OFFICE OF THE UNDER SECRETARY OF DEFENSE (COMPTROLLER)/
CHIEF FINANCIAL OFFICER

UNITED STATES DEPARTMENT OF DEFENSE
FISCAL YEAR 2015 BUDGET REQUEST

PROGRAM ACQUISITION COST BY WEAPON SYSTEM

MARCH 2014

Major Weapon Systems

OVERVIEW

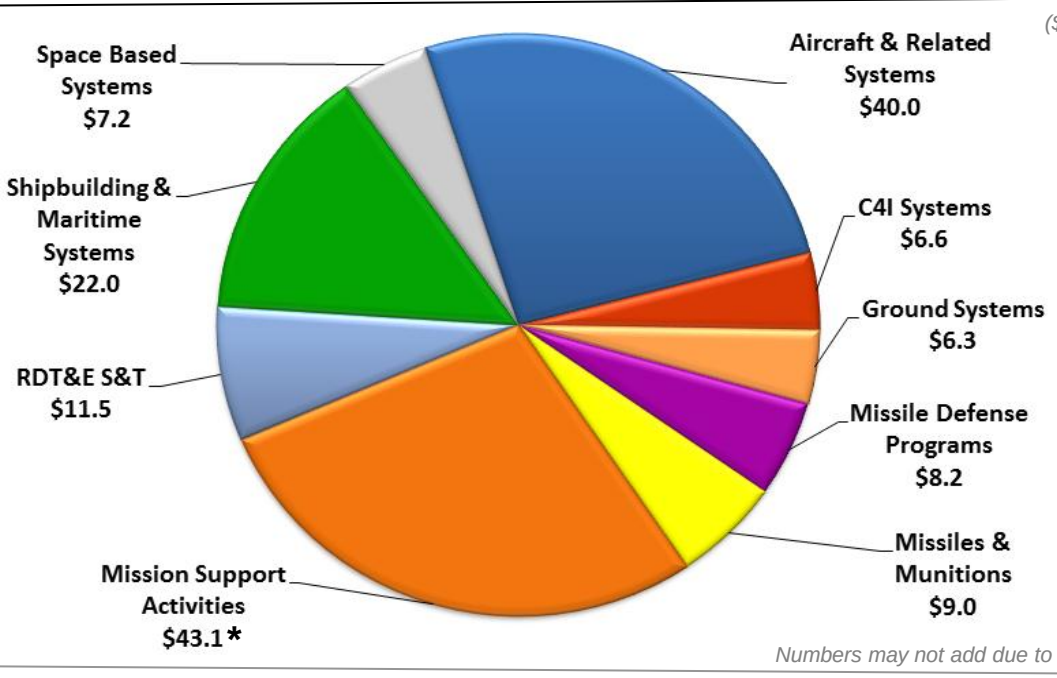
The combined capabilities and performance of U.S. weapon systems are unmatched throughout the world, ensuring that U.S. military forces have the advantage over any adversary. The Fiscal Year (FY) 2015 acquisition funding request for the Department of Defense (DoD) totals $153.9 billion, which includes $154.2 billion in new budget authority for FY 2015 offset by the cancellation of $0.3 billion of prior year funding. The $154.2 billion for the base budget, includes $90.7 billion for Procurement funded and $63.5 billion for Research, Development, Test, and Evaluation (RDT&E) funded programs. Of this amount, $69.6 billion is for programs that have been designated as Major Defense Acquisition Programs (MDAPs). Unless specifically identified as being for Overseas Contingency Operations (OCO), this book focuses on base funding for the key MDAP programs. To simplify the display of the various weapon systems, this book is organized by the following mission area categories:

Mission Area Categories

- Aircraft & 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
- Mission Support Activities
- RDT&E Science & Technology

FY 2015 Modernization – Base: $153.9 Billion*

($ in Billions)



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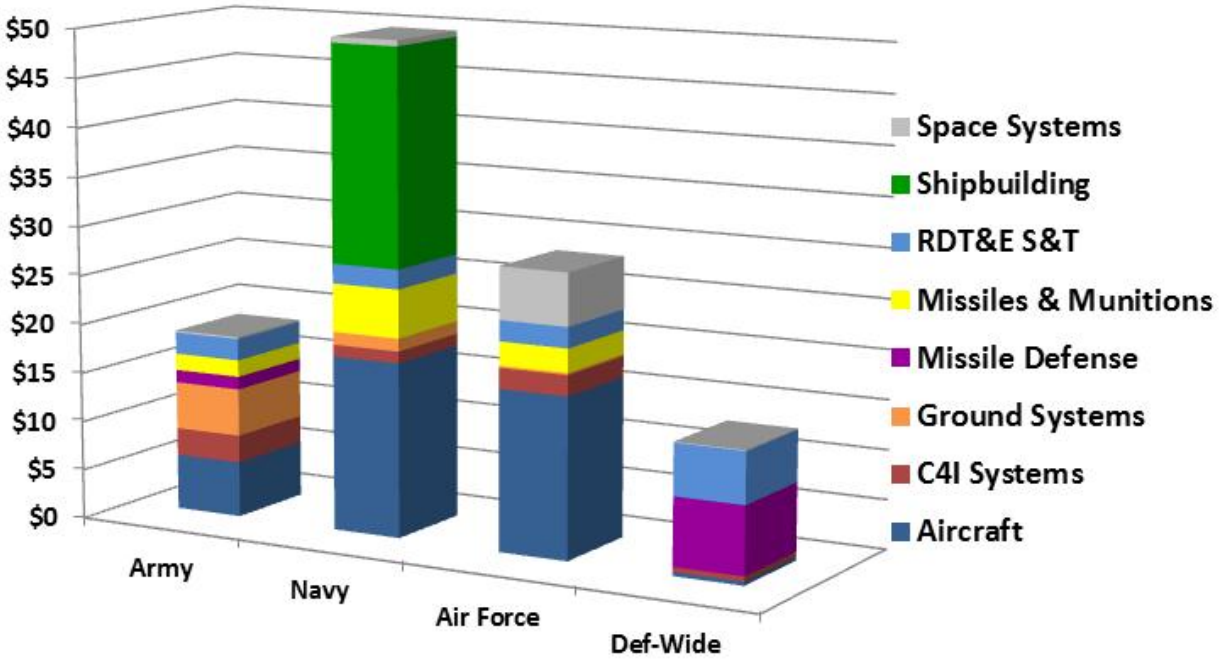
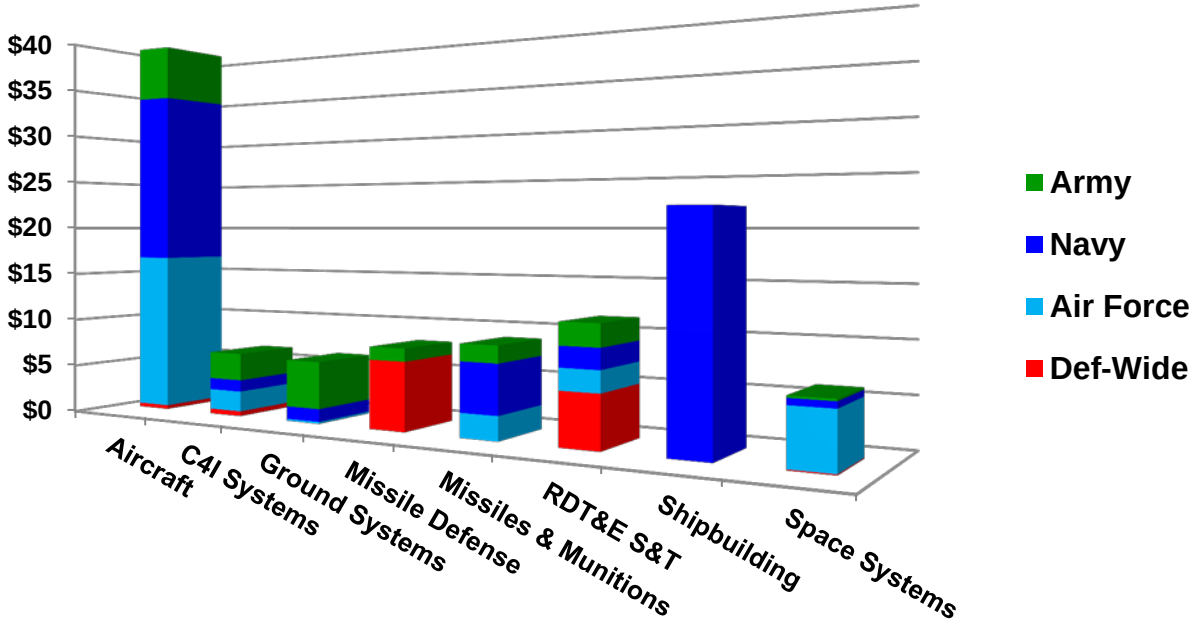
* Includes proposed cancellation of $265.7 million (FY 2014, $198.7 million; FY 2013, $67.0 million)

THE DISTRIBUTION OF FUNDING IN FY 2015 FOR PROCUREMENT AND RDT&E, BY COMPONENT AND BY CATEGORY *
(Dollars in Billions)



