability shortfalls in speed, range, endurance, and carrying capacity. Milestone C decision and low-rate initial production (LRIP) contract was awarded in March 2023; operational fielding will start in FY 2024. The program procured five aircraft in FY 2023 and seven in FY 2024 as part of the first LRIP.

FY 2025 Program: Procures a production lot of eight (8) aircraft with associated initial spares, support equipment, site activation support, training, publications and technical data, and other program management administration activities.

Prime Contractor(s): The Boeing Company; Ridley Park, PA

MH-139A Grey Wolf						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	15.8	-	25.7	-	-
Procurement	5	197.4	7	249.1	8	333.4
Total	5	213.3	7	274.8	8	333.4

Numbers may not add due to rounding

Aircraft & Related Systems

E-7A



The E-7A Wedgetail program will replace the current E-3G Airborne Warning and Control System (AWACS) aircraft. The E-7A is an airborne early warning and control platform based on the Boeing (737-700) next generation design powered by twin CFM International CFM56-7 turbofan engines. The E-7A provides improved kill-chain effectiveness, enhanced survivability, reliability, and availability. The E-7A's Multifunction Electronically Scanned Array (MESA) can be electronically steered, which offers better target detection and tracking, and more robust electronic protection.



Mission: Provides Airborne Moving Target Indicator (AMTI)/Battle Management Command and Control (BMC2) capability.

FY 2025 Program: Continues funding for the E-7A developmental contract to modify the current configuration baseline to incorporate M-code GPS, Mobile User Objective System (MUOS) satellite communication, and mission system updates for cyber security and program protection. The E-7A Wedgetail acquisition is being managed under the Middle Tier Acquisition (MTA) rapid prototyping pathway.

Prime Contractor(s): The Boeing Company; Seattle, WA
Northrop-Grumman (MESA radar); Baltimore, MD

E-7A						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	411.7	-	681.0	-	418.5
Procurement	-	-	-	-	-	-
Total	-	411.7	-	681.0	-	418.5

Numbers may not add due to rounding

Aircraft & Related Systems

C-40 Fleet Expansion



The Air Force plans to acquire commercial-derivative aircraft in the C-40 Fleet Expansion program, which will augment the current C-32A executive airlift fleet. The acquisition will modify new-production business aircraft by integrating the military-specific modifications and Senior Leader Communications System-Airborne suite already on the executive airlift fleet.



Air Force Photo: C-40C

Mission: Supports the top five users: Vice President, First Spouse, Secretary of State, Secretary of Defense, and Chairman of the Joint Chiefs of Staff.

FY 2025 Program: Funds one commercial-derivative aircraft. The acquisition will modify a new-production, industry standard, business aircraft by integrating the military-specific modifications and Senior Leader Communications System-Airborne suite already on the executive airlift fleet.

Prime Contractor(s): TBD

C-40 Fleet Expansion						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	-	-	-
Procurement	-	-	-	-	1	328.7
Total	-	-	-	-	1	328.7

Numbers may not add due to rounding

Aircraft & Related Systems



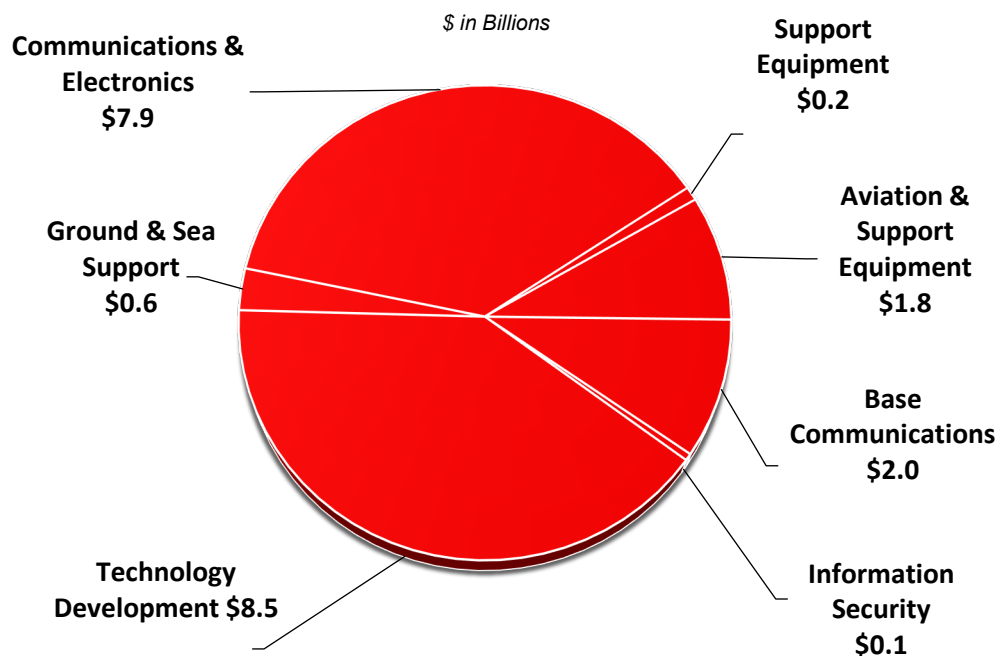
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Command, Control, Communications, Computers, and Intelligence (C4I) Systems

The Department is well underway in transforming and developing new concepts for the conduct of future joint military operations to achieve full spectrum dominance. This overarching goal to defeat any adversary or control any situation across the full range of military operations is achieved through a broad array of capabilities enabled by an interconnected network of sensors, shooters, command, control, and intelligence. Net-centricity transformed the way information is managed to accelerate decision making, improve joint warfighting, and create intelligence advantages. U.S. forces are heavily-networked and require reliable, secure, and trusted access to information and depend on network-based interconnectivity for increased operational effectiveness. By enhancing information sharing, dispersed forces are able to communicate, maneuver, share a common user-defined operating picture, and successfully complete assigned missions more efficiently. This portfolio also encompasses the development of technologies like gateways, waveforms, network management, and information assurance.

The FY 2025 budget request displayed in this portfolio is \$6.6 billion higher than what was displayed in the FY 2024 President’s Budget request. The 45 percent increase is attributable to the recategorization of programs from the Mission Support category into C4I and funding changes for Combined Joint All-Domain Command (CJADC2), Artificial Intelligence (AI), Agile Software development, 5G communications and net-centricity service-based architecture.

FY 2025 C4I Systems Total: \$21.1 Billion



Numbers may not add due to rounding

Tactical Network Technology

USA

Tactical Network Technology (TNT) Modernization in Service (MIS) provides the Army's operational formations with modernized At-the-Halt (ATH) and On-the-Move (OTM) satellite and line of sight network connectivity through technological improvement of the fielded tactical network baseline. This ATH and OTM TNT capability keeps highly mobile and dispersed



forces connected to one another from theater down to select company roles. The TNT backbone allows forces to leverage Army and Joint resources through the Department of Defense Information Network (DoDIN), providing tactical formations with reliable, secure, and seamless video, data, imagery, and voice services which enable multi-domain operations. TNT MIS enables Combined Joint All Domain Command and Control (CJADC2) by providing network connectivity and transport for the ground domain, connecting the ground domain to the DoD Information Network (DoDIN) and enabling the Army's contribution to Joint Force Commanders.

TNT MIS supports the near-term objectives of the Army Network Modernization Strategy by replacing over time, non-sustainable/end of life equipment (switches, routers, servers, etc.) with technology that meets cyber and electronic warfare resiliency requirements of the expeditionary Army. This modernization reduces life cycle costs by reducing size, weight, and power; consolidating capabilities that previously resided on individual hardware components; and by leveraging common commercial information technology solutions across various programs.

Mission: Modernizes the Tactical Network as one the Army's top six modernization priorities for multi-domain operations and supports the Army of 2030 and 2040 initiatives.

FY 2025 Program: Procures and fields Mission Network refresh, initial spares, and modernization of unsustainable end of life commercial technology in Corps through Battalion units across the Army, Army Reserve, and Army National Guard by modernizing their network transport systems and regional hub nodes. The FY 2025 Program also pilots Low Earth Orbit and Medium Earth Orbit satellite terminal capability in the ESB-E.

Prime Contractor(s): General Dynamics Mission Systems; Taunton, MA
 Datapath Inc; Duluth, GA
 L3Harris Corporation; Rochester, NY
 Cubic Corporation-DTECH Labs; Ashburn, VA
 Curtis-Wright Corporation, Pacstar; Portland, OR

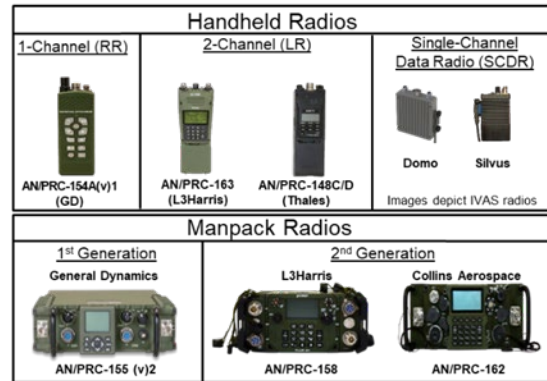
Tactical Network Technology						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	-	-	-
Procurement	-	362.9	-	358.6	-	280.8
Total	-	362.9	-	358.6	-	280.8

Numbers may not add due to rounding

C4I Systems

Handheld, Manpack, and Small Form Fit Radio DOD - JOINT

The Handheld, Manpack, and Small Form Fit (HMS) radio program is a single Acquisition Category IC program encompassing: handheld radios (one-channel Rifleman Radio (RR), two-channel Leader Radio (LR), and Single-Channel Data Radio (SCDR)) and Manpack (MP) radios (Generation 1 and Generation 2 radios). The HMS provides voice and data communication to the expeditionary Warfighter with an On-the-Move (OTM), At-the-Halt (ATH), and stationary Line of Sight (LOS) / Beyond Line of Sight (BLOS) capability for both dismounted personnel and platforms. The radio systems are software reprogrammable, networkable, multi-mode systems capable of simultaneous voice and data communication. The radios will support a variety of other platforms, including tactical end user device voice and data needs. The HMS provides tailorable and scalable software-defined radio systems to meet the communication needs of the U.S. Army, Air Force, Navy, Marine Corps, and Special Operations Command.



Mission: Provide voice and data communications to the tactical edge and the expeditionary Warfighter with an OTM, ATH, and stationary LOS / BLOS capability for both dismounted personnel and mounted platforms.

FY 2025 Program: Funds the procurement of the LR and MP radios for up to five Brigade Combat Teams, support equipment, fielding, non-recurring engineering, and platform vehicle integration. Provides for follow-on testing of the LR and MP products to demonstrate compliance with program requirements to assess effectiveness, suitability, and survivability. Supports safety, spectrum supportability, and certifications necessary to prepare products for fielding.

Prime Contractor(s): L3Harris Radio Corporation; Rochester, NY
 Thales Communications Incorporated; Clarksburg, MD
 Collins Aerospace; Cedar Rapids, IA

Handheld, Manpack, and Small Form Fit Radio						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	4.3	-	4.3	-	4.3
Procurement	-	660.3	-	765.1	-	704.1
Total	-	664.5	-	769.4	-	708.4

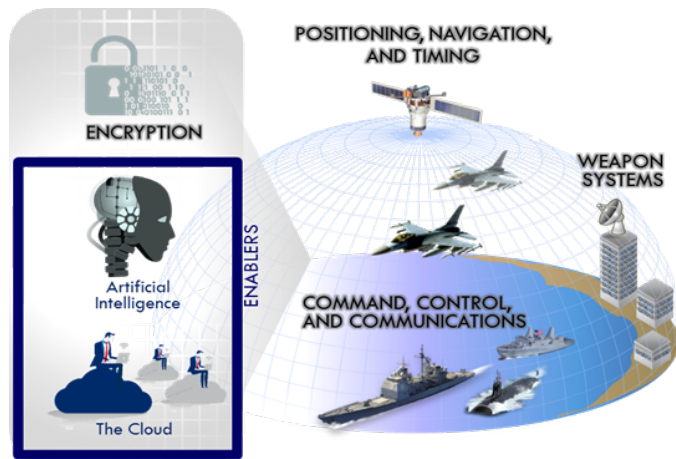
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Cyberspace Activities

DOD - JOINT

The United States is one of the most technologically advanced nations in the world, with a vast network of interconnected systems that support critical infrastructure and services. However, this reliance on technology also makes the country vulnerable to cyberspace threats.

One of the main sources of cyber threats comes from foreign state actors, who conduct cyber operations to advance their military capabilities and global influence. These operations can range from espionage and data theft to cyber-attacks that disrupt critical infrastructure or target government agencies.



In addition to foreign state actors, there is a growing threat from non-state entities, such as criminal organizations and hackers. These groups are becoming more sophisticated in their methods and techniques, making it difficult to defend against cyber-attacks.

The FY 2025 cyberspace activities (CA) budget, aligned with the 2022 Department of Defense (DoD) National Defense Strategy (NDS), reaffirms the Department’s three enduring cyberspace missions: defend the DoD Information Network, defend the nation, and prepare to fight and win the nation’s wars.

Mission: Improve the cyber resiliency of the Joint Force and its supporting elements to ensure they can execute their missions successfully in contested cyberspace environments; strengthen the Joint Force by conducting cyberspace operations that enhance U.S. military advantages, harden weapon systems through continuous cyber assessments and mitigation; defend U.S. critical infrastructure from malicious cyber activity; secure DoD information and systems, including DoD information on non-DoD owned networks, against malicious cyber activity; and expand DoD cyber cooperation with interagency, industry, and international partners.

FY 2025 Program: Funds three focus areas: advancing cybersecurity (CS), cyberspace operations (CO), and cyber research and development (R&D) activities. This aligns to the DoD's commitment to strengthening its cyber capabilities and protecting its critical networks and systems from evolving threats.

Prime Contractor(s): Various

Cyberspace Activities						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	2,729.0	-	3,041.6	-	3,178.0
Procurement	-	720.9	-	1,018.3	-	780.8
Total	-	3,449.9	-	4,059.9	-	3,958.8

Numbers may not add due to rounding

CJADC2 Programs

DOD - JOINT

The Department of Defense (DOD) continues to improve its Command and Control (C2) structure in a rapidly evolving battlespace. The joint all-domain approach, initiated in Fiscal Year (FY) 2020, is the warfighting capability necessary to keep pace with the volume and complexity of data in modern warfare and to deter, deny, and, if necessary, defeat adversarial advancement.



Combined Joint All Domain Command and Control (CJADC2) is C2 for 21st-century warfighting that supports the Joint Warfighting function enabled by technology, not a single system we buy as product or program of record. It is an ongoing effort to transform our C2 processes and strengthen the integration of data, analytics, artificial intelligence (AI), and advanced networks, into modified Joint workflows that enable Joint command and control across all domains – land, sea, air, space, and cyberspace.

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In the FY 2025 CJADC2 budget, each Military Department contributes to CJADC2; FY 2025 initiatives include the Army’s Project Convergence, the Navy’s Project Overmatch, and the Air Force’s Advanced Battle Management System (ABMS). The Chief Digital and Artificial Intelligence Office (CDAO) contributes with four distinct efforts: Joint Operating System (JOS), Data Integration Layer (DIL), Global Information Dominance Experimentation (GIDE), and Mission Command Applications (MCAs).

Mission: CJADC2 builds on the Air, Land Battle (Air Land Battle) framework of the Cold War, with a modern version extends the integration framework from two domains (air and land) to all domains including sea, space and cyber. It accelerates the command-and-control function to a continuous real-time decision and feedback loop. The JADC2 framework intends to provide the sensors, data, networks, and automated decision aids (AI) to make real-time command and control (C2) possible.

FY 2025 Program: Provides \$1.4 billion to continue development of the CJADC2 architecture.