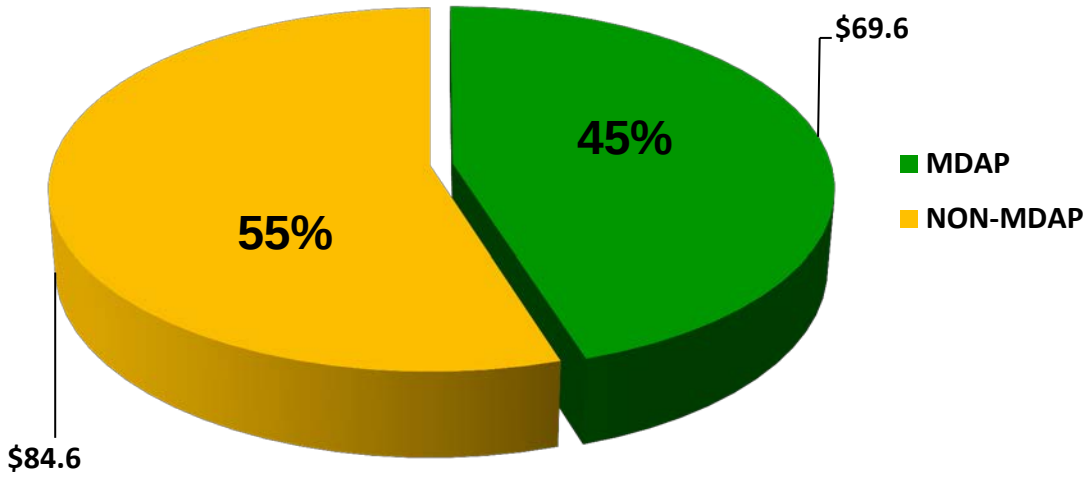


* Excludes Mission Support

($ in Billions)
Numbers may not add due to rounding

THE RELATIONSHIP BETWEEN MDAP AND NON-MDAP FUNDING IN FY 2015 FOR PROCUREMENT AND RDT&E FUNDING (Dollars in Billions)

(Excludes proposed cancellation of prior year funds of $265.7 million).



The FY 2015 President's base budget request for modernization in the Research, Development, Test, and Evaluation (RDT&E) and Procurement titles is comprised of 2,397 Program, Project, and Activity (PPA) line items, a portion which finances the development and procurement of Major Defense Acquisition Programs (MDAPs).

The MDAPs are acquisition programs that have been designated by the Secretary of Defense or estimated to require an eventual total expenditure for RDT&E of more than $480 million (based on fiscal year 2014 constant dollars) or total expenditure for Procurement of more than $2.8 billion (based on fiscal year 2014 constant dollars), including all planned increments or spirals.

This booklet describes the funding requested for most of the MDAPs that require FY 2015 funding. The purpose of the above chart is to illustrate the share in funding allotted to both MDAP and non-MDAP efforts. While non-MDAP individual programs are smaller in dollar value, they are no less essential to developing future technologies, and procuring a wide assortment of equipment, munitions, vehicles, and weapons that do not meet the MDAP definition. The MDAP programs consume approximately $69.6 billion, or 45 percent of the FY 2015 modernization funding ($154.2 billion).

The estimated cost of report or study for the Department of Defense is approximately $$40,183 for the 2014 Fiscal Year.

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Major Weapon Systems Summary ($ in Millions)		FY 2013	2014 Base	2014 OCO	2014 Total Request	FY 2015	Page
Aircraft and Related Systems – Joint Service							
MQ–1B/MQ-1C	Predator/Gray Eagle	710.7	590.7	-	590.7	**293.1**	1-2
MQ-9	Reaper	1,112.7	533.7	12.0	545.7	**591.4**	1-3
RQ–4 / MQ-4C	Global Hawk/Triton/NATO AGS	1,228.8	762.7	-	762.7	**1,088.7**	1-4
RQ–7/RQ–11/ RQ-21	Shadow, Raven, and Blackjack	173.4	249.7	2.8	252.5	**238.1**	1-5
C–130J	Hercules	1,414.2	1,849.5	-	1,849.5	**1,401.9**	1-6
F–35	Joint Strike Fighter	7,629.8	7,544.9	-	7,544.9	**8,314.4**	1-7
V–22	Osprey	1,845.3	1,711.9	73.2	1,785.1	**1,613.3**	1-8
Aircraft and Related Systems – US Army (USA)							
AH–64E	Apache: Remanufacture/New Build	1,029.0	884.2	142.0	1,026.2	**775.4**	1-9
CH–47	Chinook	1,598.9	943.0	386.0	1,329.0	**1,052.5**	1-10
UH-72	Lakota Light Utility Helicopter	255.6	171.2	-	171.2	**416.6**	1-11
UH–60	Black Hawk	1,603.5	1,314.9	-	1,314.9	**1,434.3**	1-12
Aircraft and Related Systems – US Navy (USN) / US Marine Corps (USMC)							
MH–60R	Multi-Mission Helicopter	748.5	797.3	-	797.3	**1,052.0**	1-13
MH–60S	Fleet Combat Support Helicopter	452.1	417.5	-	417.5	**236.1**	1-14
P–8A	Poseidon	3,127.7	3,653.7	-	3,653.7	**2,360.0**	1-15
E–2D	Advanced Hawkeye	1,059.5	1,331.8	-	1,331.8	**1,230.3**	1-16
H–1	Venom/Viper	854.3	711.7	-	711.7	**903.9**	1-17
Aircraft and Related Systems – US Air Force (USAF)							
Bombers	Strategic Bombers	547.4	608.1	-	608.1	**654.6**	1-18
F-22	Raptor	719.2	621.6	-	621.6	**542.5**	1-19
KC-46A	Tanker	1,550.3	1,558.6	-	1,558.6	**2,359.6**	1-20
C-5	Galaxy	1,156.7	1,101.2	-	1,101.2	**385.0**	1-21
F-15	Eagle	356.3	600.8	-	600.8	**739.1**	1-22
E-3	Sentry AWACS	232.8	302.7	-	302.7	**344.1**	1-23
C4I Systems – Joint Service							
TNRS	Tactical Networking Radio Systems	851.1	830.8	-	830.8	**541.5**	2-2
C4I Systems – USA							
WIN–T	Warfighter Information Network – Tactical	761.4	894.2	-	894.2	**919.7**	2-3
Ground Systems – Joint Service							
JTLV	Joint Light Tactical Vehicle	94.8	134.6	-	134.6	**229.3**	3-2
Ground Systems – USA					-		
AMPV	Armored Multi-Purpose Vehicle	26.9	28.3	-	28.3	**92.4**	3-3
FHTV	Family Of Heavy Tactical Vehicles	70.9	43.0	-	43.0	**41.3**	3-4
M-1 Modification	Abrams Tank	215.7	279.4	-	279.4	**349.5**	3-5
PIM	Paladin Integrated Management	338.3	320.8	-	320.8	**330.7**	3-6
Ground Systems – USMC							

Major Weapon Systems Summary ($ in Millions)		FY 2013	2014 Base	2014 OCO	2014 Total Request	FY 2015	Page
ACV	Amphibious Combat Vehicle	83.2	123.0	-	123.0	**105.7**	3-7
Missile Defense Programs – Joint Service					-		
AEGIS	AEGIS Ballistic Missile Defense	1,421.9	1,490.7	-	1,490.7	**1,364.6**	4-2
THAAD	Terminal High Altitude Area Defense	684.2	827.7	-	827.7	**764.0**	4-3
GMD	Ground-Based Midcourse Defense	923.5	910.8	-	910.8	**1,003.8**	4-4
Missile Defense Programs – USA							
Patriot/PAC–3	Patriot Advanced Capability	1,060.3	370.8	-	370.8	**320.6**	4-5
PAC-3/MSE Missile	PAC-3/Missile Segment Enhancement Missile	71.3	759.2	-	759.2	**419.6**	4-6
Missiles and Munitions – Joint Service							
AMRAAM	Advanced Medium Range Air-Air Missile	361.1	480.8	-	480.8	**457.9**	5-2
AIM–9X	Air Intercept Missile - 9X	178.0	244.6	-	244.6	**297.8**	5-3
Chem–Demil	Chemical Demilitarization	1,444.9	1,126.6	-	1,126.6	**867.6**	5-4
JASSM	Joint Air-to-Surface Standoff Missile	237.3	277.6	-	277.6	**353.3**	5-5
JDAM	Joint Direct Attack Munition	144.6	181.0	72.0	253.0	**101.4**	5-6
JSOW	Joint Standoff Weapon	125.9	118.0	-	118.0	**135.4**	5-7
SDB	Small Diameter Bomb	170.8	182.2	-	182.2	**219.1**	5-8
Missiles and Munitions – USA					-		
Javelin	Javelin Advanced Tank Weapon	79.7	115.5	-	115.5	**81.8**	5-9
GMLRS	Guided Multiple Launch Rocket System (GMLRS)	325.2	330.4	39.0	369.4	**172.5**	5-10
Missiles and Munitions – USN					-		
ESSM	Evolved Seasparrow Missile	79.1	118.7	-	118.7	**203.6**	5-11
RAM	Rolling Airframe Missile	60.4	65.9	-	65.9	**80.8**	5-12
Standard	Standard Family of Missiles	379.5	454.0	-	454.0	**515.2**	5-13
Tomahawk	Tactical Tomahawk Cruise Missile	303.8	324.9	-	324.9	**226.7**	5-14
Trident II	Trident II Ballistic Missile Mods	1,361.4	1,453.4	-	1,453.4	**1,517.2**	5-15
Missiles and Munitions – USAF							
B61	B61 Tail Kit Assembly (TKA)	62.4	33.0	-	33.0	**198.4**	5-16
Shipbuilding and Maritime Systems – USN					-		
CVN 78	FORD Class Nuclear Aircraft Carrier	659.0	1,703.3	-	1,703.3	**2,137.8**	6-2
DDG 51	AEGIS Destroyer	4,667.4	2,253.3	-	2,253.3	**3,060.2**	6-3
LCS	Littoral Combat Ship	2,288.7	2,389.8	-	2,389.8	**2,071.2**	6-4
SSN 774	VIRGINIA Class Submarine	4,855.1	6,717.5	-	6,717.5	**6,300.4**	6-5
SSC	Ship to Shore Connector	111.9	87.4	-	87.4	**247.8**	6-6

Major Weapon Systems Summary ($ in Millions)		FY 2013	2014 Base	2014 OCO	2014 Total Request	FY 2015	Page
OR	Ohio Replacement (OR) Program	573.9	1,146.1	-	1,146.1	**1,289.8**	6-7
Space Based Systems – USN					-		
MUOS	Mobile User Objective System	162.6	52.8	-	52.8	**221.0**	7-2
Space Based Systems – USAF					-		
AEHF	Advanced Extremely High Frequency	688.2	594.0	-	594.0	**613.3**	7-3
EELV	Evolved Expendable Launch Vehicle	1,463.9	1,392.3	-	1,392.3	**1,381.0**	7-4
GPS	Global Positioning System	1,221.5	1,207.4	-	1,207.4	**1,013.5**	7-5
SBIRS	Space Based Infrared System	878.9	847.0	-	847.0	**770.4**	7-6
WGS	Wideband Global SATCOM System	47.2	46.5	-	46.5	**70.4**	7-7

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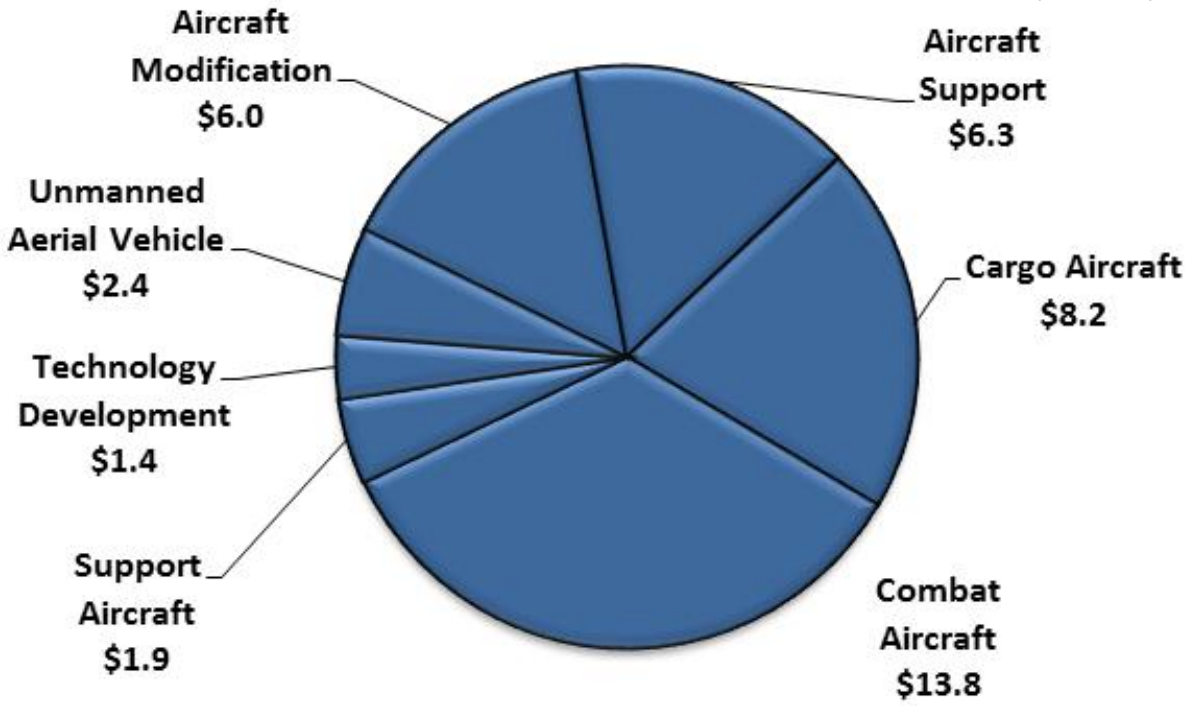
Aircraft & Related Systems

Aviation forces — including fighter/attack, bomber, mobility (cargo/tanker), and specialized support aircraft, including unmanned aircraft systems — 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 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.

FY 2015 Aircraft & Related Systems – Base: $40.0 Billion

($ in Billions)



Numbers may not add due to rounding

MQ-1B Predator / MQ-1C Gray Eagle

DOD - JOINT

The U.S. Air Force (USAF) Predator and Army Gray Eagle Unmanned Aircraft Systems are comprised of aircraft configured with a multi-spectral targeting systems (electro-optical, infra-red (IR), 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. Both systems include single-engine, propeller-driven unmanned aircraft.

Missions: Operates over-the-horizon at medium altitude for long endurance and provide real-time intelligence, surveillance, reconnaissance, and target acquisition, and strike capability to aggressively prosecute time-sensitive targets. The Army MQ-1C Gray Eagle also adds Synthetic Aperture Radar (SAR) Ground Moving Target Indicator (GMTI), a communications relay capability, a heavy fuel engine, tactical common data link, and greater weapons capability.

FY 2015 Programs: For Predator, funds development and fielding of USAF modifications to the airframe and ground station elements continues. Special Operations Command (SOCOM) divests their MQ-1s starting in FY 2015. For Gray Eagle, the Army continues development and integration of the Universal Ground Control Station, a Ground Based Sense-and-Avoid system, and a signals intelligence (SIGINT) capability; and procures 19 Gray Eagle aircraft.

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

MQ–1B Predator / MQ-1C Gray Eagle

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
Predator USAF	9.1	-	0.8	-	-	-	0.8	-	1.4	-
Gray Eagle USA	97.2	-	44.4	-	-	-	44.4	-	69.4	-
SOCOM	1.1	-	0.6	-	-	-	0.6	-	-	-
Subtotal	**107.4**	**-**	**45.8**	**-**	**-**	**-**	**45.8**	**-**	**70.8**	**-**
Procurement							-	-		
Predator USAF	27.8	-	7.9	-	-	-	7.9	-	4.8	-
Gray Eagle USA	550.8	15	534.9	15	-	-	534.9	15	217.5	19
SOCOM	24.7	-	2.1	-	-	-	2.1	-	-	-
Subtotal	**603.3**	**15**	**544.9**	**15**	**-**	**-**	**544.9**	**15**	**222.3**	**19**
Total	**710.7**	**15**	**590.7**	**15**	**-**	**-**	**590.7**	**15**	**293.1**	**19**

Numbers may not add due to rounding

MQ-9 Reaper

DOD - JOINT

The U.S. Air Force MQ-9 Reaper Unmanned Aircraft System (UAS) Program is comprised of an aircraft segment consisting of aircraft configured with an array of sensors to include day/night Full Motion Video (FMV), Signals Intelligence (SIGINT), and Synthetic Aperture Radar (SAR) 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 (LOS) and Beyond-Line-of-Sight (BLOS) communications equipment; a support element; and trained personnel. 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.

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

FY 2015 Program: Continues development, transformation and fielding of Reaper aircraft and ground stations to field and maintain 50 steady state and 65 deployed (surge) Combat Air Patrols (CAPs) in FY 2015, growing to 55 MQ-9 Reaper CAPs by FY 2019. The FY 2015 request supports the procurement of 12 aircraft and 12 fixed ground control stations. Additionally, the request includes funding to support the modification of additional MQ-9s to the extended range (ER) configuration.

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

MQ–9 Reaper

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
USAF	130.9	-	107.3	-	-	-	107.3	-	**170.4**	**-**
SOCOM	2.6	-	1.3	-	12.0	-	13.3	-	**9.7**	**-**
Subtotal	**133.5**	**-**	**108.6**	**-**	**12.0**	**-**	**120.6**	**-**	**180.1**	**-**
Procurement							-	-		
USAF	943.5	36	412.2	20	-	-	412.2	20	**395.6**	**12**
SOCOM	35.7	-	12.9	-	-	-	12.9	-	**15.7**	**-**
Subtotal	**979.2**	**36**	**425.1**	**20**	**-**	**-**	**425.1**	**20**	**411.3**	**12**
Total	**1,112.7**	**36**	**533.7**	**20**	**12.0**	**-**	**545.7**	**20**	**591.4**	**12**

Numbers may not add due to rounding

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

DOD - JOINT

The U.S. Air Force (USAF) RQ-4, Navy MQ-4C, and NATO Alliance Ground Surveillance (AGS) Unmanned Aircraft System programs provide high altitude long endurance Intelligence, Surveillance, and Reconnaissance (ISR) capabilities. The RQ-4 Block 30 includes a multi-intelligence suite for imagery and signals intelligence collection and the Block 40 includes multi-platform radar technology for synthetic aperture radar (SAR) imaging and moving target detection. The Department has decided to restore the 21 Block 30 systems and fund modernization efforts to operate beyond FY 2023. The final two Block 40 USAF RQ-4s will be delivered in FY 2014. The Navy MQ-4C Triton provides the Navy with a persistent maritime ISR capability. Mission systems include inverse SAR, Electro-optical/Infra-red Full Motion Video, Electronic Support Measures (ESM), Automatic Identification System (AIS), a basic communications relay capability, and Link-16. Five NATO AGS aircraft are being procured and developed over the next several years and will complete deliveries by mid-FY 2017.

Missions: The USAF and NATO AGS RQ-4 systems perform high-altitude, near-real-time, high-resolution ISR collection, while the Navy MQ-4C provides persistent maritime ISR. Both AF and Navy systems support Joint and Combatant Commander requirements, while the Navy MQ-4C also supports the numbered Fleet commanders from five worldwide sites.