Prime Contractor(s): Various

Combined Joint All Domain Command & Control						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	611.0	-	1,039.0	-	1,433.0
Total	-	611.0	-	1,039.0	-	1,433.0

Numbers may not add due to rounding



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Ground Systems

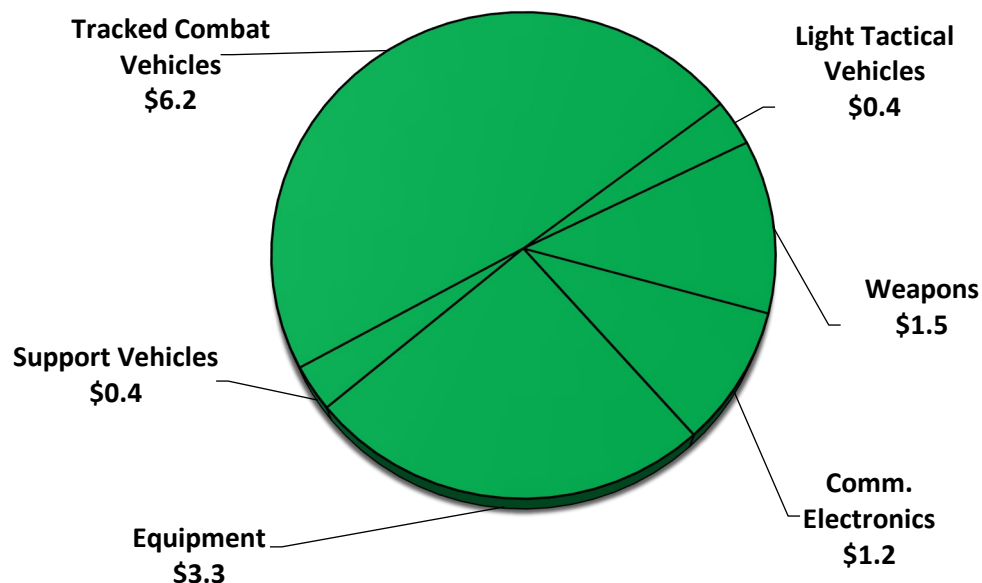
The Department is modernizing its ground force capabilities to ensure the United States remains a dominant force capable of operating in all environments across the full spectrum of conflict. The Army and Marine Corps equip each soldier and Marine with the best equipment available to succeed in both today's and tomorrow's operations. Ongoing technology research and concept exploration will benefit future Army and Marine Corps combat portfolios.

The ground forces modernization plan addresses the challenges of the future operational environment. In addition to upgrades to legacy equipment, the overall strategy embraces new capability, like the Armored Multi-Purpose Vehicle (AMPV), the Amphibious Combat Vehicle (ACV), the M10 Booker, as well as development of the XM30 Combat Vehicle which replaces the M2 Bradley Fighting Vehicle, previously OMFV. The XM30 will comprise of a fleet of vehicles with enhanced capabilities and a greater commonality of parts and components is being designed to be a optionally crewless platform.

The Army continues to modernize, and upgrade select Major Defense Acquisition Programs in its FY 2025 request, including Stryker vehicles, upgrading the Abrams Main Battle Tank to the M1A2C System Enhancement Package (SEP) V3 configuration, the M2 Bradley Fighting Vehicles, the M109A7 Paladin 155mm howitzers, and the Armored Multi-Purpose Vehicle (AMPV). The Marine's ground force focus, in FY 2025, continues to be the Amphibious Combat Vehicle (ACV). The ACV will deliver shore and sea-based infantry to the battlefield in vehicles designed for future operational environments. All the Services will procure the Joint Light Tactical Vehicle (JLTV).

FY 2025 Ground Systems Total: \$13.0 Billion

\$ in Billions



Numbers may not add due to rounding

Joint Light Tactical Vehicle

DOD - JOINT

The Joint Light Tactical Vehicle (JLTV) is a joint program currently in production for the Army and Marine Corps with procurements for the Navy and Air Force. The JLTV replaces the High Mobility Multipurpose Wheeled Vehicle (HMMWV), which is the current light tactical vehicle. The JLTV concept includes a 3.5-ton Combat Tactical Vehicle and a 5.1-ton Combat Support Vehicle and is based on a family of vehicles focused on scalable armor protection, integrated communications, and vehicle agility and mobility required of the light tactical vehicle fleet. The JLTV provides defensive measures to protect troops in transport, increase payload capability, and achieve commonality of parts and components to reduce the vehicle's overall life cycle costs. The JLTV program optimizes performance, payload, and protection of the crew and vehicle while ensuring a design that is transportable by CH-47, CH-53, and C-130 aircraft.



Mission: Provides protected, sustained, and networked light tactical mobility to the Joint forces capable of worldwide deployment across the full spectrum of military operations and mission profiles under all weather and terrain conditions.

FY 2025 Program: Procures more than 2,609 JLTV vehicles, trailers, and associated vehicle kits of various configurations across the Department to fulfill multiple mission roles and requirements and minimize ownership costs for the light tactical vehicle fleet. The vehicle kits will support the baseline vehicle by providing the warfighter with the ability to augment the vehicle's configuration to respond to environmental conditions or threat situations.

Prime Contractor(s): Oshkosh Defense, LLC; Oshkosh, WI
AM General, LLC; South Bend, IN

Joint Light Tactical Vehicle						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USA	-	9.4	-	27.2	-	27.0
USMC	-	2.7	-	2.6	-	10.7
Subtotal	-	12.1	-	29.9	-	37.8
Procurement						
USA	2,554	866.9	2,601	847.5	1,808	680.8
USMC	1,051	436.7	396	232.5	674	340.5
USAF	138	87.7	114	57.8	127	69.5
USN	19	26.3	-	24.2	-	50.9
Subtotal	3,762	1,417.6	3,111	1,162.0	2,609	1,141.8
Total	3,762	1,429.7	3,111	1,191.8	2,609	1,179.5

Numbers may not add due to rounding

Ground Systems

M-1 Abrams Tank Modification/Upgrades

USA

The M1A2 Abrams is the Army’s main battle tank, which first entered service in 1980. Since ending production in 1994, the Army has modernized the Abrams through System Enhancement Package (SEP) programs and Engineering Change Proposals (ECPs) to improve survivability, lethality, sustainability, and supportability. Current modifications to the M1 Abrams SEP version 3 (SE Pv3) include an updated Armor suite; Ammunition Data Link; Commander’s Remote Operated Weapon Station - Low Profile (CROWS-LP), Under Armor Auxiliary Power Unit (APU); Electronics Upgrades; Power Train Improvements/Integration Optimization; and Active Protection System (APS) upgrades.



Mission: Dominate adversaries through lethal firepower, unparalleled survivability, and audacious maneuver.

FY 2025 Program: Continues M1A2 Abrams SE Pv3 tank production with procurement of 30 SE Pv3 tank upgrades; includes technology maturation testing for incorporation of Meteorological Sensor, Laser Warning Receiver, and Thermal Management System into the M1A2 SE Pv3. In May 2023, Army Senior Leaders (ASLs) approved a new, more comprehensive ECP called the Abrams M1E3, which resulted in a strategic shift to the Abrams Main Battle Tank (MBT) modernization approach. This change in strategy means the Army will not pursue the SE Pv4 but will roll-in various SE Pv4 technologies into the Abrams M1E3. The Abrams M1E3 ECP will harness new and developing technologies, which increase research and development funding, to produce a lighter tank that is more operationally/tactically mobile, and survivable.

Prime Contractor(s): General Dynamics Land Systems; Sterling Heights, MI

M-1 Abrams Tank Modification/Upgrades						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	59.0	-	96.2	-	246.5
Procurement	90	1,238.7	34	800.3	30	773.7
Total	90	1,297.7	34	896.5	30	1,020.2

Numbers may not add due to rounding

Ground Systems

Armored Multi-Purpose Vehicle



The Armored Multi-Purpose Vehicle (AMPV) is the replacement for the Army’s legacy M113 Armored Personnel Carrier Family of Vehicles (FOV). The AMPV addresses shortcomings across the M113 FoV and provides improvements to Survivability; Size, Weight, Power, and Cooling (SWAP-C); and incorporates capability for future technologies and the Army’s Network. The AMPV consists of five (5) variants: General Purpose, Medical Treatment, Medical Evacuation, Mortar Carrier, and Mission Command. AMPV had a successful Full Rate Production (FRP) decision on August 21, 2023. The AMPV is one of the Army’s top 35 modernization priorities, fulfilling the Army’s strategy of protection, mobility, reliability, and interoperability.



Mission: Enable units to operate more securely and effectively with the tanks, Bradley vehicles, and self-propelled artillery pieces within the Armored Brigade Combat Team (ABCTs).

FY 2025 Program: Funds the third order of Full Rate Production (FRP) with the procurement of 81 vehicles.

Prime Contractor(s): BAE Systems; York, PA

Armored Multi-Purpose Vehicle (AMPV)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	12.4	-	12.3
Procurement	213	1,237.0	91	554.8	81	515.3
Total	213	1,237.0	91	567.1	81	527.7

Numbers may not add due to rounding

Next Generation Squad Weapon

USA

The Next Generation Squad Weapon (NGSW) Middle Tier Acquisition (MTA) Rapid Prototyping and Fielding efforts are developing a new Rifle (NGSW-R), Automatic Rifle (NGSW-AR), and Fire Control (NGSW-FC) with a common 6.8mm cartridge in a variety of ammunition types (General Purpose, Special Purpose, Reduced Range, and blank) intended to replace the M16, M4A1 Carbines, and the M249 Squad Automatic Weapon in the Close Combat Force. These MTA Rapid Prototyping and Fielding efforts support Army Modernization priorities (Build a More Lethal Force) through enhancement of Joint Lethality in contested environments like Multi-Domain Operations by eliminating erosion of close combat capability relative to peer competitors in complex terrain.



Mission: Develop and field a NGSW, compliant with the Adaptive Squad Architecture, capable of defeating emerging protected and unprotected threats. The NGSW aims to improve engagement time, maximum effective range, accuracy, and target effects.

FY 2025 Program: Funds the procurement and fielding of 18,019 NGSW-R, 1,772 NGSW-AR, and 20,045 NGSW-FC. The NGSW-R, NGSW-AR, NGSW-FC, and 6.8mm Common Cartridge are fielded concurrently to provide a squad level capability improvement to maintain overmatch against near peer enemy threats.

Prime Contractor(s): NGSW-R/AR: SIG Sauer; Newington, NH
 NGSW FC: Vortex Optics; Barneveld, WI

Next Generation Squad Weapon						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	33.0	-	35.3	-	22.1
Procurement	16,513	166.6	33,473	292.9	39,836	367.3
Total	16,513	199.6	33,473	328.1	39,836	389.4

Numbers may not add due to rounding

Ground Systems

Paladin Integrated Management (PIM)



The Paladin Integrated Management (PIM) replaces the current fleet of M109 Family of Vehicles (FOV), the M109A6 Paladin 155mm Howitzer, and the Field M992A2 Artillery Ammunition Support Vehicle (FAASV), with more robust platforms: the M109A7 Self Propelled Howitzer (SPH) and the M992A3 Carrier Ammunition Tracked (CAT). The Army is using a two-increment approach to upgrade and modernize the existing M109 fleet to fill the capability gap left by the 2009 cancellation of the Non-Line of Sight Cannon (NLOS-C): mobility improvements and, later, lethality, range, and reliability improvements. The Army plans to procure 689 PIM sets and sustain them through 2050. The PIM Low-Rate Initial Production (LRIP) was extended in FY 2018 with a successful Full Rate Production (FRP) decision in FY 2020.



Mission: Provide the primary indirect fire support for Armored Brigade Combat Teams, armored and mechanized infantry divisions, and the full spectrum of operations.

FY 2025 Program: Funds the continuation of FRP with the procurement of 20 system sets; continues support of the Armament Upgrade Project to optimize capabilities and improve reliability for the M109A7 SPH with expected changes in the system's operational profile.

Prime Contractor(s): BAE Systems; York, PA

Paladin Integrated Management (PIM)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	17.3	-	42.5	-	42.5
Procurement	59	1,009.5	24	469.2	20	417.7
Total	59	1,026.8	24	511.6	20	460.2

Numbers may not add due to rounding

Ground Systems

Stryker Family of Armored Vehicles



The Stryker is a 19-ton wheeled armored vehicle that provides the Army with a family of 24 different platforms (10 flat-bottom, 7 Double V-Hull, 7 Double V-Hull A1). The Stryker family provides a lethal, versatile, tactically agile joint force capable of operational maneuver in a dynamic, asymmetric threat, and operational environment. The Stryker is deployable by C-17 and C-5 aircraft and can be combat-capable upon arrival in any contingency area. The Stryker platform has nine configurations, which include: the Infantry Carrier Vehicle (ICV); Reconnaissance Vehicle; Anti-Tank Guided Missile (ATGM); Nuclear, Biological, Chemical, and Radiological Vehicle (NBCRV); Medical Evacuation Vehicle; Commander’s Vehicle; Fire Support Vehicle; Mortar Carrier; and Engineer Squad Vehicle.



Mission: Provides rapid protected transport to the Infantry and Scouts of the Stryker Brigade Combat Team (SBCT) allowing them to maneuver in open and urban terrain across the full spectrum of operations.

FY 2025 Program: Continues Stryker DVHA1 procurement; integration and first fielding of the 30mm cannon on the Infantry Carrier Vehicle Double V-Hull A1 30mm; procurement of Common Remote Operated Weapon System – Javelin (CROWS-J); fielding of 1 Stryker Brigade Combat Team of CROWS-J (87 per SBCT); integration of the Fire Direction Center (FDC), and procurement of Stryker Training Aids, Devices, Simulators, and Simulations (TADSS). Procurement of Double V-Hull A1 platforms to support Mission Command Platform (MCP) Mission Equipment Package integration.

Prime Contractor(s): General Dynamics Corporation; Sterling Heights, MI

ICVVA1 30mm Contractor: Oshkosh Defense; Oshkosh, WI

Stryker Family of Armored Vehicles						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	64.2	-	24.8	-	14.1
Procurement	184	1,210.8	85	614.3	38	455.3
Total	184	1,275.0	85	639.1	38	469.4

Numbers may not add due to rounding

M10 Booker (formerly Mobile Protected Firepower)



The M10 Booker (formerly, Mobile Protected Firepower (MPF)) is a protected, long range, precision direct-fire capability that ensures Army Infantry Brigades freedom of movement during offensive operations and defeats attacking enemy during defensive operations. The M10 is configured to operate in environments with restricted terrain commonly faced by light infantry, such as those found in the Pacific Area of Operations.



On June 24, 2022, Booker had a successful Milestone C which was followed by a Low-Rate Initial Production (LRIP) contract award to General Dynamics Land Systems (GDLS). During LRIP, the Army will complete evaluation of Booker system performance on production vehicles, verify system operational effectiveness and suitability, establish an initial Booker production base, and execute an orderly production ramp-up leading into Full Rate Production (FRP). Booker First Unit Equipped (FUE) is targeted for FY 2025.

Mission: Provide Army Infantry Bridges with the mobile, protected firepower capability necessary to defeat enemy prepared positions, destroy enemy armored vehicles, close with the enemy through fire and maneuver, and ensure freedom of maneuver and action in close contact with the enemy.

FY 2025 Program: Funds completion of Booker LRIP Phase developmental and operational testing, production of the initial FRP lot of 33 vehicles, maintenance of system software, monitoring of potential system obsolescence, engineering changes, management of the Booker Technical Data Package (TDP), and fielding of LRIP vehicles to the Booker First Unit Equipped (FUE).

Prime Contractor(s): General Dynamics Land Systems; Sterling Heights, MI

M10 Booker						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	60.8	-	102.2	-	48.1
Procurement	29	349.7	33	394.6	33	460.6
Total	29	410.5	33	496.8	33	508.7

Numbers may not add due to rounding

Ground Systems

Family of Medium Tactical Vehicles (FMTV)

USA

The FMTV is a complete series or family of vehicles based on a common chassis with automatic transmission and that vary based on different payload and mission requirements. The FMTV operates throughout the theater as multipurpose transportation and unit mobility vehicles by Combat, Combat Support, and Sustainment Units. The FMTV variants consist of the Light Medium Tactical Vehicle 3-Ton Cargo, and Van models; Medium Tactical Vehicle 8-ton Cargo Standard Wheelbase; Long Wheelbase, Tractor, Expansible Van; Wrecker; 10-ton Dump; 8.8-ton Load Handling System; and three types of companion trailers. Eighty percent of the FMTV's parts are common with similar engines, transmissions, drivelines, power trains, tires, and cabs. The A2 program, an evolution of the FMTV's A1P2 vehicle program, incorporates new technologies to rebalance the iron triangle of payload, performance, and protection. The vehicle is capable of transporting a heavier payload over more difficult terrain in a shorter amount of time with greater protection than its predecessor.