FY 2015 Programs: Funds USAF development efforts for the Block 30, Block 40, ground stations, and Multi-Platform Radar Technology Insertion programs; the U.S. contribution to the NATO AGS; and the Navy MQ-4C Triton Engineering and Manufacturing Development effort and advance procurement for four planned Low Rate Initial Production systems in FY 2016.

Prime Contractor: Northrop Grumman; Rancho Bernardo, CA

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

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
RQ-4, USAF	240.2	-	120.2	-	-	-	120.2	-	244.5	-
RQ-4, NATO	192.6	3	221.6	2	-	-	221.6	2	232.9	-
MQ-4, USN	612.7	3	375.2	-	-	-	375.2	-	498.0	-
Subtotal	**1,045.5**	**6**	**717.0**	**2**	**-**	**-**	**717.0**	**2**	**975.4**	**-**
Procurement										
RQ-4, USAF	136.1	-	45.7	-	-	-	45.7	-	75.9	-
MQ-4, USN	47.2	-	-	-	-	-	-	-	37.4	-
Subtotal	**183.3**	**-**	**45.7**	**-**	**-**	**-**	**45.7**	**-**	**113.3**	**-**
Total	**1,228.8**	**6**	**762.7**	**2**	**-**	**-**	**762.7**	**2**	**1,088.7**	**-**

Numbers may not add due to rounding

RQ-7 Shadow / RQ-11 Raven / RQ-21 Blackjack — DOD - JOINT


Raven
USAF Photo


Shadow
US Army Photo

The RQ-7, RQ-11, and RQ-21 Unmanned Aircraft Systems (UAS) provide organic Reconnaissance, Surveillance, Target Acquisition (RSTA) capabilities and are embedded in maneuver formations capable of providing crucial information to the ground commander.

Mission: The Army/USMC RQ-7 Shadow and USMC/Navy RQ-21 Blackjack provide the tactical maneuver commander near real-time RSTA and force protection during day/night and limited adverse weather conditions. The multi-sensor RQ-11 Raven provides an "over-the-hill" rucksack-portable, day/night, limited adverse weather, remotely-operated capability that supports combat battalions and below, and selected combat support units. The multi-sensor RQ-21 Blackjack is runway independent, requiring minimal space for takeoff and recovery from an unimproved expeditionary/urban environment, as well as from the decks of Navy ships.

FY 2015 Program: Funds upgrades to system hardware and performance-based logistics support for the RQ-7 Shadow. Procures upgrades and provides training and contractor logistics support for the RQ-11 Raven. Procures three systems (each system consists of five air vehicles, two ground control stations, payloads, launch/recovery system and associated ground support equipment), conducts operational test and evaluation and provides contractor logistics support for the RQ-21 Blackjack.

Prime Contractors: RQ-7 Shadow: AAI Corporation; Hunt Valley, MD
RQ-11 Raven: AeroVironment; Monrovia, CA
RQ-21 Blackjack: INSITU, Incorporated; Bingen, WA

RQ-7 Shadow / RQ-11 Raven / RQ-21 Blackjack

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E *	56.1	-	26.1	-	-	-	26.1	-	**26.5**	-
Procurement										
Shadow (Army)	26.2	-	121.9	-	-	-	121.9	-	**125.4**	-
Shadow (USMC)	47.1	-	22.1	-	-	-	22.1	-	**2.5**	-
Raven (Army)	25.8	234	10.4	-			10.4	-	**4.0**	-
Raven (USMC)	2.3	-	1.7	-	2.8	-	4.5	-	**2.7**	-
Raven (SOCOM)	1.9	-	0.9	-	-	-	0.9	-	**6.4**	-
Blackjack (USMC)	14.0	1	66.6	3	-	-	66.6	3	**70.6**	3
Subtotal	**117.3**	**235**	**223.6**	**3**	**2.8**	**-**	**226.4**	**3**	**211.6**	**3**
Total	**173.4**	**235**	**249.7**	**3**	**2.8**	**-**	**252.5**	**3**	**238.1**	**3**

** Reflects total RDT&E funding for all three systems across the Army, USMC and SOCOM*

Numbers may not add due to rounding

C-130J Hercules

DOD - JOINT


USAF Photo

The C–130J Hercules is a medium-sized tactical transport airlift aircraft that is modernizing the U.S. 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/or supplies within/between command areas in a theater of operation, aeromedical evacuation, air logistics support, and augmentation of strategic airlift forces. The C-130J aircraft, with its extended fuselage, provides additional cargo carrying capacity for the Air Force combat delivery mission compared to the legacy C-130E/H and the C-130J (short) aircraft. Special mission variants of the C-130J conduct airborne psychological operations (EC-130J), weather reconnaissance (WC-130J), search and rescue (HC-130J), and special operations (MC-130J and AC-130J). The KC-130J provides the Marine Corps with 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, and airdrop and the air logistic support of theater forces.

FY 2015 Program: Continues the multiyear procurement (MYP) for C-130J aircraft from FY 2014 to FY 2018, procuring 14 aircraft in FY 2015.

Prime Contractor: Lockheed Martin Corporation, Marietta, GA

C-130J Hercules

	FY 2013 *		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
HC/MC-130	10.5		2.6				2.6	-	7.5	-
C-130J	18.3		22.4				22.4	-	26.7	-
Subtotal	**28.9**	**-**	**25.1**	**-**	**-**	**-**	**25.1**	**-**	**34.2**	**-**
Procurement										
C-130J	164.0	1	639.5	6			639.5	6	622.4	7
HC/MC/AC-130	991.1	11	1,083.6	10			1,083.6	10	653.0	6
Subtotal	**1,155.0**	**12**	**1,723.1**	**16**	**-**	**-**	**1,723.1**	**16**	**1,275.4**	**13**
Procurement										
KC-130J	230.3	3	101.3	1			101.3	1	92.3	1
Subtotal	**230.3**	**3**	**101.3**	**1**	-	-	**101.3**	**1**	**92.3**	**1**
Spares	-	-	**-**	**-**	-	-	**-**	**-**	**-**	**0**
Total	**1,414.2**	**15**	**1,849.5**	**17**	**-**	**-**	**1,849.5**	**17**	**1,401.9**	**14**

** FY 2013 includes Base and OCO funding*

Numbers may not add due to rounding

F–35 Joint Strike Fighter

DOD - JOINT

The F-35 Joint Strike Fighter (JSF) is the next-generation strike fighter for the Navy, Marine Corps, Air Force, and U.S. Allies. The F-35 consists of three variants: the 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, and complements the F-22; the F-35B (STOVL) replaces the Marine Corps AV-8B and F/A-18A/C/D; the F-35C (CV) complements the F/A-18E/F for the Navy, and will also be flown by the Marine Corps.

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

FY 2015 Program: Continues development of the air system, F-135 single engine propulsion system, and conducts systems engineering, development and operational testing, and supports Follow-on Development. Procures a total of 34 aircraft: 2 CV for the Navy, 6 STOVL for the Marine Corps, and 26 CTOL for the Air Force in FY 2015.

Prime Contractors: Lockheed Martin Corporation, Fort Worth, TX
Pratt & Whitney, Hartford, CT

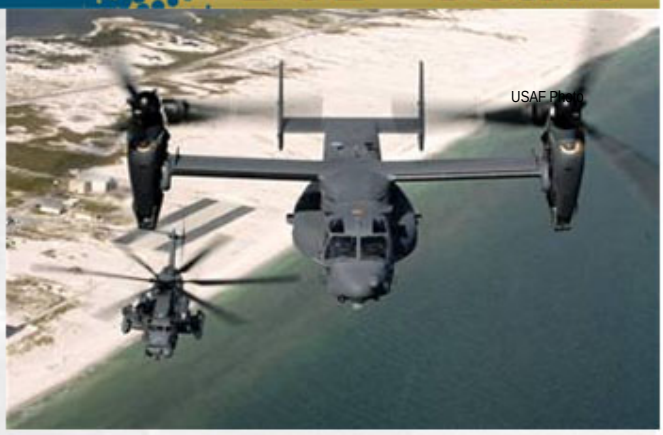
F-35 Joint Strike Fighter

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
USN	1,281.4		856.5				856.5	-	1,029.5	-
USAF	1,129.9		631.5				631.5	-	611.7	-
Subtotal	**2,411.3**	**-**	**1,487.9**	**-**	**-**	**-**	**1,487.9**	**-**	**1,641.2**	**-**
Procurement										
USN	2,031.2	10	2,528.2	10			2,528.2	10	2,290.8	8
USAF	2,906.3	19	3,355.9	19			3,355.9	19	4,032.6	26
Subtotal	**4,937.5**	**29**	**5,884.1**	**29**	**-**	**-**	**5,884.1**	**29**	**6,323.4**	**34**
Spares	281.0	-	172.8	-	-	-	172.8	0	349.8	-
Total	**7,629.8**	**29**	**7,544.9**	**29**	**-**	**-**	**7,544.9**	**29**	**8,314.4**	**34**

Numbers may not add due to rounding

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 needs of the Navy, and long range special operations forces (SOF) missions for U.S. Special Operations Command (SOCOM). The aircraft is designed to fly 2,100 miles with one in-flight refueling, giving the Services the advantage of a vertical and/or short takeoff and landing aircraft that could rapidly self-deploy to any location in the world.

Mission: Conducts airborne assault, vertical lift, combat search and rescue, and special operations missions.

FY 2015 Program: Supports procurement of 19 MV-22 aircraft for the Navy/Marine Corps. The request is based on the third year of a follow-on 5-year multiyear procurement contract, for FYs 2013 to 2017. FY 2014 was the last year of procurement for the Air Force-SOCOM CV-22.