Mission: Provides unit mobility and resupply of equipment and personnel for rapidly deployable worldwide operations on primary and secondary roads, trails, cross-country terrain, and all climatic conditions.

FY 2025 Program: Funds the procurement of 240 Armor Capable Medium Tactical Vehicle Trucks and Trailers for both the Army and Air Force. The various Medium Tactical Vehicles fill the 8-ton truck requirement, fulfill Army modularity requirements, and modernize the medium fleet, reduce operating and support costs, resolve potential operational deficiencies, and operate throughout the theater as a multi-purpose transportation vehicle used by combat, combat support, and combat support units, as well as support the mission of Command Post Infrastructure (CPI2).

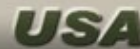
Prime Contractor(s): Oshkosh Defense, LLC; Oshkosh, WI

Family of Medium Tactical Vehicles (FMTV)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	21.4	-	28.2	-	15.1
Procurement						
USA	266	211.4	221	110.7	208	133.9
USAF	11	1.1	32	4.0	32	4.5
Subtotal	277	212.5	253	114.7	240	138.5
Total	277	233.9	253	142.9	240	153.5

Numbers may not add due to rounding

Ground Systems

Family of Heavy Tactical Vehicles



The Family of Heavy Tactical Vehicles (FHTV) consists of the Palletized Load System (PLS), the Heavy Expanded Mobility Tactical Truck (HEMTT), the Modular Catastrophic Recovery System (MCRS), the Enhanced Heavy Equipment Transporter System (EHETS), and the Medium Equipment Trailer (MET). The PLS is a 16.5-ton, 10-wheel tactical truck with self-load/unload capability. The PLS carries its payload on flat rack cargo bed, trailer, or International Standards Organization (ISO) containers. The HEMTT is a 10-ton, 8-wheel (8x8) truck that comes in several configurations: Tanker to refuel tactical vehicles and helicopters; Tractor to tow the Patriot missile system and the Multi-Launch Rocket System (MLRS); Wrecker to recover vehicles; and Cargo truck with a material handling crane. The MCRS is comprised of the Prime Mover (M983A4 LET), Fifth Wheel Towing Recovery Device (FWTRD), and the Tilt Deck Recovery Trailer (TDRT). Coupled with the Prime Mover, the MCRS can recover all Stryker variants and an estimated 95 percent of Mine Resistant Ambush Protected (MRAP) vehicles currently in theater. The EHETS is comprised of the M1300 Tractor and M1302 Semitrailer. The MET, when coupled with an M1300 tractor, provides a system to transport intermediate weight combat vehicles that cannot clear a 4-meter underpass while transported on an EHETS trailer.



Army photo of a PLS

Mission: Provide transportation of heavy cargo to supply and re-supply combat vehicles and weapons systems. The PLS is fielded to transportation units, ammunition units, and forward support battalions with the capability to self-load and transport a 20-foot container. The upgraded HEMTT A4 provides logistics support behind quick-moving forces such as the M-1 Abrams and Stryker. The HEMTT family carries all types of cargo, especially ammunition and fuel, for line haul, local haul, unit resupply, and other missions in the tactical environment to support modern, highly mobile combat units. The MCRS recovers large, wheeled vehicle platforms in severe off-road conditions either in lift/toe or transport mode. The EHETS is used to transport, recover, and evacuate a combat loaded M1 Series main battle tank, an M88, or similar heavy loads. The MET will be required to haul combat vehicles under a 4-meter underpass.

FY 2025 Program: Funds the procurement of 37 PLS Trailers, 102 MET trailers, 12 M983A4 tractors, 22 HEMTTs, and 22 Forward Repair Systems. Funds also resource the Common Tactical Truck as the next generation of tactical trucks to meet the Army’s Tactical Wheeled Vehicle modernization strategy and develop predictive logistics for the FHTV fleet.

Prime Contractor(s): Oshkosh Corporation; Oshkosh, WI

Family of Heavy Tactical Vehicles						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	51.3	-	44.2	-	50.0
Procurement	436	275.0	96	66.4	195	98.9
Total	436	326.3	96	110.6	195	148.9

Numbers may not add due to rounding

XM30 Combat Vehicle (formerly OMFV)

USA

The XM30 Combat Vehicle (previously OMFV), as part of an Armored Brigade Combat Team (ABCT), will replace the Bradley Infantry Fighting Vehicle to provide the capabilities required to defeat a future near-peer competitor's force. The XM30 is an optionally manned platform that maneuvers Soldiers to a point of positional advantage to engage in close combat and deliver decisive lethality during the execution of combined arms maneuver. It is designed to operate with and may operate without a crew and Soldiers under armor based on the commander's decision. It delivers decisive lethality during the execution of combined arms maneuver while also controlling maneuver robotics and semi-autonomous systems. The XM30 is a Middle Tier Acquisition Rapid Prototyping (MTA-RP) program. The Army anticipates transitioning from an MTA-RP to a Major Capability Acquisition Pathway at Milestone B in the 2nd quarter of Fiscal Year (FY) 2025 and plans to enter Low-Rate Initial Production (LRIP) in the 1st quarter FY 2028 with a Full Rate Production (FRP) decision slated for FY 2030.



Mission: Maneuvers soldiers in the Forward Operating Environment to a position of advantage to engage in close combat and deliver decisive lethality. The XM30 Combat Vehicle is a Middle Tier Acquisition - Rapid Prototyping Program that must exceed current capabilities while overmatching similar threat class systems. It must be optimized for urban and rural terrain areas, while also defeating pacing threats, and be characterized by the ability to spiral in advanced technologies as they mature. The capabilities desired focus to improve lethality, protection, mobility, range, survivability.

FY 2025 Program: Funds the fully digital, detailed prototype vehicle designs from Preliminary Design Review (PDR) through to the Critical Design Review (CDR) in preparation for the prototype builds and testing portion of Phase 3&4 in the program’s development.

Prime Contractor(s): TBD

XM30 Combat Vehicle						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	519.1	-	996.7	-	504.8
Procurement	-	-	-	-	-	-
Total	-	519.1	-	996.7	-	504.8

Numbers may not add due to rounding

Ground Systems

Amphibious Combat Vehicle



The Amphibious Combat Vehicle (ACV) is an armored personnel carrier that replaces the aging Amphibious Assault Vehicle. The Marine Corps has refined its ACV strategy based on several factors including: knowledge gained through multiyear analysis and ongoing development of its Ground Combat Tactical Vehicle Strategy. The ACV acquisition strategy competitively awarded two vendors with Engineering, Manufacturing, and Development contracts to build 16 test vehicles each (32 total) in November 2015. The ACV completed Milestone C in June 2018 and down selected to one vendor, BAE Systems, and awarded that vendor with the Low-Rate Initial Production (LRIP) contract. In a third quarter FY 2019 acquisition decision memorandum, the Navy departed from the program’s President’s Budget FY 2020 acquisition strategy to authorize a third LRIP Lot consisting of 56 vehicles. The program began Full Rate Production in FY 2021 with the procurement of 72 vehicles. The ACV program will develop and procure multiple Mission Role Variants (MRVs).



Mission: Provides protected mobility and general support lift to elements of Marine Infantry battalions. The ACV is an advanced generation, eight-wheeled armored personnel carrier, capable of mitigating capability gaps by providing improved lethality against dismounted enemy troops through more effective land and water tactical mobility, and increased force protection and survivability from blasts, fragmentation, and kinetic energy threats. The first ACV-P delivers combat ready Marines from ship-to-shore connector craft to mass forces at littoral penetration points and continue to maneuver onward to inland objectives.

FY 2025 Program: Initiates the production of 80 Improved Lethality 30MM variants (ACV-30s), plus procurement of related items such as Production Support, Systems Engineering/Program Management (SE/PM), Engineering Change Orders (ECOs), Government Furnished Equipment (GFE), and Integrated Logistics Support (ILS).

Prime Contractor(s): BAE Systems; York, PA

Amphibious Combat Vehicle						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	86.9	-	103.2	-	60.2
Procurement	74	518.5	80	557.6	80	810.3
Total	74	605.4	80	660.8	80	870.5

Numbers may not add due to rounding

Ground Systems

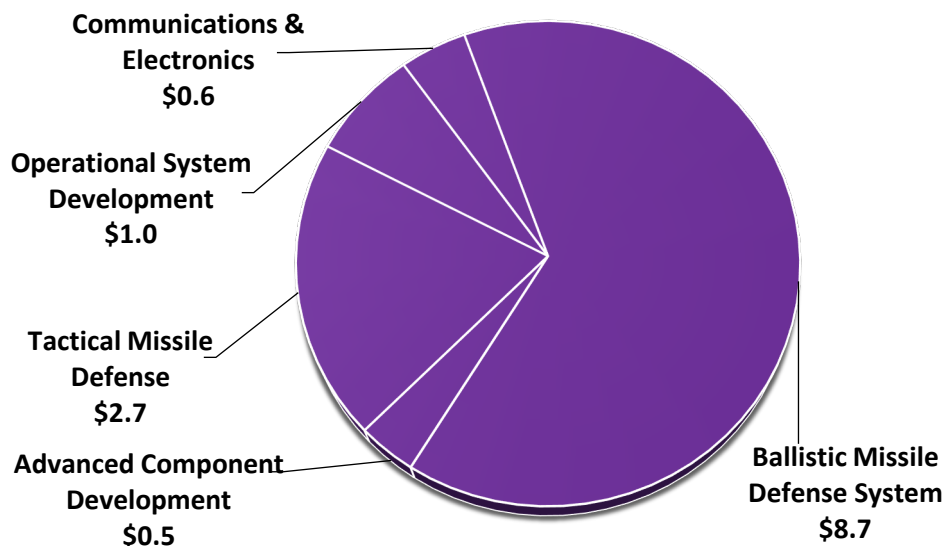
Missile Defense Programs

This category includes development and procurement of weapon systems to counter adversary’s offensive missile systems to include ballistic missiles, cruise missiles and hypersonic weapons. The Missile Defense Agency is specifically tasked to lead the Department’s missile defense system mission; however, the five Military Services have acquisition and operational roles in missile defeat and defense. A missile defense system includes ground and sea-based interceptor missiles; associated land, sea and space-based missile warning; command, control, battle management, and communications; and development of advanced technologies designed to meet emerging threats. Other significant investments include construction, targets and countermeasures, and associated testing activities. Encompassed in this category are all programs that are either critical to the functionality of the ballistic missile defense system, tactical ballistic missile interceptor programs or support missile defense as a primary mission. The program is consistent with the 2022 Missile Defense Review, which calls for the development and fielding of an integrated defense of the homeland and forward-deployed forces.

The budget request continues funding for projects designed to increase the capability and capacity of the United States to detect, disrupt/defeat (left-of-launch), and defend against use of ballistic missiles against the United States, its deployed forces, allies, and partners, to include current and projected threats to the U.S. Homeland. The budget request funds tactical air and missile defense interceptor inventories for the Patriot Advanced Capability-3 Missile Segment Enhancement. FY 2025 request invests in Standard Missile (SM-3) and SM-6 variants, and Terminal High Altitude Area Defense programs. In addition, the FY 2025 request includes funding for the defense of the Guam territory; continues research of a space sensor layer; continues development of Next Generation Interceptors and invests in development efforts against non-traditional missile threats such as hypersonic weapons, cruise missiles, and unmanned aircraft systems.

FY 2025 Missile Defense Programs: \$13.5 Billion

\$ in Billions



Note: Total FY 2025 Missile Defeat and Defense (MDD) request is \$28.4 billion. The Missile Defense total shown does not include non-traditional Missile Defeat programs, such as hypersonic weapons and defenses. The FY 2025 MDD total includes the Missile Defense Agency \$10.4 billion request, and the Military Service tactical missile defense investments, but does not include the Department’s Science and Technology funding, Service Personnel funding, or Operation and Maintenance funding.

Numbers may not add due to rounding

Ground-based Midcourse Defense

DOD - JOINT

The Ground-based Midcourse Defense (GMD) element is a Missile Defense Agency program and a key component of the Missile Defense System, providing Combatant Commanders with the capability to engage missiles in the midcourse phase of flight. This phase, compared to boost or terminal, allows significant time for sensor viewing from multiple platforms and provides multiple engagement opportunities for hit-to-kill interceptors. The Ground Based Interceptor (GBI) is made up of a three-stage, solid fuel booster, and an exoatmospheric kill vehicle. When launched, the multi-stage, solid fuel booster missile carries the kill vehicle toward the target’s predicted location in space. Once released from the booster, the kill vehicle uses data received in-flight from ground-based radars and its own on-board sensors to defeat the incoming missile by ramming the warhead with a closing speed of approximately 15,000 miles per hour. Interceptors are currently emplaced at Fort Greely, Alaska and Vandenberg Air Force Base, California. The GMD fire control centers are established in Colorado and Alaska. Next Generation Interceptor (NGI) acquisition covers the development, integration and testing of an All Up Round boost vehicle/ kill vehicle system capable of surviving both the natural and hostile environments while countering the evolving threats to the Homeland.



Mission: Provides the Combatant Commanders with capability to defend the United States, including Hawaii and Alaska, against long-range ballistic missiles in the midcourse phase of flight.

FY 2025 Program: Strengthens Homeland Missile Defense. Continues to develop a Next Generation Interceptor. Continues the design and development activities for two competitive interceptor development contracts. Next Generation Interceptor funding provides for the initial requirements analysis, design, development, prototyping, integration and relevant environment testing to mature the booster, payload, sensor, and design-specific critical technologies and technology elements. Upgrades and consolidates ground testing infrastructure and facilities. Upgrades and replaces ground system infrastructure fire control/kill vehicle software to improve the reliability and cybersecurity resiliency of the GMD weapon system. Funds Ground, Cyber and Flight testing to support the Integrated Master Test Plan.

Prime Contractor: Boeing Defense and Space; Huntsville, AL
 Next Generation Interceptor: Northrop Grumman (Gold); Chandler, AZ
 Lockheed Martin (Black); Huntsville, AL

Ground-based Midcourse Defense and Improved Homeland Defense Interceptors						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	2,550.9	-	3,076.3	-	2,505.4
Procurement	-	11.3	-	-	-	20.8
Total	-	2,562.2	-	3,076.3	-	2,526.2

Numbers may not add due to rounding

Terminal High Altitude Area Defense

DOD - JOINT

The Terminal High Altitude Area Defense (THAAD) is a key element of the missile defense system. The THAAD Battery provides interceptors, using “Hit-To-Kill” technology to destroy missiles inside and outside the atmosphere. A Battery nominally consists of 6 truck-mounted launchers, 48 Interceptors (8 per launcher), one Army/Navy Transportable Radar Surveillance and Control Mode 2 (AN/TPY-2) radar, a Tactical Fire Control/Communications component, and the Heavy Expanded Mobility Tactical Trucks (HEMTTs).



Mission: Provides Combatant Commanders with a globally transportable, rapidly deployable capability against short-range, medium-range, and limited intermediate-range ballistic missile threats inside or outside the atmosphere during terminal phase of flight.

FY 2025 Program: Procures 12 THAAD Interceptors, Interceptor obsolescence mitigation, stockpile reliability requirements, and THAAD Battery Ground Component Obsolescence modifications. Provides software upgrades to improve reliability, availability and readiness, defense planning, and improved capability to engage Short-Range Ballistic Missile (SRBM), Medium Range Ballistic Missiles (MRBM), and limited Intermediate Range Ballistic Missiles (IRBM) threats. These development efforts will enhance THAAD’s capability against global operational threats. Provides flight and ground testing, test operations and infrastructure, war-games, and exercises to execute Integrated Master Test Plan requirements.

Prime Contractor: Lockheed Martin Corporation; Dallas, TX, Sunnyvale, CA, and Huntsville, AL

Terminal High Altitude Area Defense (THAAD)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	262.1	-	267.9	-	393.0
Procurement	18	240.0	11	216.8	12	247.0
Total	18	502.0	11	484.7	12	639.9

Numbers may not add due to rounding

Missile Defense Programs

Sea-Based Weapons System

DOD - JOINT

Sea-Based Weapons System (Aegis Ballistic Missile Defense (BMD)) is the naval element of the missile defense system and provides an enduring, operationally effective, and supportable missile defense capability on Aegis cruisers, destroyers, and Ashore to defend U.S. deployed forces and our allies. Aegis Sea-Based Weapon Systems build upon the existing Navy Aegis Weapons System (AWS) and Standard Missile-3 (SM-3) design. Upgrades are being made to the weapon system and SM-3 designs which expand capability through a series of incremental, evolutionary improvements to counter ever more sophisticated long-range threats. Aegis Missile Defense will also begin activities required to evolve the MDS to address cruise missile and hypersonic threats.



Mission: Provides a forward-deployable, mobile, and Aegis Ashore capability to detect and track missiles of all ranges in all phases of flight with the ability to destroy missiles in the midcourse and terminal phases.

FY 2025 Program: Procures 12 SM-3 Block IIA's. Pivots from and discontinues the SM-3 Block IB procurements in favor of SM-3 Block IIA, and further integrates the Block IIA missile into the AWS. Funds capability upgrades of the Aegis Baseline 5 (BMD 4.x) and Aegis Baseline 9 (BMD 5.x) Weapon Systems and the development of Aegis BL 10 (BMD 6). Procures one (1) BMD 5.x hardware shipset. Continues technology maturation and prototyping support for the AN/SPY-1 Digital Receive Upgrades (DRU) to improve sensitivity, tracking performance, and resource utilization. Funds development of Aegis assets for the Defense of Guam. Funds Ground and Flight testing in support of the Integrated Master Test Plan requirements.

Prime Contractors: Aegis Weapon System: Lockheed Martin Corporation; Moorestown, NJ
SM-3 Interceptor: Raytheon Company; Tucson, AZ and Huntsville, AL

Sea-Based Weapons System						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	751.9	-	887.2	-	784.3
Procurement (Interceptors)	71	1,072.2	39	807.6	12	491.4
Procurement (HW/SW Installs)	5	72.2	9	27.8	1	32.0
Total	76	1,896.3	48	1,722.6	13	1,307.7

Numbers may not add due to rounding

Missile Defense Programs

PATRIOT Advanced Capability (PAC-3)/LTAMDS



The Army’s Phased Array Tracking Radar to Intercept of Target (PATRIOT) system is an extremely capable, long-range air defense guided missile system, which provides protection of ground combat forces and high-value assets. The PATRIOT air and missile defense system, which includes the Advanced Capability (PAC-3) missile and Lower Tier Air and Missile Defense Sensor (LTAMDS), provides defense against tactical ballistic missiles, cruise missiles, and air-breathing threats worldwide.



The PATRIOT system is deployed by a Fire Unit organized within a Battalion. Each Fire Unit consists of the Engagement Control Station, a Radar Set, an Electric Power Plant, Launching Stations, and the Battery Command Post and includes ancillary support equipment. Both the Fire Unit and the Battalion have dedicated support, communications, and maintenance vehicles, with limited missile reload and transport capability via the Guided Missile Transporter. The PAC-3 units are the Combatant Commanders’ most capable asset to protect forward deployed forces.

Mission: Contributes to the Ballistic Missile Defense System overall situational awareness for short-range terminal ballistic missile and unmanned system threats. It can cue other systems while protecting Joint assets. The PATRIOT force is 15 battalions; many remain forward stationed in multiple theaters of operation.

FY 2025 Program: Implements critical capability, readiness and sustainability modifications and continues software enhancement for improved combat identification, improved communications, interoperability, supportability, electronic warfare capabilities; and supports transition to the Integrated Air and Missile Defense architecture. FY 2025 LTAMDS development funding continues to support the Pacific Deterrence Initiative. FY 2025 funding will also support procurement of four sensors and Milestone C decision in FY 2025.

Prime Contractor(s): Raytheon Integrated Defense Systems; Tewksbury, MA
 Lockheed Martin Missiles and Fire Control; Dallas, TX

PATRIOT Advanced Capability/PAC-3						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	513.4	-	993.9	-	317.9
Procurement	-	463.0	-	212.2	4	688.8
Total	-	976.3	-	1,206.1	4	1,006.7

Numbers may not add due to rounding

PAC-3/Missile Segment Enhancement



The Missile Segment Enhancement (MSE) is a performance improvement to the existing Phased Array Tracking Radar to Intercept of Target (Patriot) Advanced Capability-3 (PAC-3) missile. The MSE's improved capability is achieved through a higher performance solid rocket motor, modified lethality enhancer, more responsive control surfaces, upgraded guidance software, and insensitive munitions improvements.



The PAC-3 MSE employs kinetic energy to destroy targets through a hit-to-kill capability and provides the range, accuracy, and lethality to effectively intercept and destroy tactical ballistic missiles, air-breathing threats, cruise missiles, and unmanned aerial systems. This missile engages maneuvering and advanced threats earlier, expanding operational battlespace performance against complex threats. These improvements result in a more agile, lethal interceptor missile with enhanced Insensitive Munitions compliance. The PAC-3 MSE is the latest generation interceptor fired from the Patriot system.

Mission: Provide the Combatant Commanders with a hit-to-kill, surface-to-air missile that can intercept tactical ballistic missiles, cruise missiles, and air-breathing threats that have chemical, biological, radiological, nuclear, and conventional high explosive warheads. The MSE extends the PAC-3 range, filling a critical performance gap, and affords greater protection for deployed U.S. and allied forces.

FY 2025 Program: Funds the production of 230 MSE missiles, Field Surveillance Program, PAC-3 Missile Support Center, Obsolescence, System Engineering/Program Management, and Government/Software Engineering. Funds the second year of a Multiyear Procurement (MYP) contract.

Prime Contractor(s): Lockheed Martin Missiles and Fire Control; Dallas, TX

PAC-3/Missile Segment Enhancement						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	-	-	-
Procurement	252	2,471.4	230	1,212.8	230	963.1
Total	252	2,471.4	230	1,212.8	230	963.1

Numbers may not add due to rounding

Missile Defense Programs

Missiles and Munitions

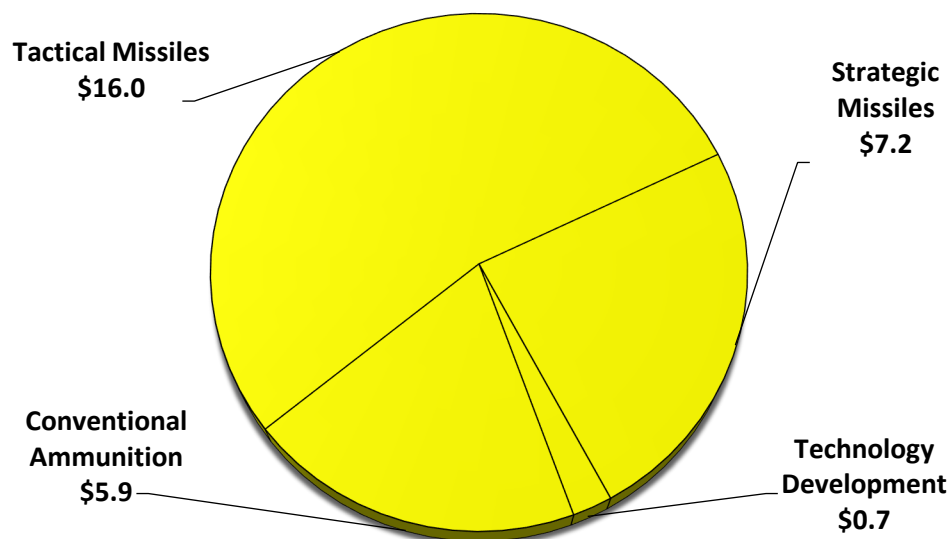
Munitions is a general term for ammunition and missiles. Ammunition consists of bombs, grenades, rockets, mines, projectiles, and other similar devices. There are conventional and nuclear missiles used for both tactical and strategic purposes. Many munitions are precision-guided, enhancing the attack of a broader target set, with limited low-collateral damage. Some programs include non-explosive articles that enhance the performance of other munitions. For example, the Joint Direct Attack Munitions (JDAM) adds guidance capability when attached to a gravity bomb, making it a “smart” precision-guided bomb.

In FY 2025, the Department focused on critical high performance, standoff, and precision strike weapons to deliver munitions with greater penetration power. Improvements to these weapons increase range and precision effects in contested environments against high-value land attack targets. This requires munitions with farther standoff, multi-mode seekers, robust guidance systems, and less time for target selection. The Department has made investments to expand production capacity, procure munitions at favorable economic rates, and strengthen the industrial base. Precision guided munitions are manufactured on fully utilized production lines, so pricing economies are secured at economically feasible rates. The Department is increasing investments in the next generation nuclear cruise missile, the Long Range Stand-off weapon as well as the Ground Based Strategic Deterrent ballistic missile system.

The munition portfolio continues the seven Multiyear Procurement (MYP) programs of which four are part of the Large Lot Procurement (LLP) pilot MYP strategy, which aims to maximize weapon production efficiency with a procurement Buy-to-Budget approach.

FY 2025 Missiles and Munitions Total: \$29.8 Billion

\$ in Billions



*Numbers may not add due to rounding
Numbers do not include Operation and Maintenance (O&M)*

Joint Direct Attack Munition

DOD - JOINT

The Joint Direct Attack Munition (JDAM) is a joint Air Force and Navy program led by the Air Force. The JDAM improves the existing inventory of general purpose gravity bombs by integrating a Global Positioning System (GPS)/inertial navigation guidance capability



USAF Image

that improves accuracy and adverse weather capability. A Laser JDAM variant increases operational flexibility for an expanded target set. The laser sensor kit added to the JDAM weapon kit provides the ability to attack targets of opportunity, including moving land and maritime targets, when designated by an airborne or ground laser. JDAM tail kit procurement has transitioned to use the Strategic Anti-Jam Beamforming Receiver (SABR) GPS receiver and antenna, which provide enhanced resistance to GPS jamming over earlier production variants.

Mission: Enhances DoD conventional strike system capabilities by providing the ability to precisely attack time-critical, high value, fixed or maritime targets under adverse environmental conditions and from all altitudes.

FY 2025 Program: Continues production of JDAM tail kits, including the SABR-Y upgraded GPS receiver and the JDAM tail kit hardback design used for the BLU-137 penetrator warhead. The FY 2025 minimum sustainment rate will be achieved.

Prime Contractor(s): The Boeing Company; St. Charles, MO

Joint Direct Attack Munition						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
Procurement						
USAF	5,345	252.0	1,772	132.4	1,500	125.3
USN	1,930	76.7	1,464	73.7	1,460	75.1
Total	7,275	328.7	3,236	206.1	2,960	200.4

Numbers may not add due to rounding

Missiles & Munitions

Small Diameter Bomb I



The Small Diameter Bomb (SDB) Increment I is an Air Force program providing increased kills per sortie on current and future aircraft platforms. The SDB I is a conventional 250 lb. small sized, precision guided air-to-ground weapon that can be delivered from both fighter and bomber aircraft from standoff or close air support. The SDB I is a fixed and stationary target attack weapon.



Mission: Destroy targets from a medium-range standoff or close air support position deliverable by both fighter and bomber aircraft, with higher load-out and less collateral damage compared to other weapons.

FY 2025 Program: Continues production of weapons integrated with the Strategic Anti-Jam Beam-forming Receiver to support Air Force inventory objectives and Foreign Military Sales.

Prime Contractor(s): Boeing Company; St. Charles, MO

Small Diameter Bomb I						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	-	-	-
Procurement	740	52.7	874	48.7	604	42.3
Total	740	52.7	874	48.7	604	42.3

Numbers may not add due to rounding

Small Diameter Bomb (SDB) II

DOD - JOINT

The Small Diameter Bomb (SDB) II is a joint Air Force and Navy program led by the Air Force to provide a conventional, small sized, precision guided air-to-ground weapon that can be delivered from both fighter and bomber aircraft to attack mobile and fixed targets through adverse weather from standoff. The SDB II incorporates a tri-mode seeker and datalink, which expands the use to moving targets.



USAF Image

Mission: Destroys targets from a medium-range standoff position deliverable by both fighter and bomber aircraft, with higher load-out and less collateral damage compared to other weapons.

FY 2025 Program: SDB II continues to advance toward full rate production and integration efforts on multiple platforms while expanding weapon capabilities such as improved anti-jam military code GPS receiver and enhanced cryptographic datalink.

Prime Contractor(s): Raytheon Missile & Defense; Tucson, AZ

Small Diameter Bomb II						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USAF	-	38.0	-	37.5	-	29.9
USN	-	41.6	-	52.2	-	19.7
Subtotal	-	79.6	-	89.7	-	49.6
Procurement						
USAF	2,007	480.4	920	291.6	868	328.4
USN	378	100.7	250	65.9	280	76.1
Subtotal	2,385	581.1	1,170	357.5	1,148	404.5
Total	2,385	660.7	1,170	447.2	1,148	454.1

Numbers may not add due to rounding

Missiles & Munitions

Joint Air-to-Surface Standoff Missile



The Joint Air-to-Surface Standoff Missile (JASSM) provides a survivable, precision cruise missile to kill hard, medium, and soft targets. It is a 2,000-pound class weapon with a multi-purpose, hardened blast frag penetrator warhead. The JASSM can cruise autonomously in adverse weather, day or night, to defeat high value targets even when protected by next generation defenses. The JASSM navigates to a pre-planned target using a Global Positioning System-aided inertial navigation system and transitions to automatic target correlation using an imaging infrared seeker in the terminal phase of flight. The range for the JASSM-Baseline (BL) variant (AGM-158A) is greater than 200 nautical miles. The JASSM-BL is integrated on the F-15E, F-16, B-52, B-1, and B-2 aircraft and concluded procurement in FY 2016.



USAF Image

The JASSM-Extended Range (ER) variant has four configurations, AGM-158B, AGM-158B-2, AGM-158B-3, and AGM-158D, which have a more fuel-efficient engine, greater fuel capacity, and add 2.5 times the standoff range at greater than 500nm. The JASSM-ER maintains the same outer mold line and low-observable properties as JASSM-BL, but replaces the turbojet engine with a higher thrust, more fuel-efficient turbofan engine. The AGM-158B is currently integrated on the F-15E, F-16, B-1, B-2, and B-52 aircraft. The AGM-158B-2 includes multiple initiatives via a single system level update including Electronic Safe and Arm Fuze (ESAF) and Missile Control Unit (MCU) upgrades, a new GPS receiver for highly contested environments, and warfighter capability enhancements through agile software development. The developmental AGM-158B-3 builds on AGM-158B-2 updates, with included M-Code GPS capability. The AGM-158D is in development with the goal of enhancing performance with new wing and chine designs, the integration of a Weapon Data Link (WDL) for post-launch retargeting capability, and software updates for increased survivability. The threshold aircraft for AGM-158D is the B-1.

Mission: Destroys high value targets from a long-range standoff position deliverable by fighter and bomber aircraft.

FY 2025 Program: Funds the second year of a Multiyear Procurement (MYP) contract. Continues production of the AGM-158B and AGM-158B-2, and development efforts on the AGM-158B-3, and AGM-158D.

Prime Contractor(s): Lockheed Martin Missiles and Fire Control; Orlando, FL

Joint Air-to-Surface Standoff Missile						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	123.9	-	132.9	-	183.5
Procurement	600	835.0	550	1,685.7	550	825.1
Total	600	958.9	550	1,818.6	550	1,008.6

Numbers may not add due to rounding

Air Intercept Missile

DOD - JOINT

The Air Intercept Missile-9X (AIM-9X), also known as Next Generation SIDEWINDER, is a short range air-to-air missile that provides launch-and-leave warfighting capability. The AIM-9X Block II is an infrared missile with a staring focal plane array imaging infrared (IR) seeker and high-angle off-boresight capability. It is mounted on a highly maneuverable (thrust vectored) airframe, along with digital guidance and IR signal processing that results in enhanced acquisition ranges, improved IR counter-countermeasures capability, and robust engagement zones for first shot/first kill air-to-air performance. The AIM-9X is a joint Navy/Air Force program led by the Navy.



USAF Image

Mission: Destroys low and high altitude, high-speed enemy targets in an electronic countermeasures environment.

FY 2025 Program: Procures the 11th lot of Full Rate Production (FRP) Block II missiles. Continues engineering, manufacturing, and development for the System Improvement Program (SIP) III software and SIP IV hardware and software development efforts. The hardware effort includes design and development of the advanced sensor and electronics unit. The software effort includes completion of development of Operational Flight Software (OFS) 9.5X and 10.4X, and continued development of OFS 10.5X and 11.5X.