Prime Contractor: Bell Helicopter; Fort Worth, TX
The Boeing Company; Philadelphia, PA

V–22 Osprey

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
USN	44.3	-	43.1	-			43.1	-	61.2	-
USAF	19.7	-	46.7	-			46.7	-	-	-
Subtotal	**64.0**	**-**	**89.8**	**-**	**-**	**-**	**89.8**	**-**	**61.2**	**-**
Procurement										
USN	1,404.3	18	1,391.1	19			1,391.1	19	1,532.9	19
USAF	290.3	4	212.8	3	73.2	1	286.0	4	-	-
Subtotal	**1,694.6**	**22**	**1,603.9**	**22**	**73.2**	**1**	**1,677.1**	**23**	**1,532.9**	**19**
USN Spares	2.6	-	10.7	-	-		10.7	-	-	-
USAF Spares	84.1	-	7.5	-	-		7.5	-	2.7	-
Subtotal	**86.7**	**-**	**18.2**	**-**	**-**	**-**	**18.2**	**-**	**2.7**	**-**
USN Subtotal	1,451.2	18	1,444.9	19	-	-	1,444.9	19	1,594.2	19
USAF Subtotal	394.1	4	267.0	3	73.2	1	340.2	4	2.7	-
Total	**1,845.3**	**22**	**1,711.9**	**22**	**73.2**	**1**	**1,785.1**	**23**	**1,596.8**	**19**

Numbers may not add due to rounding

AH-64E Apache: Remanufacture / New Build

USA

The AH-64E Apache program consists of a remanufacture (A) and a new build (B) effort, which 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 upgrades the aircraft with updated technologies and performance enhancements to keep the Apache viable throughout its lifecycle. The new build effort assembles all new components resulting in a completely new aircraft to fill shortages in the fleet due to combat losses. This program also provides for the installation of the Target Acquisition Designation Sight and Pilot Night Vision Sensors, plus other safety and reliability enhancements.

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

FY 2015 Program: Supports the remanufacture of 25 AH-64D aircraft to the AH-64E configuration.

Prime Contractors: Apache: The Boeing Company; Mesa, AZ

Integration: Northrop Grumman Corporation; Baltimore, MD
Lockheed Martin Corporation; Oswego, NY

AH–64E Apache: Remanufacture / New Build

	FY 2013 *		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	110.0	-	124.8	-			124.8	-	**124.1**	**-**
Procurement										
(A) Remanufacture	593.6	32	759.4	42	-	-	759.4	42	**651.3**	**25**
(B) New Build	325.4	12	-	-	142.0	4	142.0	4	**-**	**-**
Subtotal	**919.0**	**44**	**759.4**	**42**	**142**	**4**	**901.4**	**46**	**651.3**	**25**
Grand Total	**1,029.0**	**44**	**884.2**	**42**	**142.0**	**4**	**1,026.2**	**46**	**775.4**	**25**

** FY 2013 include Base and OCO funding*

Numbers may not add due to rounding

CH–47 Chinook

USA

US Army Photo

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 includes a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. The new aircraft uses more powerful T55-GA-714A engines that improve fuel efficiency and enhance lift performance. These aircraft are fielded to heavy helicopter companies and Special Operations Aviation. The CH-47F ReNew program rebuilds and replaces CH-47Ds to the CH-47F configuration and 59 Special Operation MH-47s to the MH-47G configuration. The New Build program procures all new CH-47F aircraft and 8 new MH-47G aircraft for the U.S. Special Operations Command (SOCOM). FY 2013 was the last year of procurement for the SOCOM MH-47G aircraft. The CH-47F is expected to remain the Army's heavy lift helicopter until at least the 2038 timeframe.

Mission: Transports ground forces, supplies, ammunition, and other battle-critical cargo in support of worldwide combat and contingency operations.

FY 2015 Program: Provides for the production of 32 aircraft, of which 6 will be New Build aircraft and 26 will be ReNew/Service Life Extension Program aircraft. FY 2015 is the third year of a new 5-year multiyear procurement (MYP) program.

Prime Contractor: The Boeing Company; Philadelphia, PA

CH–47 Chinook

	FY 2013 *		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	55.7	-	33.2	-			33.2	-	**35.4**	**-**
Procurement										
USA	1,389.0	44	890.0	28	386.0	10	1,276.0	38	**994.9**	**32**
SOCOM	154.2	-	19.8	-	-	-	19.8	-	**22.2**	**-**
Subtotal	**1,543.2**	**44**	**909.8**	**28**	386.0	**10**	**1,295.8**	**38**	**1,017.1**	**32**
Total	**1,598.9**	**44**	**943.0**	**28**	**386.0**	**10**	**1,329.0**	**38**	**1,052.5**	**32**

** FY 2013 includes Base and OCO funding*

Numbers may not add due to rounding

UH-72 Lakota Light Utility Helicopter (LUH)

USA


US Army Image

The Army's UH-72A Light Utility Helicopter (LUH) is a utility helicopter that is replacing the UH-1 and the OH-58 Kiowa Warrior A and C models.

It provides reliable and sustainable general and administrative support in permissive environments at reduced acquisition and operating costs. There is no more RDT&E funding required for this program. The LUH acquisition strategy is based on a competitive procurement of a commercial-off-the-shelf, non-developmental aircraft.

The UH-72A Lakota is a U.S. Army light utility helicopter that entered service in 2006. The Lakota is a militarized version of the Eurocopter EC145 modified to an LUH configuration. In June 2006, the U.S. Army selected it as the winner of its LUH program with a 345 aircraft fleet planned.

In FY 2015, as part of an aviation force restructure, the Army divests single-engine legacy aircraft in the training fleet and replaces them with UH-72A LUHs. 100 additional LUH aircraft will be procured in FY 2015 and FY 2016.

Mission: Provides aerial transport for logistical and administrative support. Additionally, the Lakota provides a flexible response to Homeland Security requirements such as search and rescue operations, reconnaissance and surveillance, and medical evacuation missions.

FY 2015 Program: Supports an additional year of full rate production of 55 aircraft.

Prime Contractor: AIRBUS Helicopters, Inc.; Columbus, MS.

UH-72 Lakota Light Utility Helicopter (LUH)

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	-	-	-	-			-	-	-	-
Procurement	255.6	35	171.2	20			171.2	20	416.6	55
Total	255.6	35	171.2	20	-	-	171.2	20	416.6	55

Numbers may not add due to rounding

UH–60 Black Hawk

USA

The UH-60 Black Hawk is a twin engine, single-rotor, four bladed utility helicopter


US Army Photo

that is designed to carry a crew of four and a combat equipped squad of 11 or an external load up to 9,000 lbs.

The UH-60 comes in many variants, and many different modifications. The Army variants can be fitted with the stub wings to carry additional fuel tanks or weapons. Variants may have different capabilities and equipment in order to fulfill different roles. The Black Hawk series of aircraft can perform a wide array of missions, including the tactical transport of troops, electronic warfare, and aeromedical evacuation.

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 and performs aeromedical evacuation and multiple functions in support of the Army's air mobility doctrine for employment of ground forces.

FY 2015 Program: Supports the continuation of a 5-year multiyear procurement (MYP) contract for FYs 2012-2016 with the production of 79 aircraft in FY 2015. Also supports the continued development and testing of the improved turbine engine and digital upgrades to the UH-60L.

Prime Contractor: Sikorsky Aircraft; Stratford, CT

UH-60 Black Hawk

	FY 2013 *		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	26.0	-	79.9	-			79.9	-	65.2	-
Procurement	1,577.5	100	1,235.0	70	-	-	1,235.0	70	1,369.1	79
Total	1,603.5	100	1,314.9	70	-	-	1,314.9	70	1,434.3	79

** FY 2013 includes Base and OCO funding*

Numbers may not add due to rounding

MH-60R Multi-Mission Helicopter

The MH–60R Multi-Mission Helicopter program provides battle group protection, and adds significant capability in coastal littorals and regional conflicts. The MH-60R Multi-Mission Helicopter represents a significant avionics improvement to the H-60 series helicopters. Airborne low frequency sonar is added to enhance the existing acoustics suite. An added multi-mode radar includes an inverse synthetic aperture radar mode, which permits stand-off classification and targeting. Additionally, an improved electronics surveillance system will enable passive detection and targeting of radar sources not currently detectable.

Mission: Conducts forward deployed Anti-Submarine and Anti-Surface warfare. Secondary mission areas include search and rescue, vertical replenishment, naval surface fire support, logistics support, personnel transport, medical evacuation, and communications relay.

FY 2015 Program: Supports 29 helicopters as part of a continuing 5-year multiyear procurement (MYP) for MH-60 airframes from FYs 2012 to 2016. Includes funds for a MYP of MH-60 cockpits and mission avionics for the same period. The Army serves as the executive agent for the UH-60 and MH-60 airframe MYP efforts. The Navy serves as the executive agent for the MH-60 cockpits and sensor MYP efforts.

Prime Contractors: Airframe: Sikorsky Aircraft; Stratford, CT
Cockpits and Mission Avionics; Lockheed Martin, Owego, NY

MH–60R Multi-Mission Helicopter

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	6.0	-	17.6	-			17.6	-	11.4	-
Procurement	742.5	19	779.7	19			779.7	19	1,040.6	29
Total	748.5	19	797.3	19	-	-	797.3	19	1,052.0	29

Numbers may not add due to rounding

MH–60S Fleet Combat Support Helicopter

The MH-60S is a versatile twin-engine helicopter used to maintain forward deployed fleet sustainability through rapid airborne delivery of materials and personnel, to support amphibious operations through search and rescue coverage and to provide an organic airborne mine countermeasures capability.

Mission: Conducts vertical replenishment, day/night ship-to-ship, ship-to-shore, and shore-to-ship external transfer of cargo; internal transport of passengers, mail and cargo, vertical onboard delivery; air operations; day/night search and rescue, medical evacuation, and humanitarian assistance and disaster relief. Armed Helo and Organic Airborne Mine Countermeasures (OAMCM) have been added as primary mission areas for the MH-60S, being completed as block upgrades to the platform.

FY 2015 Program: Supports eight helicopters as part of a continuing 5-year multiyear procurement (MYP) for MH-60 airframes from FYs 2012 to 2016. Includes funds for a MYP of MH-60 cockpits for the same period. The Army serves as the executive agent for the UH-60 and MH-60 airframe MYP efforts. The Navy serves as the executive agent for the MH-60 cockpits and mission avionics MYP efforts. While the MYP for H-60s runs through FY 2016, FY 2015 is the last planned year of procurement for the MH-60S.

Prime Contractor: Airframe: Sikorsky Aircraft; Stratford, CT
Cockpits and Mission Systems: Lockheed Martin; Oswego, NY

MH–60S Fleet Combat Support Helicopter

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	20.5	-	21.8	-			21.8	-	25.9	-
Procurement	431.6	18	395.7	18			395.7	18	210.2	8
Total	452.1	18	417.5	18	-	-	417.5	18	236.1	8

Numbers may not add due to rounding

P–8A Poseidon

The P–8A Poseidon is an multi-mission platform designed to replace the P-3C Orion propeller driven aircraft. This derivative of the Boeing 737 aircraft is an all weather, twin engine, maritime patrol aircraft designed to sustain and improve armed maritime and littoral capabilities in traditional, joint, and combined roles to counter changing and emerging threats. All sensors onboard contribute to a single fused tactical situation display, which is then shared over both military standard and internet protocol data links, allowing for seamless delivery of information between U.S. and allied forces. The P-8A will carry a new radar array, which is a modernized version of the Raytheon APS-149 Littoral Surveillance Radar System. The Navy plans to procure up to 117 Poseidons.

Mission: Provides Maritime Patrol Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASuW), and armed Intelligence, Surveillance and Reconnaissance (ISR) capabilities in maritime and littoral areas above, on, and below the surface of the ocean.

FY 2015 Program: Procures eight P-8A aircraft, support equipment and spares, and provides advance procurement for 15 FY 2016 aircraft. The P-8A capabilities to meet the ASW, ASuW, and ISR objectives will be delivered incrementally to the aircraft requiring continued research and development while full rate production continues for the baseline aircraft.

Prime Contractors: Airframe: The Boeing Company, Seattle, WA
Engine: CFM International, Cincinnati, OH

P–8A Poseidon

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	391.3	-	272.3	-	-	-	272.3	-	308.0	-
Procurement	2,585.2	13	3,359.5	16	-	-	3,359.5	16	2,051.8	8
Spares	151.2	-	21.9	-	-	-	21.9	-	0.2	-
Total	3,127.7	13	3,653.7	16	-	-	3,653.7	16	2,360.0	8

Numbers may not add due to rounding

E-2D Advanced 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 battle space 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, this variant of the E-2 provides increased electrical power, a strengthened fuselage, and 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 target; and tracking of strike warfare assets.

FY 2015 Program: Funds four E-2D aircraft in the second year of a Multiyear Procurement (MYP) contract that has a total of 25 aircraft from FY 2014 through FY 2018, associated support, and funds advance procurement for five FY 2016 aircraft (the third year of the MYP). Supports follow-on test and evaluation, trainers, non-recurring engineering for the Identification Friend or Foe (IFF) system and in-flight refueling capability.

Prime Contractors: Airframe: Boeing, Seattle, WA
Northrop Grumman Corporation, Bethpage, NY (Engineering) and St. Augustine, FL (Manufacturing)
Engine: Rolls-Royce Corporation, Indianapolis, IN
Radar: Lockheed Martin Corporation, Syracuse, NY

E-2D Advanced Hawkeye

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	125.2	-	107.0	-	-	-	107.0	-	193.2	-
Procurement	898.5	5	1,208.1	5	-	-	1,208.1	5	1,029.5	4
Spares	35.8	-	16.6	-	-	-	16.6	-	7.6	-
Total	1,059.5	5	1,331.8	5	-	-	1,331.8	5	1,230.3	4

Numbers may not add due to rounding

H–1 Program: AH-1Z Viper / UH-1Y Venom

The H–1 program replaces the AH–1W Super Cobra and UH–1N Huey helicopters with the AH–1Z Viper and UH–1Y Venom, the next generation of USMC Attack and Utility aircraft. Speed, range and payload have been increased significantly, while decreasing supportability demands, training timelines, and total ownership cost. The advanced cockpit is common to both aircraft, reduces operator workload, improves situational awareness, and provides growth potential for future weapons and joint digital interoperability enhancements. The cockpit systems assimilate onboard planning, communications, digital fire control, all weather navigation, day/night targeting, and weapons systems in mirror-imaged crew stations. The procurement strategy converts 37 AH-1W helicopters into AH-1Zs, builds 152 new AH-1Zs, remanufactures 10 H-1N helicopters into UH-1Ys, and builds 150 new UH-1Ys. Both aircraft are in full rate production.

Mission: The AH-1Z provides close air support, air interdiction, armed reconnaissance, strike coordination and reconnaissance, forward air control (airborne), and aerial escort during day/night operations in support of naval expeditionary operations or joint and combined operations. The UH-1Y provides combat assault transport, close air support, armed reconnaissance, strike coordination and reconnaissance, forward air control (airborne), air delivery, airborne command and control, aerial escort and air evacuation during day/night and reduced weather conditions.

FY 2015 Program: Provides for the production of 26 new build aircraft (11 AH-1Z and 15 UH-1Y). Funds development efforts to support follow-on improvements to sensors and weapons integration, avionics and air vehicle components that will address deficiencies, systems safety, obsolescence, reliability, and cost growth issues.

Prime Contractor: Bell Helicopter; Fort Worth, TX

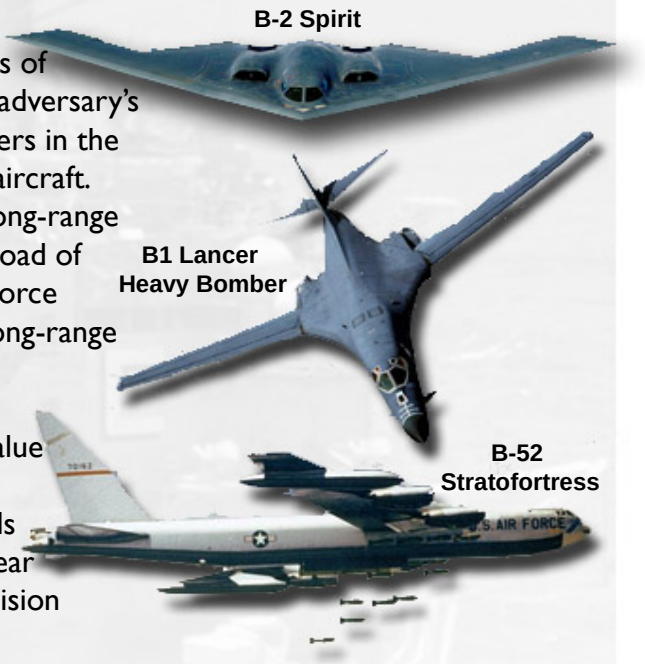
H–1 Program (AH-1Z Viper / UH-1Y Venom)

	FY 2013 *		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	27.7	-	47.1	-			47.1	-	44.2	-
Procurement	826.6	30	664.6	21	-	-	664.6	21	859.7	26
Total	854.3	30	711.7	21	-	-	711.7	21	903.9	26

** FY 2013 includes Base and OCO funding*

Numbers may not add due to rounding

Strategic Bombers



Strategic bombers are mid to long range heavy bomber aircraft designed to drop large amounts of ordnance onto a distant target to debilitate an adversary's capacity to wage war. Current strategic bombers in the Air Force inventory are the B-1, B-2, and B-52 aircraft. The B-1B Lancer is a swing-wing, supersonic, long-range conventional bomber, carrying the largest payload of both guided and unguided weapons in the Air Force inventory. The B-2 aircraft is a multi-engine, long-range bomber incorporating low-observable stealth technology that enables the B-2 aircraft to penetrate enemy air defenses and strike high-value targets. The B-52 aircraft is a long-range heavy bomber capable of flying at high subsonic speeds at altitudes up to 50,000 feet and carrying nuclear or conventional ordnance with worldwide precision navigation capability.

Mission: Flies into enemy territory to destroy strategic targets such as major military installations, factories and cities. The B-1 bomber can perform a variety of missions, including that of conventional carrier for theater operations and can rapidly deliver massive quantities of 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 a short time anywhere. The B-52 aircraft maintains nuclear or conventional missions.

FY 2015 Program: Continues development efforts and modification of strategic bombers, to include the Fully Integrated Data Links for the B-1 aircraft; the B-2 Defensive Management System (DMS); and the Combat Network Communication Technology for the B-52 aircraft.

Prime Contractors: The Boeing Company, Oklahoma City, OK
Northrop Grumman Aerospace Systems, Palmdale, CA

Strategic Bombers

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	310.6	-	375.1	-	-	-	375.1	-	291.2	-
Procurement	214.1	-	212.0	-	-	-	212.0	-	344.3	-
Spares	22.8	-	21.1	-	-	-	21.1	-	19.2	-
Total	547.4	-	608.1	-	-	-	608.1	-	654.6	-

Numbers may not add due to rounding

F-22 Raptor

The F-22 Raptor program is a fifth generation air superiority aircraft fighter. The F-22A will penetrate enemy airspace and achieve first-look, 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.

Mission: Provides enhanced U.S. air superiority capability against the projected threat and will provide the United States Air Force both offensive and defensive capabilities to defeat all existing threats.