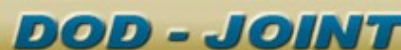
Prime Contractor(s): Raytheon Missile & Defense; Tucson, AZ

Air Intercept Missile – 9X						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USAF	-	33.4	-	42.0	-	34.9
USN	-	33.0	-	36.4	-	31.4
Subtotal	-	66.4	-	78.4	-	66.3
Procurement						
USAF	497	220.9	192	95.6	205	107.1
USN	122	201.4	147	78.2	157	86.0
Subtotal	619	422.3	339	173.8	362	193.1
Total	619	488.6	339	252.2	362	259.4

Numbers may not add due to rounding

Missiles & Munitions

Advanced Medium Range Air-to-Air Missile



The Advanced Medium Range Air-to-Air Missile (AMRAAM) is an all-weather, all-environment, radar guided missile developed to improve capabilities against low and high-altitude, high-speed targets in an electronic countermeasures environment. The AMRAAM is a joint Navy/Air Force program led by the Air Force.



USAF Image

Mission: Destroys low and high altitude, high-speed enemy targets in an electronic countermeasures environment. The AMRAAM is a fire-and-forget air-to-air missile and is the U.S.'s primary beyond visual range intercept missile. The current generation, AIM-120D, has a two-way datalink, Global Position System-enhanced Inertial Measurement Unit, an expanded no-escape envelope, improved high-angle off-boresight capability, and increased range over previous variants.

FY 2025 Program: Funds the second year of a Multiyear Procurement (MYP) contract. Continues production of the AIM-120D and addresses component parts obsolescence as well as future warfighting improvements.

Prime Contractor(s): Raytheon Missile & Defense; Tucson, AZ

Advanced Medium Range Air-to-Air Missile						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USAF	-	36.1	-	53.7	-	53.6
USN	-	30.4	-	29.2	-	29.6
Subtotal	-	66.4	-	82.9	-	83.2
Procurement						
USAF	319	371.1	457	701.5	462	447.4
USN	306	335.9	374	439.2	261	279.6
Subtotal	625	707.0	831	1,140.7	723	727.0
Total	625	773.4	831	1,223.6	723	810.2

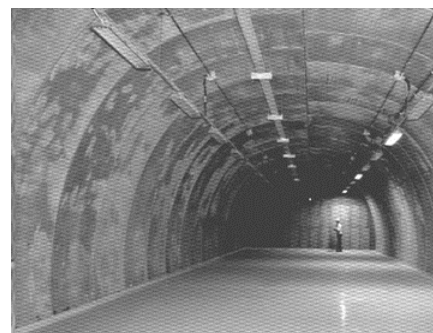
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Missiles & Munitions

Chemical Demilitarization

DOD - JOINT

The Chemical Demilitarization Program (CDP) is composed of two Major Defense Acquisition Programs, which are the Assembled Chemical Weapons Alternatives (ACWA) Program and the U.S. Army Chemical Materials Activity. The goal of both programs is to destroy a variety of United States chemical agents and weapons, including the destruction of former chemical weapon production facilities. The CDP is responsible for the elimination of the existing U.S. chemical weapons stockpiles in compliance with the obligations of Chemical Weapons Convention, which entered into force in 1997, including meeting the commitment destruction deadline of September 30, 2023; but not later than the congressionally mandated deadline of December 31, 2023, while ensuring the safety and security of the workers, the public, and the environment. On July 7, 2023, complete destruction of the declared U.S. chemical weapons stockpile was achieved, and the CDP continues with the closure phase of the two ACWA program sites. The Chemical Agents and Munitions Destruction, Defense (CAMD,D) appropriation funds the CDP mission. The funding for the Recovered Chemical Warfare Material (RCWM) Program Support Functions level of effort mission in support of the RCWM Program has been realigned from the CAMD,D appropriation account to the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD(A&S)), for the management and oversight of the enduring RCWM Program Support Functions, in order to maintain these capabilities once the destruction of the U.S. chemical weapons stockpile, through the ACWA program mission, is completed.



Mission: There are two mission areas funded by the CAMD,D appropriation:

- Decontaminate and decommission the ACWA program sites (Colorado and Kentucky) and continue secondary waste disposal from the Kentucky site.
- Support the Chemical Stockpile Emergency Preparedness Program (CSEPP) emergency response capabilities for communities surrounding chemical weapons stockpile storage sites and begin CSEPP close-out activities following completion of the ACWA program destruction operations and chemical surety activities, including secondary waste disposal.

FY 2025 Program: Continue decontamination and decommissioning closure activities at Colorado and Kentucky, and complete secondary waste disposal from the Kentucky site. Continue the CSEPP efforts for emergency response capabilities at Kentucky and closeout activities.

Prime Contractor(s): Bechtel National Incorporated; Pueblo, CO
Bechtel Parsons, Joint Venture; Richmond, KY

Chemical Demilitarization						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
Chemical Agents and Munitions Destruction	-	1,059.8	-	1,091.8	-	775.5
Total	-	1,059.8	-	1,091.8	-	775.5

Numbers may not add due to rounding

Missiles & Munitions

Joint Air-to-Ground Missile

DOD - JOINT

The Joint Air-to-Ground Missile (JAGM) system provides an improved air-to-ground missile capability for rotary-wing aircraft and unmanned aircraft systems. The JAGM is an aviation-launched, precision-guided munition for use against high-value stationary, moving, and relocatable land and naval targets. The JAGM is different than the HELLFIRE AGM-114R in that it utilizes a multi-mode seeker to provide precision point and fire-and-forget targeting day or night in adverse weather, battlefield obscured conditions, and against a variety of countermeasures. A multi-purpose warhead provides lethal effects against a range of target types, from armored vehicles, thin-skinned vehicles, and maritime patrol craft, to urban structures and field fortifications. The JAGM delivers the Joint services a single air-to-ground missile with improved lethality, operational flexibility, and a reduced logistics footprint.



Mission: Engages and defeats high value stationary, moving, and relocatable land and naval targets with precision point and fire-and-forget targeting day or night, in adverse weather, battlefield obscured conditions, and against a variety of countermeasures.

FY 2025 Program: Continues Full Rate Production for Joint Services.

Prime Contractor(s): Lockheed Martin Missiles and Fire Control; Orlando, FL

Joint Air-to-Ground Missile (JAGM)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USA	-	2.3	-	3.0	-	3.0
USN	-	0.4	-	0.4	-	20.7
Subtotal	-	2.6	-	3.4	-	23.7
Procurement						
USA	704	216.0	901	303.4	23	47.6
USN	300	78.4	264	79.3	182	76.8
Subtotal	1,004	294.4	1,165	382.7	205	124.4
Total	1,004	297.1	1,165	386.1	205	148.1

Numbers may not add due to rounding

Missiles & Munitions

Long Range Anti-Ship Missile (LRASM)

DOD - JOINT

The Long Range Anti-Ship Missile (LRASM) is a Navy-lead joint interest (Navy/Air Force) program that provides Combatant Commanders the ability to conduct anti-surface warfare operations and deny the sanctuary of maneuver to high-value adversary surface combatants protected by an Integrated Air Defense System with long-range surface-to-air missiles. LRASM is a precision guided anti-ship missile with



semi-autonomous guidance, day/night and all-weather capability, which integrates a multi-modal sensor suite, a weapons datalink, enhanced digital anti-jam Global Positioning System capabilities, and a 1,000 lb. penetrator/blast fragmentation warhead. LRASM achieved Early Operational Capability (EOC) on the Air Force B-1 bomber in December 2018 and on the Navy F/A-18E/F in November 2019. In FY 2024, the Navy begins procuring the LRASM C-3 Extended Range (ER) variant, an AGM-158C derived capability to enhance long range strike and existing OASuW capability for the Navy F/A-18E/F. LRASM C-3 provides the C++ software, BLOS Weapons Data Link, advanced survivability, and the JASSM-ER range and strike capability. LRASM shares a production line with the Joint Air-to-Surface Standoff Missile (JASSM).

Mission: Provide robust anti-surface warfare capability to ensure freedom of maneuver, maintain sea lines-of-communication, and extend joint warfighter combat reach in contested maritime environments.

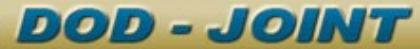
FY 2025 Program: Funds the second year of a Multiyear Procurement (MYP) contract. Procures 205 LRASM and funds telemetry kit installations. Continues C-3 system level testing, tooling, and test set development with planned flying test bed events.

Prime Contractor(s): Lockheed Martin Missiles and Fire Control; Orlando, FL

Long Range Anti-Ship Missile (LRASM)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	6.3	-	-	-	16.3
Procurement						
USN	66	219.7	91	639.6	90	326.4
USAF	57	211.6	27	187.7	115	354.1
Subtotal	123	431.3	118	827.3	205	680.5
Total	123	437.6	118	827.3	205	696.8

Numbers may not add due to rounding

Ammunition



The Military departments develop, procure and field conventional and leap-ahead ammunition providing Joint Warfighters and Allied Partners overmatch capabilities.

Mission: Provide for the production and fielding of ammunition. Includes small, medium, and large caliber direct fire ammunition; artillery and mortar projectiles; grenades, area denial, shoulder launched munitions, rocket-assisted projectiles, countermine, and pyrotechnics.



FY 2025 Program: Procures various ammunition cartridges for use by the Army, Navy, Marine Corps, and Air Force to fulfill combat and training mission requirements.

Government-Owned, Contractor-Operated Production Facilities:

- Holston Army Ammunition Plant, Kingsport, Tennessee: Produces and develops Insensitive Munitions Explosives (IMX); synthesizes and manufactures high explosive compounds such as Research Department Explosive (RDX) and High Melting Explosive (HMX).
- Iowa Army Ammunition Plant, Middletown, Iowa: Assembles and packs: medium - and large-caliber ammunition; large ammunition; high explosive artillery; medium - and - large caliber mortars; insensitive munitions; smart munitions mines/scatterable mines; missile assembly/missile warheads; and rocket-assisted projectiles.
- Lake City Army Ammunition Plant, Independence, Missouri: Produces upgraded small caliber ammunition (5.56mm, 7.62mm, .50 Cal, and 20mm) and develops the Next Generation Squad Weapon.
- Radford Army Ammunition Plant, Radford, Virginia: Produces propellants, energetics, and munitions.
- Scranton Army Ammunition Plant, Scranton, Pennsylvania: Manufactures large caliber metal projectiles and mortar projectiles.

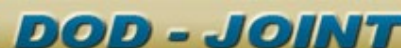
Commercial-Owned, Contractor-Operated Production Facilities:

- Ammunition facilities exist in the United States, Canada, and allied nations, comprising over 250 companies, over 1,200 end items and 1,300 components; major National Technology and Industrial Base (NTIB) include GD-OTS, AMTEC, Raytheon, and BAE Systems. Foreign suppliers include Nammo (Sweden), UTM Ltd (UK), and Poongsan (Korea).

Procurement of Ammunition						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
Procurement						
USA	-	8,737.4	-	2,967.6	-	2,702.6
USN	-	1,690.3	-	1,293.3	-	1,747.9
USAF	-	840.0	-	703.2	-	709.5
Total	-	11,267.7	-	4,964.0	-	5,160.0

Numbers may not add due to rounding

Advanced Anti-Radiation Guided Missile



The Advanced Anti-Radiation Guided Missile – Extended Range (AARGM-ER) program will integrate hardware and software upgrades to the AARGM missile guidance and control sections, a new rocket motor, and a control actuation system into a new outer mold line able to be launched from FA-18 E/F, EA-18G and is compatible with F-35 internal bay platforms. AARGM-ER's capabilities will provide improved extended range, increased survivability and effectiveness against complex, new, and emerging threats. The AARGM-ER is a joint Navy/Air Force program led by the Navy.



Mission: AARGM-ER production units will prosecute integrated air defense systems supporting suppression and destruction of enemy air defenses missions.

FY 2025 Program: Procures 157 missiles for the Navy and 128 missiles for the Air Force on the full rate production contract. Advance procurement funding is included for subcomponents providing critical 14-month time savings for missile delivery. RDT&E funding continues expansion of the F/A-18 employment envelope, F-35 weapon integration, development of a virtual store training capability, and AARGM-ER integration into the mission planning tool.

Prime Contractor(s): Northrup Grumman Corporation Defense Systems; Northridge, CA

Advanced Anti-Radiation Guided Missile - Extended Range (AARGM - ER)						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E						
USN	-	89.2	-	59.6	-	28.7
USAF	-	243.1	-	298.6	-	375.5
Subtotal	-	332.2	-	358.1	-	404.2
Procurement						
USN	100	181.3	83	195.7	157	248.6
USAF	42	78.0	14	41.9	128	173.4
Subtotal	142	259.3	97	237.6	285	422.0
Total	142	591.5	97	595.8	285	826.2

Numbers may not add due to rounding

Missiles & Munitions

Guided Multiple Launch Rocket System

DOD - JOINT

The Guided Multiple Launch Rocket System (GMLRS) is a family of surface-to-surface artillery rockets which are fired from the M142 High Mobility Artillery Rocket System (HIMARS) and the M270A1/A2 Multiple Launch Rocket System (MLRS) launchers. They provide a responsive, all-weather, rapidly deployable precision strike capability. The GMLRS guidance set combines an Inertial Measurement Unit with a Global



Positioning System receiver to provide a high level of accuracy to maximize effects against a variety of targets. Production of the first variant, the M30 GMLRS Dual Purpose Improved Conventional Munition (DPICM) with a cluster munition (CM) warhead, was terminated in response to the June 2008 Department of Defense (DoD) Policy on CM and Unintended Harm to Civilians. The GMLRS program now produces two other warhead variants with a range of 15-70+ kilometers. The M31A2 GMLRS Unitary can precisely engage point targets utilizing a single 200-pound, low collateral damage, high-explosive warhead. The M30A2 GMLRS Alternative Warhead (AW) is a non-cluster munition used to engage area and imprecisely located targets. All Unitary and AW models in inventory and in production comply with the requirements outlined in the November 2017 update to DoD Policy on CM. The latest rocket models are configured with the Insensitive Munitions Propulsion System (IMPS) that improves Soldier safety and launcher survivability. The Army is currently executing an Extended Range (ER) GMLRS modification to double the current maximum range and an Enhanced AW (EAW) warhead modification to provide increased lethality against light/medium anti-armor capability.

Mission: Complements cannon artillery fires by suppressing, neutralizing, or destroying enemy indirect fire support, air defense capabilities, and other light materiel/personnel targets.

FY 2025 Program: Funds the second year of a Multiyear Procurement (MYP) contract. Continues production of current rocket variants and development/qualification of modifications to extend the maximum range and enhance warhead effectiveness.

Prime Contractor(s): Lockheed Martin Corporation; Dallas, TX and Camden, AR.

Guided Multiple Launch Rocket System						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	19.4	-	76.0	-	20.6
Procurement						
USA	-	2,170.2	-	942.3	-	1,219.8
USN	-	7.3	-	8.9	-	1.6
Subtotal	-	2,177.5	-	951.2	-	1,221.4
Total	-	2,196.9	-	1,027.2	-	1,241.9

Numbers may not add due to rounding

Javelin Advanced Anti-Tank Weapon System

DOD - JOINT

The Javelin is highly effective against a variety of targets at extended ranges under day/night, battlefield obscurants, adverse weather, and multiple counter-measure conditions. The system’s soft-launch feature permits firing from enclosures commonly found in complex urban terrain. The system consists of a reusable command launch unit (CLU) and a modular missile encased in a disposable launch tube assembly. The CLU provides stand-alone all-weather and day/night surveillance capability. Javelin provides precision effects in either a top-attack or direct-attack mode to defeat armored vehicles, fortifications, and soft targets in full spectrum operations. It uses an imaging infrared two-dimensional staring focal plane array seeker and a tandem warhead with two shaped charges, a precursor warhead to defeat reactive armor, and a primary warhead to penetrate base armor and other structures. It is effective against stationary and moving targets.



USMC Photo

Mission: Provides the dismounted soldier with the only man-portable, fire-and-forget system that is highly lethal against targets ranging from main battle tanks to fleeting targets of opportunity found in current threat environments.

FY 2025 Program: Continues procurement of the JAVELIN FGM-148F (F model) missile and Lightweight Command Launch Unit

Prime Contractor(s): Javelin Joint Venture (Raytheon Missiles & Defense; Tucson, AZ and Lockheed Martin; Orlando, FL)

Javelin Advanced Anti-Tank Weapon System - Medium						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	15.9	-	7.8	-	10.4
Procurement						
USA	2,415	874.5	541	199.5	930	326.1
USMC	1,313	257.9	91	54.9	123	61.6
Subtotal	3,728	1,132.4	632	254.4	1,053	387.7
Total	3,728	1,148.3	632	262.2	1,053	398.1

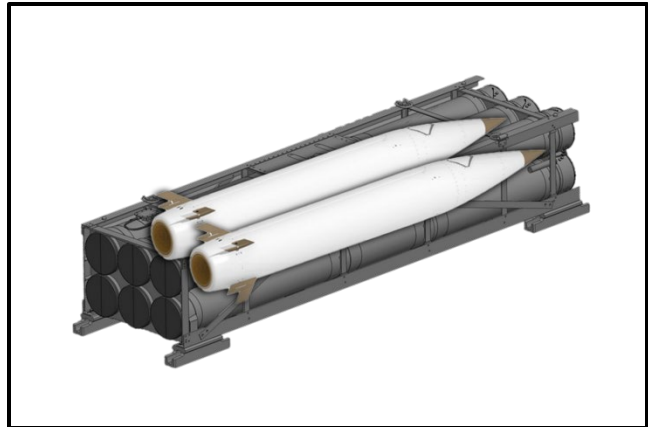
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Missiles & Munitions

Precision Strike Missile

USA

The Precision Strike Missile (PrSM) is the Army's next generation surface-to-surface ballistic missile that replaces and improves upon the Army Tactical Missile System (ATACMS). PrSM will provide Joint Force Commanders with a 24/7, all weather capability to attack critical and time sensitive area and point targets including threat air defense, missile launchers, command and control centers, assembly/staging areas, and high payoff targets at all depths of the multi-domain battlefield. PrSM provides field artillery units with long range and deep strike capability while supporting brigade, division, corps, Army, theater, Joint/Coalition Forces, and Marine Air-Ground Task Forces in full, limited, or expeditionary operations.



Mission: Destroy/neutralize/suppress targets at ranges from 70-400 km (threshold) using missile-delivered indirect precision fires.

FY 2025 Program: Procures additional Increment 1 missiles with Launch Pod Missile Containers and tooling investments to increase production in the future.

Prime Contractor(s): Lockheed Martin Missiles and Fire Control; Grand Prairie, TX

Precision Strike Missile						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	250.0	-	272.8	-	184.0
Procurement	42	162.9	110	384.1	230	492.6
Total	42	412.9	110	656.9	230	676.6

Numbers may not add due to rounding

Missiles & Munitions

Trident II Ballistic Missile Modifications



The Trident II (D5) is a submarine launched ballistic missile. It provides the most survivable, second-strike capability in our nation’s nuclear triad. The Trident II missile is carried on the OHIO-class and will be carried on the COLUMBIA-class Fleet Ballistic Missile Submarines. The D5 Life Extension (D5LE) Program is currently being executed to extend the life of the Trident II to match the extended 42-year life of the OHIO Class Submarine. Funding for the D5 Life Extension 2 (D5LE2) is necessary now to ensure the Trident II will meet the needs of the fleet beyond 2039 and extend the life of Trident II through the 2080s. The D5LE and D5LE2 ensure the Trident II will address component obsolescence, inventory depletion, and provide modularity for adaptability to evolving threats. The importance of this program as a key component to the sea-based leg of the nuclear triad was re-confirmed by the President and Congress with the renewal of the New Strategic Arms Reduction Treaty in 2021.



US Navy Photo

Mission: Aboard a virtually undetectable platform, the submarine launched fleet ballistic missile deters nuclear war by means of assured second-strike capability in response to a major attack on the United States or its allies.

FY 2025 Program: Continues to support the production of the redesigned missile which will be deployed on the COLUMBIA-class Fleet Ballistic Missile Submarine. Funds support procurement of Trident II D5LE warhead components, Solid Rocket Motors, the Mk4B Shape Stable Nose Tip (SSNT), and replacement of D5 legacy tooling and test support equipment. Development efforts of the D5LE2 include system studies and architecture development, W93/Mk7 warhead subsystem design reviews, as well as Submarine Launched Ballistic Missile (SLBM) and strategic guidance technologies in order to deliver a System Requirements Review in FY 2025.

Prime Contractor(s): Lockheed Martin Corporation; Sunnyvale, CA

Trident II Ballistic Missile Modifications						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	304.0	-	321.6	-	403.4
Procurement	-	1,390.5	-	1,548.6	-	2,062.3
Total	-	1,694.5	-	1,870.2	-	2,465.7

Numbers may not add due to rounding

Missiles & Munitions

Standard Missile 6



The Standard Missile-6 (SM-6) is a surface Navy Anti-Air Warfare missile that provides area and ship self-defense. The missile is intended to project power and contribute to raid annihilation by destroying manned fixed and rotary wing aircraft, Unmanned Aerial Vehicles (UAV), Land Attack Cruise Missiles, and Anti-Ship Cruise Missiles in flight. It was designed to fulfill the need for a vertically launched, extended range missile compatible with the Aegis Weapon System to be used against extended range threats at-sea, near land, and overland. The SM-6 combines the tested legacy of STANDARD Missile-2 (SM-2) propulsion and ordnance with an active Radio Frequency seeker modified from the AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM), allowing for over-the-horizon engagements, enhanced capability at extended ranges, and increased firepower.



US Navy Photo

Mission: Provides all-weather, anti-aircraft armament for cruisers and destroyers. The most recent variant of Standard Missile is SM-6, which incorporates an AMRAAM seeker for increased performance, including overland capability.

FY 2025 Program: Funds the procurement of 125 SM-6 IA missiles and canisters under the second year of a Multiyear Procurement (MYP) contract. The factory will operate at the maximum production rate. RDT&E funding completes Block IB rocket motor prototyping, begins rocket motor Engineering and Manufacturing Development, continues new Electronic Unit efforts for SM-6, continues Aegis architecture and design for SM-6 Block IB extended range capability, the procurement of Block IB components including ground test and controlled test vehicle hardware, MK-29 Mod I canisters for the Block IB flight and safety qualification testing, and seven (7) fleet experimentation rounds.

Prime Contractor(s): Raytheon Missiles & Defense; Tucson, AZ

Standard Missile-6						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	298.3	-	418.2	-	468.3
Procurement	125	489.1	125	1,196.8	125	755.2
Total	125	787.5	125	1,615.0	125	1,223.5

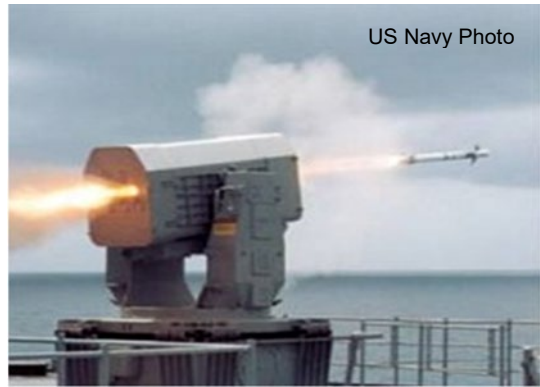
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Missiles & Munitions

Rolling Airframe Missile



The RM-116 Rolling Airframe Missile (RAM) is a high firepower, lightweight complementary self-defense system to engage anti-ship cruise missiles. The systems design is based upon the infrared (IR) seeker of the Stinger (FIM-92) missile, and the warhead, rocket motor, and fuse from the Sidewinder (AIM-9) missile. The missile uses Radio Frequency for midcourse guidance, and transitions to IR guidance for terminal engagement. The current RM-116 configuration is Block II (RIM-116C). Block 2A includes software modifications to improve raid performance and Block 2B includes an upgraded seeker and missile to missile link.



Mission: Provides high firepower close-in defense of combatant and auxiliary ships by utilizing a dual mode, passive radio frequency/infrared missile in a compact 21 missile launcher.

FY 2025 Program: Procures 148 RAM missiles, 4 Block 1 to 2B Ordnance Alterations (ORDALTS), and 70 Block 2 to 2A ORDALTS.

Prime Contractor(s): Raytheon Missiles & Defense; Tucson, AZ

Rolling Airframe Missile						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	16.7	-	11.1	-	19.2
Procurement	100	92.1	120	114.9	148	141.0
Total	100	108.9	120	126.0	148	160.2

Numbers may not add due to rounding

Missiles & Munitions

Naval Strike Missile



Naval Strike Missile (NSM) funding is required to support Navy Over The Horizon (OTH) Weapon System program for Littoral Combat Ship (LCS) and Frigate, Guided Missile (FFG) Ships. The program provides a long-range anti-surface offensive capability to improve the ship's ability to defend against enemy surface ships. NSM provides the Marine Corps' Navy/Marine Corps Expeditionary Ship Interdiction System (NMESIS) with a ground-based anti-ship capability. Missile components include a missile encased in a firing canister consisting of a flight vehicle that is mechanically and electrically connected within a weapon canister. The flight vehicle's major components are operationally joined, consisting of an explosive warhead, propulsion system, guidance system, initiation system, and other components. The weapon canister is a mechanical structure with electrical interconnections that is used to support and restrain the flight vehicle during loading and unloading operations. The weapon canister allows the flight vehicle to connect to the Missile Launch System without being exposed to the environment. The Navy and Marine Corps procure the same NSM configuration.



Mission: Destroys low and high altitude, high-speed enemy targets in an electronic countermeasures environment.

FY 2025 Program: Funds the second year of a Multiyear Procurement (MYP) to procure 12 NSMs for the Navy and 90 NSMs for the Marine Corps. RDT&E efforts support LCS operational test flight execution and live fire test and evaluation efforts.

Prime Contractor(s): Kongsberg Defence and Aerospace; Kongsberg, Norway

Naval Strike Missile						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	8.1	-	5.2	-	2.0
Procurement						
USN	39	59.0	13	35.7	12	29.3
USMC	115	174.4	90	209.0	90	174.8
Subtotal	154	233.4	103	244.7	102	204.1
Total	154	241.5	103	249.9	102	206.1

Numbers may not add due to rounding

Missiles & Munitions

Tactical Tomahawk Cruise Missile



Tomahawk is a combat-proven, long-range strike weapon that delivers a 1,000 lb. class warhead at ranges greater than 900 nm. Tomahawk is launched from U.S. Navy surface and submarine combatants and provides a high precision, all-weather, deep-strike attack capability against fixed and mobile targets. Because of Tomahawk’s capability, more than 2,000 Tomahawk combat expenditures have occurred to date. Key weapon features include: precision navigation/guidance; robust anti-jam Global Positioning System (GPS) capabilities; high responsiveness and mission flexibility due to an in-flight re-targeting capability; and the ability to transmit Battle Damage Indication reports prior to weapon impact.



US Navy Photo

Mission: Provides precision strike against long and medium range tactical targets.

FY 2025 Program: Continues the procurement of Tomahawk missiles for the Marine Corps and shifts the Navy’s focus to mid-life recertification phase efforts to increase the service life of the missile. Funds the development of a maritime strike variant to engage surface target and the Joint Multi-Effects Warhead System for optimal lethality.

Prime Contractor(s): Raytheon Missiles & Defense; Tucson, AZ

Tactical Tomahawk Cruise Missile						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	119.8	-	122.8	-	200.7
Procurement						
USN	55	738.8	-	706.3	-	449.4
USMC	13	43.0	34	105.2	22	115.2
Subtotal	68	781.7	34	811.5	22	564.7
Total	68	901.5	34	934.3	22	765.4

Includes modification programs

Numbers may not add due to rounding

Missiles & Munitions

LGM-35A Sentinel



The LGM-35A Sentinel, formerly known as the Ground Based Strategic Deterrent program is the Air Force effort to replace the aging LGM-30 Minuteman III intercontinental ballistic missile (ICBM) weapon system. The Minuteman III missile fleet was fielded in the 1970s with an initial 10-year service life while its command and control (C&C) as well as launch systems date back to the 1960s. Sentinel will modernize or replace Minuteman III flight, C&C, and launch systems, including missile silos, control centers and other ground infrastructures. The new Sentinel weapon system will meet existing user requirements, while having the adaptability and flexibility to address changing technology and threat environments through 2075. As a critical part of the nuclear triad, Sentinel will continue sustaining strategic stability, while hedging against vulnerabilities in other portions of the triad. Should deterrence fail, Sentinel will decisively defeat adversary targets while guaranteeing retaliatory capabilities as authorized and directed by the President. The program entered the Engineering and Manufacturing Development (EMD) phase in September 2020. Deployment is projected to begin in the late 2020s.



Minuteman III pictured

Mission: Provides land-based strategic nuclear deterrence, assurance, and stability by delivering a responsive and resilient capability. That assures allies do not need to expand their own capability, dissuades proliferation, and deters adversaries.

FY 2025 Program: Funds activities in support of EMD to include: advancing the test series for both Development Test & Evaluation and Operational Test & Evaluation across the air vehicle, launch facility, launch center, and all other test support assets. The proposed budget encompasses the completion of sub-system Critical Design Reviews (CDR), leading up to the Weapon System CDR. Additionally, it involves initiating utility corridor trenching for the Operational Weapon System Article (OWSA) and commencing the associated conversion of first two (2) Launch Facilities and two (2) Launch Centers. The FY 2025 budget also supports advance procurement for six Secondary Launch Platform – Airborne aircraft group-B kits in support of incremental Minuteman III capability; as well as security systems and associated equipment for new facilities at Vandenberg SFB and F.E. Warren AFB.

Prime Contractor(s): Northrop Grumman Corporation; Roy, UT

Sentinel						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	3,434.6	-	3,746.9	-	3,721.0
Procurement	-	2.8	-	543.5	-	10.9
Total	-	3,437.5	-	4,290.4	-	3,731.9

Numbers may not add due to rounding

Long Range Stand-Off Weapon



Long Range Stand-Off (LRSO) Weapon is a nuclear cruise missile capable of penetrating and surviving complex advanced integrated air defense systems in GPS-denied environments from significant stand-off ranges. The LRSO replaces the Air Launched Cruise Missile (ALCM) which entered service in 1982 and is well past its original 10-year service life design. LRSO details are classified to protect critical program information. The program entered the Engineering and Manufacturing Development (EMD) phase in July 2021.



Mission: Retains penetrating and survivable capabilities against advanced Integrated Air Defense Systems in GPS-denied environments from significant stand-off ranges, ensuring a credible deterrent. Combined with nuclear capable bombers, LRSO provides the nuclear triad with a clear, visible, and tailorable deterrent. LRSO provides the President and U.S. Forces the ability to project power and hold at risk any target at any location on the globe. LRSO also provides a hedge against future technological and geopolitical uncertainties.

FY 2025 Program: Funds the LRSO cruise missile procurement, allowing the Air Force to purchase ancillary equipment, warhead support equipment, and field trainers required to be in place for initial Nuclear Surety Inspection (INSI). The INSI must be accomplished prior to fielding the weapon system and attaining Initial Operational Capability. Additionally, the FY 2025 PB request includes \$140 million in Advanced Procurement funding, to procure long lead time components and maintain the LRSO production schedule.