FY 2015 Program: Continues critical F-22 modernization through incremental capability upgrades and key reliability and maintainability efforts to include the Reliability, Availability, and Maintainability Maturation Program (RAMMP), which provides for the development and integration of upgrades for F-22 aircraft to reach mature reliability, availability and maintainability. Continues to retrofit the combat-coded F-22 fleet with Increment 3.1, which provides an initial ground attack kill chain capability via inclusion of emitter-based geo-location of threat systems, ground-looking synthetic aperture radar modes, electronic attack capability, and initial integration of the Small Diameter Bomb (SDB-1). Continues development of Increment 3.2, providing Advanced Medium Range Air-to-Air Missile-120D and Air Intercept Missile-9X integration, radar electronic protection, enhanced speed and accuracy of target geo-location, intraflight data link improvements, Automatic Ground-Collision Avoidance System, and other enhancements to improve system safety and effectiveness. Supports advance procurement in FY 2015 to begin 3.2B retrofit.

Prime Contractors: Lockheed Martin, Marietta, GA; Fort Worth, TX; and Palmdale, CA;
Boeing, Seattle, WA;
Pratt & Whitney, Hartford, CT

F-22 Raptor

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	436.4	-	389.4	-	-	-	389.4	-	330.6	-
Procurement	270.9	-	232.2	-	-	-	232.2	-	208.7	-
Spares	11.9	-	0.1	-	-	-	0.1	-	3.2	-
Total	719.2	-	621.6	-	-	-	621.6	-	542.5	-

Numbers may not add due to rounding

KC–46A Tanker

The KC-46, a Aerial Refueling Tanker will provide aerial refueling support to the Air Force, Navy, and Marine Corps as well as Allied Nation coalition aircraft. The aircraft provides increased refueling capacity, improved efficiency, and increased cargo and aeromedical evacuation capability over the current KC-135 Stratotanker, which is more than 50 years old. The first phase of aerial refueling tanker recapitalization will procure 179 aircraft, approximately one-third of the current KC-135 tanker fleet. Envisioned KC-Y and KC-Z programs will ultimately recapitalize the entire tanker fleet over a period of more than 30 years. The KC-46 aircraft will be assembled on the existing commercial 767 production line in Everett, Washington, with militarization and final finishing at Boeing Field, Washington.

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. Aerial refueling forces perform these missions at the strategic, operational, and tactical level across the entire spectrum of military operations. The KC-46 aircraft will operate in day/night and adverse weather to enable deployment, employment, sustainment and redeployment of U.S. and Coalition forces.

FY 2015 Program: Continues the development efforts of a militarized variant of the Boeing 767-2C aircraft, the building and integration of military capabilities into four development aircraft, and developmental and operational testing. Also includes the development of technical manuals, Type I training, simulator and maintenance data, and the purchase of live fire assets and Government Furnished Equipment. Begins Low Rate Initial Production (LRIP) of seven aircraft in FY 2015.

Prime Contractor: The Boeing Company, Seattle, WA

KC–46A Tanker

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	1,550.3	-	1,558.6	-	-	-	1,558.6	-	776.9	-
Procurement	-	-	-	-	-	-	-	-	1,582.7	7
Spares	-	-	-	-	-	-	-	-	-	-
Total	1,550.3	-	1,558.6	-	-	-	1,558.6	-	2,359.6	7

Numbers may not add due to rounding

C–5 Galaxy

The C-5 Galaxy is a heavy cargo transport and is the U.S. military's largest airlifter. The Galaxy can be loaded and off-loaded at the same time. Both nose and rear doors open the full width and height of the cargo compartment. The C-5 fleet is undergoing a major modernization effort called the Reliability Enhancement and Re-engining Program (RERP), a comprehensive modernization effort which centers on replacing the current TF-39 engine with a more reliable, Commercial Off-the-Shelf General Electric CF6-80C2 (F138-GE-100 military designation) turbofan engine with increased takeoff thrust, stage-3 noise compliance, and Federal Aviation Regulation pollution compliance. The C-5 RERP is the second phase of a two-phase modernization program for the C-5. The Avionics Modernization Program (AMP) completed in FY 2011 and was Phase I of the modernization effort and is the baseline for C-5 RERP. Following completion of Phase II, the aircraft will be designated a C-5M. These aircraft upgrades will increase payload capability and access to Communication, Navigation, Surveillance/Air Traffic Management airspace. The Air Force plans to modernize 52 of its C-5s (one C-5A, 49 C-5Bs, and two C-5Cs) to the new C-5M configuration.

Mission: Provides strategic inter-theater airlift for deployment and supply of combat and support forces. The aircraft can carry a fully equipped, combat-ready military unit to any point in the world on short notice and provide full field support necessary to maintain a fighting force.

FY 2015 Program: Continues the modernization of the C-5 aircraft to include the RERP, the primary modernization program for the C-5 fleet.

Prime Contractor: Lockheed Martin Corporation, Marietta, GA

C-5 Galaxy

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	12.2	-	48.6	-	-	-	48.6	-	38.8	-
Procurement	1,035.5	-	920.7	-	-	-	920.7	-	346.2	-
Spares	109.0	-	131.9	-	-	-	131.9	-	-	-
Total	1,156.7	-	1,101.2	-	-	-	1,101.2	-	385.0	-

Numbers may not add due to rounding

F-15 Eagle

The F-15C/D is a twin engine, single seat, supersonic, all-weather, day/night, air superiority fighter. The F-15E is a twin engine, two seat, supersonic dual-role, day/night, all-weather, deep interdiction fighter with multi-role air-to-air capabilities.

Mission: Provides the Air Force with the capability to gain and maintain air supremacy over the battlefield.

FY 2015 Program: Continues the F-15E Radar Modernization Program (RMP), which replaces the legacy radar using existing technology from other aviation platforms on 394 F-15s (219 F-15E and 175 F-15 C/D) and solves parts obsolescence problems to provide improved reliability and performance (increased synthetic aperture radar range and resolution), including air-to-air and air-to-ground modes. Continues the F-15 C/D radar upgrade program, which replaces the mechanically-scanned antenna on F-15C/D aircraft with an active electronically scanned array (AESA), APG-82(V)1 system and upgrades the environmental control system to provide improved reliability and performance. Continues the procurement of the Joint Helmet Mounted Cueing System and Beyond Line of Sight capability and development efforts for the Eagle Passive/Active Warning Survivability System, which is intended to improve F-15 survivability by enhancing the ability to detect, deny, or defeat air and ground threats.

Prime Contractor: Raytheon, El Segundo, CA and Forest, MS

F-15 Eagle

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	145.0	-	234.3	-	-	-	234.3	-	330.9	-
Procurement	190.2	-	346.6	-	-	-	346.6	-	387.3	-
Spares	21.1	-	19.9	-	-	-	19.9	-	20.9	-
Total	356.3	-	600.8	-	-	-	600.8	-	739.1	-

Numbers may not add due to rounding

E-3 Sentry AWACS

The Airborne Warning and Control System (AWACS) is an airborne radar system designed to detect aircraft, ships, and vehicles at long ranges and perform control and command of the battle space in an air engagement by directing fighter and attack aircraft strikes. The four-engine E-3 is based on a modified Boeing 707 Airframe, which carries airborne radar and provides all-altitude air surveillance, threat warning, and control of theater air forces. Produced between 1971-1984, the Air Force currently has a total of thirty-one E-3s in the inventory. Beginning In FY 2015, the Air Force will divest seven of these aircraft, reducing the fleet to twenty-four.

Mission: Provides surveillance, command and control (C2), and Communications functions for tactical and defensive missions.

FY 2015 Program: Continues the modernization of AWACS aircraft. The primary modification budgeted in FY 2015 is the Block 40/45 Upgrade, which includes new open architecture PC-based mission systems, upgraded communications and navigation systems and enhanced electronic support measures.

Prime Contractors: The Boeing Company, Seattle, WA

E-3

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	47.2	-	148.4	-	-	-	148.4	-	180.8	-
Procurement	169.4	-	142.6	-	-	-	142.6	-	160.3	-
Spares	16.3	-	11.7	-	-	-	11.7	-	3.0	-
Total	232.8	-	302.7	-	-	-	302.7	-	344.0	-

Numbers may not add due to rounding

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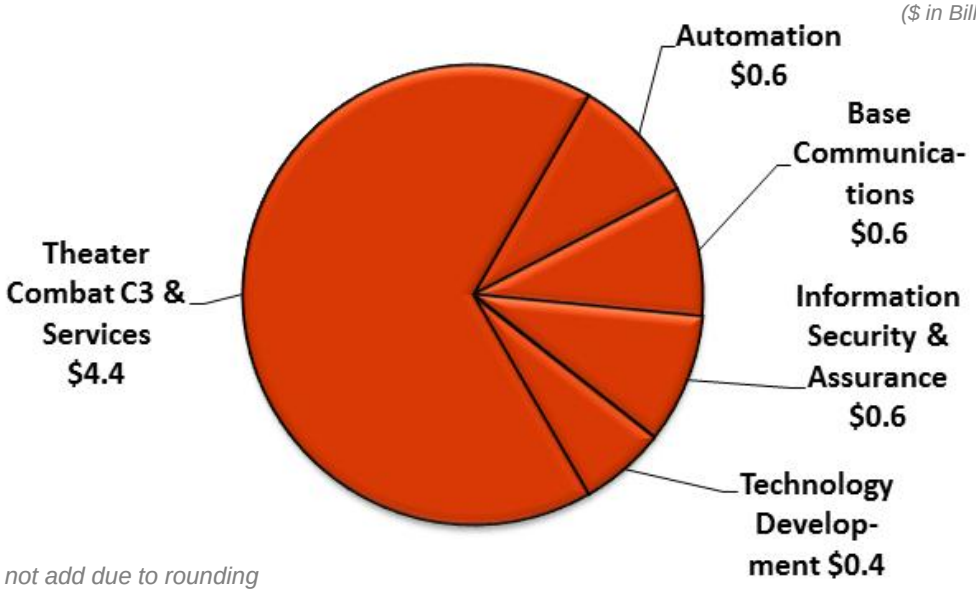
Command, Control, Communications, Computers, and Intelligence (C4I) Systems

The Department is transforming and developing new concepts for the conduct of future joint military operations. The overarching goal is full spectrum dominance—defeat of any adversary or control of any situation across the full range of military operations—achieved through a broad array of capabilities enabled by an interconnected network of sensors, shooters, command, control, and intelligence. This network-based interconnectivity increases the operational effectiveness by assuring access to the best possible information by decisionmakers at all levels, thus allowing dispersed forces to communicate, maneuver, share a common user-defined operating picture, and successfully complete assigned missions more efficiently. Net-centricity transforms the way that information is managed to accelerate decision-making, improve joint warfighting, and create intelligence advantages. Hence, all information is visible, available, usable and trusted—when needed and where needed—to accelerate the decision cycles.