Prime Contractor: Raytheon Company; Tucson, AZ

Long Range Stand-Off Weapon						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	921.9	-	911.4	-	623.5
Procurement	-	31.5	-	66.8	-	210.3
Total	-	953.3	-	978.2	-	833.8

Numbers may not add due to rounding

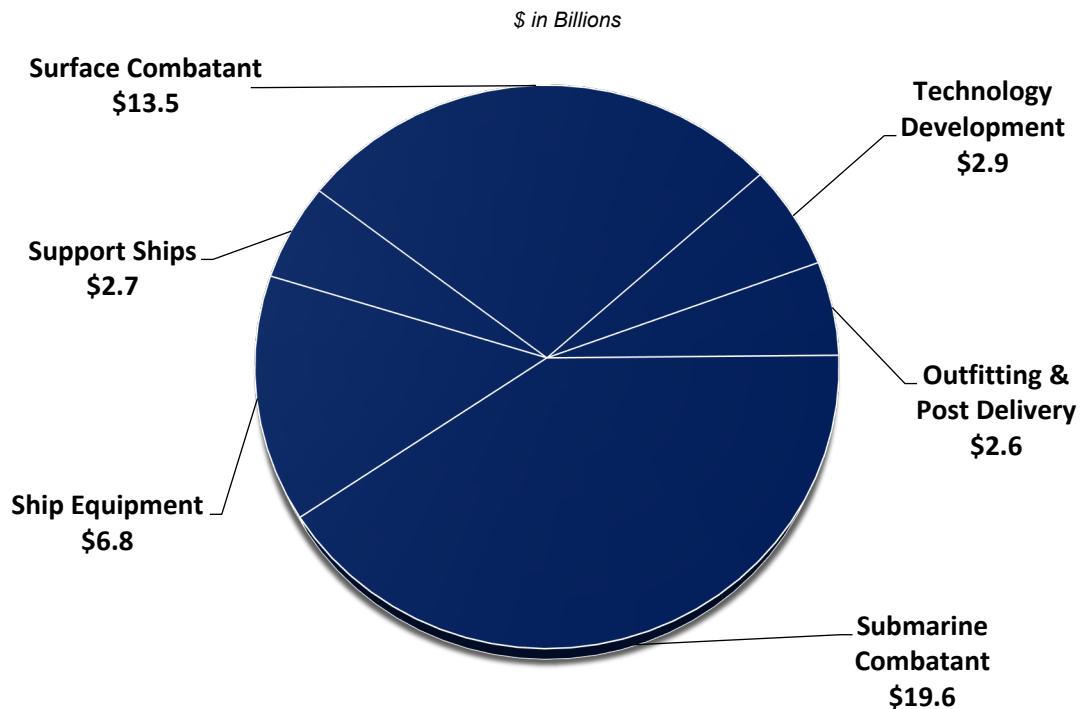
Shipbuilding and Maritime Systems

A central principle to the United States Maritime Strategy is forward presence, which promotes conflict deterrence by ensuring forces are in a position to expeditiously respond to conflict. Therefore, sea services must procure, build, and maintain maritime systems in accordance with mission needs. The funding in this category finances developmental efforts, equipment procurements, and construction of ships that will allow the U.S. Navy to maintain maritime dominance and superiority well into the 21st century.

The Department is requesting \$4.0 billion for the Submarine Industrial Base to increase production capacity, to improve Virginia Class submarine production, while sustaining the Columbia Class submarine annual rate of production.

The FY 2025 Shipbuilding Portfolio includes funding for the construction and service life extension of 12 vessels and procurement of two used sealift vessels. Six battle force fleet ships will begin construction: One SSN 774 *Virginia* class nuclear attack submarine, equipped with the Virginia Payload Module; two DDG 51 *Arleigh Burke* class Flight III destroyers; one FFG *Constellation* class Frigate; one LPD-17 *San Antonio* class Amphibious ship; and one Medium Landing Ship.

FY 2025 Shipbuilding and Maritime Systems Total: \$48.1 Billion



Numbers may not add due to rounding

CVN 78 *Gerald R. Ford* Class Nuclear Aircraft Carrier



Aircraft carriers are the centerpiece of U.S. Naval forces. The CVN 78 class ships include new technologies and enhancements that improve efficiency and operating costs as well as reduced crew requirements. This new class brings improved warfighting capability, quality-of-life improvements for Sailors, and reduced total ownership costs. USS *Gerald R. Ford* is the first aircraft carrier designed with all electric utilities, eliminating steam service lines from the ship, reducing maintenance requirements and improving corrosion control. The new A1B reactor, Electromagnetic Aircraft Launch System (EMALS), Advanced Arresting Gear (AAG) and Dual Band Radar (DBR) all offer enhanced capability with reduced manning. The ship's systems and configuration are optimized to maximize the sortie generation rate (SGR) of attached strike aircraft.



Mission: Provides the United States with the core capabilities for forward presence, deterrence, sea control, power projection, maritime security, and humanitarian assistance. The *Gerald R. Ford* class will be the premier forward asset for crisis response and early decisive striking power in a major combat operation.

FY 2025 Program: Funds continued construction for three carriers USS *John F. Kennedy* (CVN 79), USS *Enterprise* (CVN 80) and USS *Doris Miller* (CVN 81). CVN 80 and CVN 81 comprise a two-carrier procurement contract, awarded in FY 2019, which is expected to yield approximately \$4.0 billion in savings. Additional funding includes outfitting, training equipment, and continued development of ship systems.

Prime Contractor(s): Huntington Ingalls Industries; Newport News, VA

CVN 78 <i>Gerald R. Ford</i> Class Nuclear Aircraft Carrier						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	157.0	-	118.2	-	96.7
Procurement	-	3,048.7	-	2,586.2	-	2,242.7
Total	-	3,205.7	-	2,704.4	-	2,339.4

Numbers may not add due to rounding
Shipbuilding & Maritime Systems

SSBN 826 Columbia Class Ballistic Missile Submarine



The *Columbia* class Ballistic Missile Submarine (SSBN) will replace the current *Ohio* class of Fleet Ballistic Missile Submarine. The USS *Columbia* program will deliver 12 SSBNs with the necessary capability and capacity to meet the sea-based strategic deterrence mission beyond retirement of the current submarine force and with sufficient mission capability to counter credible threats through 2080.



Artist conception courtesy of the U.S. Navy

Construction began in FY 2021 for FY 2028 delivery when the first *Ohio* class boats begin decommissioning. The nuclear propulsion systems will be acquired from the nuclear industrial base under the direction of Naval Reactors. The program includes the development and construction of a Common Missile Compartment (CMC) capable of hosting the TRIDENT II missile system, a jointly conducted effort with the United Kingdom to support the *Dreadnought* class SSBN.

Mission: Provides a sea-based strategic nuclear force. Maintains an appropriate state of readiness to assist in deterring nuclear attack on the United States and its allies. Launches missiles against targets should deterrence fail. Performs extended strategic deterrent patrols without requiring assistance or replenishment.

FY 2025 Program: Funds the second of two increments of funding for the second boat (USS Wisconsin SSBN 827), future boats’ advance procurement, and detail design and construction of Contractor Furnished Equipment (CFE) and Government Furnished Equipment (GFE). Advance procurement includes CFE and GFE Long Lead Time Material; continuous production of missile tubes; advance construction; Economic Order Quantity for multi-program procurement; and continuous production of shipyard manufactured items. FY 2025 also continues funding research and development of nuclear technologies and ship systems such as the propulsion system, combat systems technology, and CMC. The request also supports the submarine industrial base to reduce the *Columbia* class’s construction schedule risk.

Prime Contractor(s): General Dynamics; Groton, CT
 Huntington Ingalls Industries; Newport News, VA

Columbia Class Ballistic Missile Submarine Program						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	401.3	-	311.5	-	234.0
Procurement	-	5,871.8	1	5,906.5	-	9,644.6
Total	-	6,273.2	1	6,218.0	-	9,878.7

Numbers may not add due to rounding
 Shipbuilding & Maritime Systems

SSN 774 Virginia Class Submarine



The *Virginia* class submarine is a multi-mission nuclear-powered attack submarine that provides the Navy with the capabilities to maintain undersea supremacy in the 21st century. Characterized by advanced stealth and enhanced features for Special Operations Forces, this submarine is able to operate in deep water and littoral environments. Equipped with vertical launchers and torpedo tubes, the submarine is able to launch Tomahawk cruise missiles and heavyweight torpedoes. Block V variants will incorporate Acoustic Superiority and the Virginia Payload Module (VPM), which is an 84-foot hull section with four additional payload tubes, each capable of carrying seven Tomahawk cruise missiles or various other payloads. The VPM helps mitigate the loss of undersea strike capability with the retirement of the Navy’s four guided missile submarines (SSGNs) in the mid-2020s.



Mission: Seeks and destroys enemy ships and submarines across a wide spectrum of scenarios, working independently and in concert with a battle group, separate ships, and independent units. Provides theater commanders with critical time sensitive information for accurate knowledge of the battlefield.

FY 2025 Program: Funds the first Block VI boat as part of a new multiyear procurement (MYP) contract that begins in FY 2025 (nine boats total). The FY 2025 request also funds advance procurement for four boats in future years, economic order quantity funds for future MYP boats in FY 2025 – FY 2029 and outfitting and support equipment. FY 2025 continues funding development of future payload integration, test and evaluation of new capabilities, future Block development, and combat systems improvements.

Prime Contractor(s): General Dynamics Corporation; Groton, CT
Huntington Ingalls Industries; Newport News, VA

SSN 774 Virginia Class Submarine						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	295.8	-	225.9	-	265.4
Procurement	2	6,974.9	2	10,619.7	1	7,943.9
Total	2	7,270.7	2	10,845.6	1	8,209.3

Numbers may not add due to rounding

Shipbuilding & Maritime Systems

DDG 51 *Arleigh Burke* Class Destroyer



The *Arleigh Burke* class (DDG 51) guided missile destroyers provide a wide range of war fighting capabilities in multi-threat air, surface, and subsurface environments. The DDG 51 class is armed with a vertical launching system, which accommodates 96 missiles, and a 5-inch gun that provides Naval Surface Fire Support to forces ashore and anti-ship gunnery capability against other ships. This is the first class of destroyers with a ballistic missile defense capability. The *Arleigh Burke* class includes four separate variants: DDG 51-71 represent the original design, designated Flight I ships, and are being modernized to current capability standards; DDG 72-78 are Flight II ships; DDG 79-124 and DDG 127 ships are Flight IIA ships; and DDG 125, DDG 126, and DDG 128 – DDG 146 will be constructed as Flight III ships with the Air and Missile Defense Radar (AMDR) capability.



US Navy Photo

Mission: Operates within a carrier strike group or independently to provide multi-mission offensive and defensive capabilities. Conducts Anti-Air Warfare, Anti-Submarine Warfare, and Anti-Surface Warfare.

FY 2025 Program: Funds two Flight III DDG 51 class destroyers in the third year of the FY 2023 – FY 2027 multi-year procurement contract for nine ships with two options, economic order quantity funding for the FY 2026 – FY 2027 ships, outfitting costs, completion costs and continued development of ship systems.

Prime Contractor(s): General Dynamics Corporation; Bath, ME
Huntington Ingalls Industries; Pascagoula, MS

DDG 51 <i>Arleigh Burke</i> Class Destroyer						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	199.1	-	268.9	-	227.3
Procurement	3	8,021.7	2	4,805.6	2	6,844.1
Total	3	8,220.8	2	5,074.5	2	7,071.3

Numbers may not add due to rounding

Shipbuilding & Maritime Systems

Constellation Class Guided Missile Frigate



The *Constellation* class (FFG-62) guided missile frigates are lethal and survivable multi-mission small surface combatants. With the *Constellation* class, the Navy will maximize the small surface combatant survivability and capabilities in the anti-surface warfare, anti-submarine warfare, electromagnetic maneuver warfare, air warfare mission areas, while keeping the ship affordable as a part of a "high-low" mix of surface ships. The *Constellation* class will form into strike groups and Large Surface Combatant action groups while maintaining the ability to operate independently. The ships in this class will have a MK48 Mod 2 Gun Weapon System, a MK41 Vertical Launch System, and a Rolling Airframe Missile (RAM) Guided Missile Weapon System (GMWS).



Mission: Provides the Fleet with escort mission capabilities, performs naval-presence missions and conducts offensive operations.

FY 2025 Program: Requests funding for one *Constellation* class ship and continues research and development of ship systems and testing efforts.

Prime Contractor(s): Fincantieri Marinette Marine; Marinette, WI

Constellation Class Guided Missile Frigate						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	106.2	-	113.0	-	107.7
Procurement	1	1,444.8	2	2,173.7	1	1,170.4
Total	1	1,551.1	2	2,286.7	1	1,278.1

Numbers may not add due to rounding
Shipbuilding & Maritime Systems

CVN Refueling Complex Overhaul



The CVN Refueling Complex Overhaul (RCOH) life extension program involves refueling and modernizing the nuclear-powered fleet aircraft carriers. During the RCOH, the nuclear fuel and obsolete parts are replaced, major system are modernized; and corrosion damage is repaired. *Nimitz* class aircraft carriers are designed for a 50-year life span, and the RCOH is performed approximately midway through the ship’s lifespan.



Mission: Refuel and upgrade the *Nimitz* class aircraft carriers at mid-life to ensure reliable operations during the remaining 25 plus years of ship life using only the normal maintenance cycle.

FY 2025 Program: Funds the first of three years of full funding for the USS *Harry S Truman* (CVN 75) with the RCOH scheduled to being in FY 2025. The FY 2025 request also funds cost to complete and outfitting for the USS *John C. Stennis* (CVN 74).

Prime Contractor(s): Huntington Ingalls Industries; Newport News, VA

CVN Refueling Complex Overhaul						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	-	-	-	-	-
Procurement	-	689.9	-	895.6	1	1,738.3
Total	-	689.9	-	895.6	1	1,738.3

Numbers may not add due to rounding
Shipbuilding & Maritime Systems

LPD 17 *San Antonio* Class Amphibious Transport Dock



The LPD Flight II is the new variant of the *San Antonio* class Amphibious Transport Dock ship. This flight II variant is designed to be adaptable and will be used across the range of military operations, from major combat operations to humanitarian assistance and disaster relief. Utilizing the LPD 17 class’ proven hull, the Flight II ships will feature a fully capable flight deck and hangar, a well deck, and the vehicle and cargo capacities to support and sustain more than 500 combat-equipped marines for up to 30 days. The ship will feature a Rolling Airframe Missile (RAM) Block 2 system; the MK 46 Gun system, and the AN/SPQ-9B radar. The LPD 17 Flight II functionally replaces LSD 41 class ships and LSD 49 class ships.



Artist Conception courtesy of HII

Mission: Transports and lands Marines, their equipment, and supplies by embarked Landing Craft Air Cushion (LCAC) or conventional landing craft and amphibious assault vehicles (AAV) augmented by helicopters or vertical take-off and landing aircraft (MV 22). These ships support amphibious assault, special operations, or expeditionary warfare missions and serve as secondary aviation platforms for amphibious operations.

FY 2025 Program: Funds 1 LPD (LPD-33), development funds for testing, outfitting costs, and cost-to-complete.

Prime Contractor(s): Huntington Ingalls Industries; Pascagoula, MS

LPD-17 <i>San Antonio</i> Class Amphibious Transport Dock						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	18.8	-	21.3	-	12.8
Procurement	1	1,989.4	-	56.3	1	1,640.2
Total	1	2,008.2	-	77.6	1	1,653.0

Numbers may not add due to rounding
Shipbuilding & Maritime Systems

T-AO 205 *John Lewis* Class Fleet Replenishment Oiler



The *John Lewis* class Fleet Replenishment Oiler (T-AO) program is building a new class of fleet oilers for the Navy. The USNS *John Lewis* (T-AO 205) is the lead ship in this class. The T-AO provides fuel and cargo delivery to support fleet operations. Compared to the previous class of oilers, the *John Lewis* class has increased space for dry cargo, a helicopter refueling capability, and a double hull to guard against oil spills and to comply with international agreements concerning ship pollution. The lead ship, the USNS *John Lewis* (T-AO 205), delivered in July 2022.



Artist conception courtesy of NASSCO

Mission: Transfers fuel and lubricants to Navy surface ships operating at sea to extend at-sea time for the ships and embarked aircraft. The T-AO Class operates as shuttle ships from resupply posts to customer ships. Additionally, in conjunction with a T-AKE, they will accompany and stay on-station with a Carrier Strike Group to provide fuel as required to customer ships.

FY 2025 Program: Funds outfitting costs, and cost-to-complete for prior year ships.

Prime Contractor(s): General Dynamics, National Steel and Shipbuilding Co.; San Diego, CA

John Lewis Class Fleet Replenishment Oiler						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	0.2	-	0.1	-	-
Procurement	1	1,060.5	1	967.6	-	261.2
Total	1	1,060.7	1	967.7	-	261.2

Numbers may not add due to rounding

Shipbuilding & Maritime Systems

Medium and Large Unmanned Surface Vessels



The Unmanned Surface Vessel (USV) is a multi-mission vessel designed to provide low cost, high endurance, reconfigurable ships that can accommodate various payloads for unmanned missions and augment the Navy's manned surface force. Future missions and payloads will be informed as the concept of operations is developed. While unmanned surface vehicles are new additions to fleet units, they are intended to be relatively low developmental technologies that combine robust and proven commercial vessel designs with existing military payloads to rapidly and affordably expand the capacity and capability of the surface fleet. The program benefits from years of investment and full-scale demonstration efforts in autonomy, endurance, command and control, payloads and testing from the Defense Advanced Research Projects Agency's (DARPA) Anti-Submarine Warfare Continuous Trail Unmanned Vessel and Office of Naval Research's Medium Displacement Unmanned Surface Vessel/Sea Hunter and Office of the Secretary of Defense Strategic Capabilities Office's Ghost Fleet Overlord Large USV experimentation efforts.



Mission: Supports combatant ships by providing additional Anti-Surface Warfare and Strike capacity.

FY 2025 Program: Funds continued development and testing of medium and large Unmanned Surface Vessels and continues research and development of payload systems. FY 2025 also continues development work in USV core capabilities of system autonomy, sensors and perception, and Command, Control, Communications, Computer & Intelligence (C4I).

Prime Contractor(s): TBD

Medium and Large Unmanned Surface Vessels						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	300.1	-	237.9	-	185.2
Procurement	-	-	-	-	-	-
Total	-	300.1	-	237.9	-	185.2

Numbers may not add due to rounding
Shipbuilding & Maritime Systems

LHA *America* Class Amphibious Assault Ship



USS *America* class ships are large-deck, amphibious assault ships designed to support ground forces. This class can transport a combination of helicopters and vertical take-off and landing aircraft. The first two ships, USS *America* (LHA 6) and USS *Tripoli* (LHA 7), are designated as Flight 0 Variants and include an enlarged hangar deck, enhanced aviation maintenance facilities, increased aviation fuel capacity, and additional aviation storerooms as compared to the previous *Tarawa* (LHA 1) class ships. The USS *Bougainville* (LHA 8) is designated the first Flight I ship and will reincorporate a well deck for operational flexibility. The well deck will enable surface operations while maintaining the aviation capabilities. The USS *Fallujah* (LHA 9) is the second Flight I ship and has an LHA 8 baseline design.



Mission: Provides forward presence and power projection as an integral part of joint, interagency, and multinational maritime expeditionary forces. Operates for sustained periods in transit to and operations in an Amphibious Objective Area to include the embarkation, deployment, and landing of a Marine Landing Force and supporting forces by helicopters and tilt rotors supported by Joint Strike Fighters F-35B.

FY 2025 Program: Funds advance procurement for LHA 10 (FY 2027 ship), outfitting costs, and cost to complete for LHA 8.

Prime Contractor(s): Huntington Ingalls Industries; Pascagoula, MS

LHA <i>America</i> Class Amphibious Assault Ship						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	12.2	-	19.4	-	11.7
Procurement	1	1,415.7	-	1,854.9	-	222.7
Total	1	1,428.0	-	1,874.2	-	234.4

Numbers may not add due to rounding
Shipbuilding & Maritime Systems

Medium Landing Ship



The Medium Landing Ship (LSM) is a medium-sized landing ship that enables distributed maneuver and logistics such as Distributed Maritime Operations, Littoral Operations in a Contested Environment, and Expeditionary Advanced Base Operations in support of the Marine Littoral Regiment (MLR). It is designed to fill the gap in capability between the Navy's large, multipurpose amphibious warfare class (LHA/LPD) and smaller landing vessels (LCAC/LCU).



Mission: Provides a highly maneuverable, mobile, independent, intra-theater range ship to complement the mix of traditional amphibious warfare ships. This ship will deploy tailored logistics, select power projection and support strike capabilities via the embarked MLR.

FY 2025 Program: Funds the lead ship (new start in FY 2025) and continuing development efforts.

Prime Contractor(s): TBD

Medium Landing Ship						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	11.1	-	14.7	-	6.0
Procurement	-	-	-	-	1	268.1
Total	-	11.1	-	14.7	1	274.1

Numbers may not add due to rounding

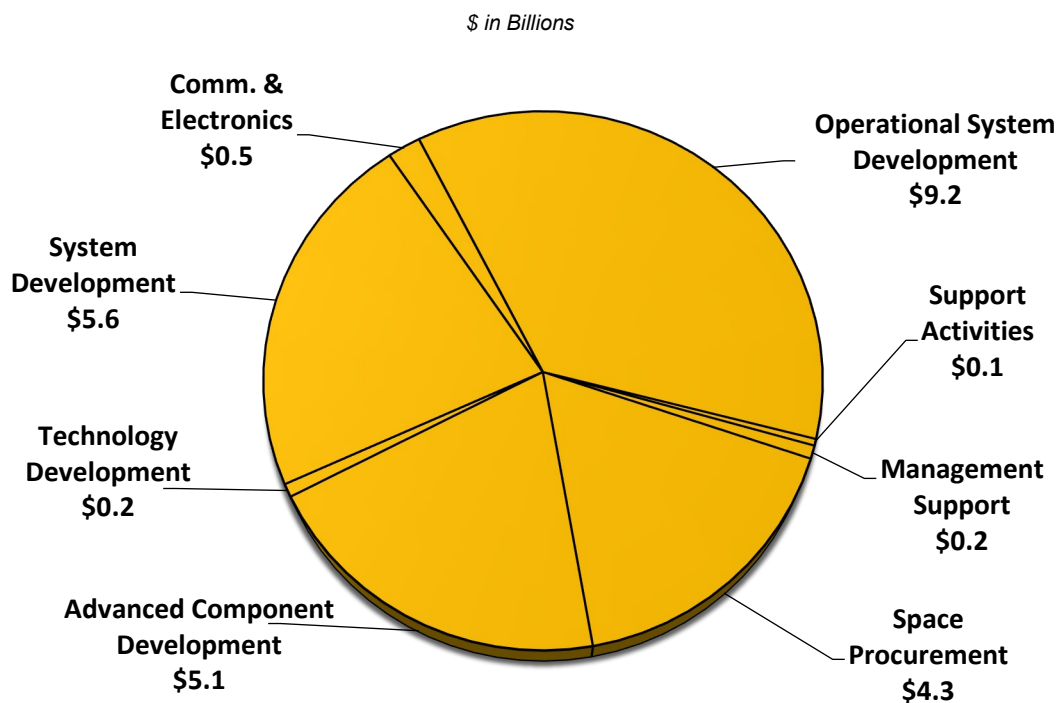
Shipbuilding & Maritime Systems

Space Based and Related Systems

Space assets support deployed U.S. forces by providing communications services, navigation capabilities, and information collected by remote sensors such as weather satellites and intelligence collection systems. Space forces contribute to the overall effectiveness of U.S. military forces by acting as a force multiplier that enhances combat power. This investment addresses growing threats, complicating an adversary’s ability to counter U.S. space superiority, while enhancing the Department’s ability to identify, characterize, and attribute all threatening actions in space. The capability to control space contributes to achieving information superiority and battle space dominance. Procurement of launch vehicles and launch services are typically funded 2 years prior to launch. Under existing budget policy, the first two satellites of a new system are financed with Research, Development, Test and Evaluation (RDT&E) funding and the remainder of follow-on satellites are fully funded with Procurement funding.

The FY 2025 budget highlights include funding for development of new Resilient Missile Warning/Missile Tracking architectures, along with Next Generation Overhead Persistent Infrared (NG OPIR) space and associated ground architectures; continues funding for the Evolved Strategic SATCOM (ESS) and Protected Tactical, Wideband, and Narrowband secure/survivable/jam-resistant capabilities. The budget also funds the procurement of two GPS III Follow-on satellites; seven National Security Space Launch (NSSL) launch services for medium and heavy lift class satellites and four launches for Space Development Agency (SDA) proliferated Low Earth Orbit Transport Layer development.

FY 2025 Space Based Systems Total: \$25.2 Billion



Numbers may not add due to rounding

Launch Enterprise

USSF

The Space Forces' Launch Enterprise consists of the National Security Space Launch (NSSL) program and Rocket System Launch Program (RSLP). NSSL provides highly reliable launch services for medium and heavy lift class national security satellites. The RSLP provides procurement of small launch and rideshare services, suborbital targets and experimental flights, and restoration of excess ballistic missile assets for reuse.



Mission: To be the Guardians of Assured Access -- Launching when and where the nation needs it. Launch Enterprise provides highly reliable launch services and support under the NSSL program and launch services with tailorable mission assurance and support under the RSLP for DoD, Intelligence Community, and other government agencies. Maintains assured access to space for the nation through the NSSL program, which includes a robust industrial base and three affordable and highly reliable families of launch vehicles.

FY 2025 Program: Procures seven Space Force Launch Services (LS) using the competitively awarded NSSL Phase 3 contract and four Space Development Agency launch services. Launches are usually ordered 24 months prior to the planned mission. Funds Launch Service Support (LSS) efforts, which are non-discrete tasks necessary to support vital national security space launches without driving undue costs to commercial launch services.

Prime Contractor(s): NSSL, RSLP: SpaceX; Hawthorne, CA
 NSSL, RSLP: United Launch Alliance (ULA); Centennial, CO
 RSLP: Northrop Grumman; Corinne, UT
 RSLP: Rocket Lab, USA; Long Beach, CA
 RSLP: VOX Space; El Segundo, CA

Launch Enterprise						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	317.5	-	141.4	-	129.4
Procurement	10	1,987.5	15	2,861.7	11	2,268.4
Total	10	2,305.0	15	3,003.1	11	2,397.8

Numbers may not add due to rounding

Space Based Systems

Global Positioning System Enterprise USSF

The Global Positioning System (GPS) provides world-wide, 24-hour a day, all-weather 3-dimensional positioning, navigation, and timing (PNT) information for military and civilian users. The GPS III space vehicles (SVs) will be fully backward compatible with legacy signals while delivering new capabilities and enhancements, to include a new Galileo-compatible signal (civilian) and a more powerful M-code (military) signal. The GPS Next Generation Operational Control System (OCX) will provide command, control, and mission support for the GPS constellation, including GPS III and all legacy satellites. Further capabilities will be introduced with GPS III Follow-on (IIIF), such as Regional Military Protection. Military GPS User Equipment (MGUE) provides secure and accurate PNT capabilities to warfighters for ground, aircraft, ships, and weapons systems, enabling continued operations in the most contested environments.



Image courtesy of Lockheed Martin

Mission: Provides worldwide PNT to military and civilian users.

FY 2025 Program: Funds independent, technical, systems engineering and integration support critical to managing SVs 08-10 storage, launch, and checkout activities, and the acquisition of GPS IIIF SVs 21 and 22. Funds continued development of the GPS IIIF SVs 11-20. Supports transitioning of constellation operations from the legacy Operational Control Segment (OCS) to OCX. Funds the testing and lead platform integration of MGUE Increment 1. Funds development efforts for MGUE Increment 2 and design activities to address MGUE Increment 1 obsolescence. Funds the GPS Program Office’s responsibility as the Prime Integrator (Enterprise Integration) to synchronize space, control, and user segment programs and to manage civil/military specifications and requirements.

Prime Contractor(s): OCX, MGUE: Raytheon Company; Aurora CO
 GPS IIIF: Lockheed Martin Corporation; Denver CO
 MGUE: BAE Systems; Cedar Rapids IA
 MGUE: L3Harris; Anaheim CA
 OCX, MGUE: Raytheon Company; El Segundo CA

Global Positioning System Enterprise						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	919.4	-	980.1	-	762.0
Procurement	2	753.1	-	279.7	2	757.7
Total	2	1,672.5	-	1,259.8	2	1,519.7

Numbers may not add due to rounding

Space Based Missile Warning Systems

USSF

Next Generation Overhead Persistent Infrared Program (OPIR) fields two Geosynchronous Earth Orbit (GEO), two Polar satellites in Highly Elliptical Orbit (HEO). Resilient Missile Warning and Missile Tracking (MW/MT) are developing to field 39 Low Earth Orbit (LEO), and up to nine Medium Earth Orbit (MEO) satellites. These systems will rapidly deliver strategically survivable missile warning capabilities, which detect advances made in adversarial missile technology and addresses counter-space systems with added resiliency features. Resilient MW/MT offers coverage of all phases of missile warning and tracking of advanced missile threats, including hypersonic missile systems.



- SBIRS HEO payloads 01-04 and GEO space vehicles (SV) 01-06 are on orbit and operationally accepted; SV 06 launched 4 Aug 2022 and was operationally accepted on March 2023.
- Next-Gen OPIR will launch four satellites: Two GEO with target launch dates of 2025 and 2027; and two Polar free-flyer satellites in HEO with target dates of 2028 and 2030.
- Future Operationally Resilient Ground Evolution (FORGE) program delivers a cyber-resilient, government owned ground system that will supports SBIRS, Next-Gen OPIR and Resilient MW/MT.
- SBIRS Survivable Endurable Evolution (S2E2) upgrades current mobile ground systems to SBIRS GEO capability to meet survivable, endurable missile warning requirements.
- Resilient MW/MT develops proliferated constellations to provide additional coverage for all phases of missile warning, missile tracking, and fire control capability.

Mission: Provides warning and tracking of strategic missile attack on the United States, its deployed forces, and its allies. Supports missile defense, battlespace awareness, and technical intelligence.

FY 2025 Program: Funds continue development of Next-Gen OPIR satellites and the FORGE ground system development. Also funds development of Resilient MW/MT LEO and MEO; launch of LEO constellation begins in FY 2025.

Prime Contractor(s): Next-Gen GEO: Lockheed Martin; Sunnyvale, CA
 Next-Gen Polar: Northrop Grumman; Redondo Beach, CA
 Missile Warning, FORGE: Raytheon; Aurora, CO
 Resilient MW/MT: Multiple competitive contractors

Space Based Missile Warning Systems						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	4,573.1	-	4,927.0	-	4,677.8
Procurement	-	149.0	-	39.4	-	-
Total	-	4,722.1	-	4,966.4	-	4,677.8

Numbers may not add due to rounding

Space Based Systems

Satellite Communications (SATCOM) Projects

USSF

The Space Force bins SATCOM in three capability sets:

1. Strategic – for Nuclear Command, Control, and Comms

- Evolved Strategic SATCOM (ESS) - Plans prototypes for next-generation strategic constellation.
- Strategic SATCOM Terminals - Provides secure/survivable/jam-resistant capabilities.



Image courtesy of Northrop Grumman

2. Protected Tactical – to enable tactical communications capabilities in contested environments

- Enhanced Polar System-Recapitalization (EPS-R) - Acquires two hosted payloads for SATCOM in the North Polar Region as part of a partnership with Norway.
- Protected Tactical Enterprise Service (PTES) - Develops the ground infrastructure to provide resilient SATCOM capabilities over existing military and commercial SATCOM systems and enables the future use of the Protected Tactical SATCOM (PTS) system.
- PTS - A genus of satellites that provides users the ability to obtain communications services in contested environments.

3. Wideband and Narrowband – to provide voice and data services in less contested areas

- Wideband Global SATCOM (WGS) - WGS Satellite Vehicle (SV) 1-10 are operational. Delivers WGS SV 11 and 12, with greater capacity than WGS SV 10; projected available for launch in FY 2025 and 2027, respectively. Enhances the legacy WGS ground system to support WGS SV 11 and 12 capabilities.
- Mobile User Objective System (MUOS) - Acquires two additional satellites to extend the use of the Wideband Code Division Multiple Access waveform.

Mission: Provides worldwide secure voice, video, and data communications for DoD users.

FY 2025 Program: Funds continue selected SATCOM development activities. Initiates PTS prototype payload launch vehicle integration and PTS Engineering and Manufacturing Development (EMD) phase for the new purpose-built high-throughput anti-jam satellite system.

Prime Contractor(s): ESS, PTS, PTES, WGS: Boeing Satellite Systems; El Segundo, CA
 ESS, PTS, EPS-R, WGS: Northrop Grumman; Redondo Beach, CA
 MUOS SLE: Up to 2 contractors TBD
 MUOS Ground: General Dynamics; Scottsdale, AZ
 Strategic SATCOM Terminals: Raytheon; Malborough, MA

Satellite Communications (SATCOM) Projects						
	FY 2023		FY 2024		FY 2025	
	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E	-	2,185.9	-	3,673.7	-	3,793.4
Procurement	-	600.7	-	355.1	-	409.6
Total	-	2,786.5	-	4,028.8	-	4,203.0

Numbers in table reflect AF/SF programs and may not add due to rounding



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