Net-centricity is a service-based architecture pattern for information sharing. It is being implemented by the Command, Control, Communications, Computers, and Intelligence (C4I) community via building joint architectures and roadmaps for integrating joint airborne networking capabilities with the evolving ground, maritime, and space networks. It encompasses the development of technologies like gateways, waveforms, network management, and information assurance.

FY 2015 Command, Control, Communications, Computers, and Intelligence (C4I) Systems – Base: $6.6 Billion

($ in Billions)



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Tactical Networking Radio Systems

DOD - JOINT

The former Joint Tactical Radio System (JTRS) was a joint Department of Defense (DoD) effort to develop, produce, integrate, test, and field a family of software-defined, secure, multi-channel, digital radios that will be interoperable with existing radios and increase communication and networking capabilities for mobile and fixed sites. The program encompassed ground, airborne, vehicular, maritime, and small form fit variants of the radio hardware, 15 waveforms for porting into the JTRS hardware, and network management applications. The JTRS Program of Record(s) was transitioned to a Military Department-management program in 2013.

Mission: Provide the products to simultaneously receive, transmit and provide voice and data communications to the tactical edge/most disadvantaged Warfighter, with software-defined, multi-channel networking capabilities for tactical vehicles reaching from the brigade to the platoon level. Assist in closing capability gaps by extending data networking to the company and below echelons, enabling network services; connecting Aviation platforms to ground and Joint air network domains. The Project Manager Tactical Radios provides the Army and other Services with tactical radio communications systems to meet mission requirements.

FY 2015 Program: Funds the DoD tactical radio communications system to include, the Army's low rate initial production of the Handheld, Manpack and Small Form Fit (HMS) Non-Developmental Item hardware and software, and the qualification and operational testing and sustainment of fielded radios and certified waveforms. Funds the development efforts associated with Army waveforms and Joint Enterprise Network Manager (JENM), and the Small Airborne Link-16 Terminal (SALT) intended for fielding to the AH-64 Apache. Funds continue operational testing, platform integration and initial sustainment support for the Mid-Tier Networking Vehicular Radio (MNVR) program.

Prime Contractors: General Dynamics Decision Systems, Inc., Scottsdale, AZ
Harris Corporation, Rochester, NY

Tactical Networking Radio Systems

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	279.7	-	306.6	-	-	-	306.6	-	211.3	-
Procurement	571.4	7,655	524.2	6,499	-	-	524.2	6,499	330.2	3,294
Total	851.1	7,655	830.8	6,499	-	-	830.8	6,499	541.5	3,294

Numbers may not add due to rounding

Warfighter Information Network - Tactical

USA

The Warfighter Information Network- Tactical (WIN-T) is the cornerstone for Army's high speed, high capability backbone communications network, linking Warfighters in the battlefield with the Global Information Grid. The network is intended to provide command, control, communications, computers, intelligence, surveillance and reconnaissance. The system is developed as a network for reliable, secure and seamless video, data, imagery and voice services for the Warfighters in the theater to enable decisive combat actions. The WIN-T program development consists of four increments. Increment 1 (Inc 1) provides "networking at the halt" by upgrading the Joint Network Node (JNN) satellite capability to access the Ka-band defense Wideband Global Satellite (WGS). Increment 2 (Inc 2) provides networking on-the-move and delivers the network to the company level. Increment 3 (Inc 3) provides Integrated Network Operations development. Increment 4 (Inc 4) provides protected satellite communications on-the-move.

Mission: Provides the Army with a transformational modernized network. Using satellite, and ground layers, it delivers the fully mobile, flexible, dynamic networking capability enabling Joint land forces to engage enemy forces deeper and more effectively. The WIN-T Inc 2 introduces a mobile, ad-hoc, self-configuring, self-healing network using satellite on-the-move capabilities, robust network management, and high-bandwidth radio systems to keep mobile forces connected, communicating, and synchronized.

FY 2015 Program: Funds the upgrade of 81 WIN-T Inc 1 units with Modification kits to enhance interoperability with units fielded with WIN-T Inc 2. Funds the procurement of WIN-T Inc 2 for one Brigade Combat Team and one Division. Continues fielding and support for previously procured Low Rate Initial Production equipment. Supports Development Testing that leads to a Follow-on Test and Evaluation in 1st quarter FY 2015. Funds development of Network Operations software (Build 4) as part of WIN-T Inc 3. Supports integration of 179 Modification kits for the AN/TRC-190 line of sight radio systems. Procures and fields Tactical NetOps Management Systems to 48 non-WIN-T units, along with program management support for Single Shelter Switch (SSS), High Capability Line of Sight, Battlefield Video-Teleconferencing Center, and Troposcatter Communications systems upgrades.

Prime Contractor: General Dynamics Corporation, Taunton, MA
Subcontractor: Lockheed Martin Corporation, Gaithersburg, MD

Warfighter Information Network-Tactical

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	161.5	-	122.3	-	-		122.3	-	116.5	-
Procurement	545.1	1,314	769.5	1,725	-		769.5	1,725	763.1	1,280
Spares	54.8	-	2.4	-	-		2.4	-	40.1	-
Total	761.4	2,166	894.2	1,725	-	-	894.2	1,725	919.7	1,280

Numbers may not add due to rounding

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Ground Systems

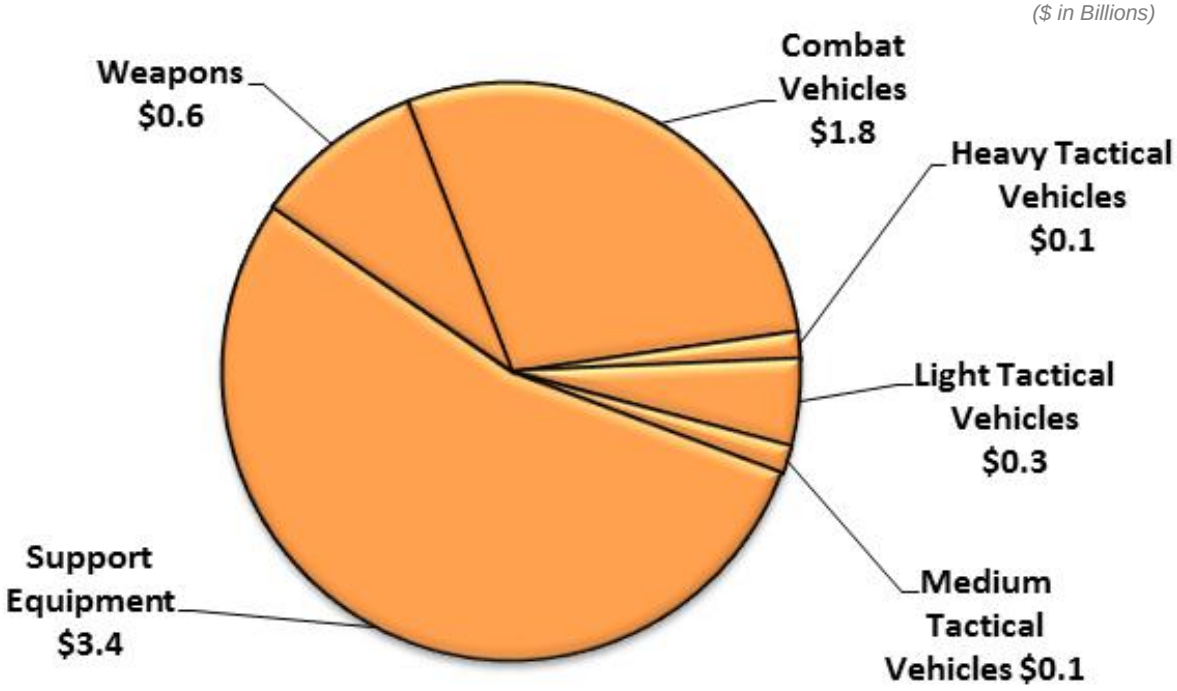
The Department continues to modernize its ground force capabilities to ensure the United States remains a dominant force capable of operating in all environments across the full spectrum of conflict. The Army and Marine Corps equip each soldier and Marine with the best equipment available to succeed in both today's and tomorrow's operations.

The Department determined that the Ground Combat Vehicle (GCV) design concepts were not optimized for the future Army and cancelled the program following Technology Development efforts in FY 2014. Army funded additional modernization and upgrades of select Major Defense Acquisition Programs (MDAPs). Stryker vehicles, Abrams Tank, Bradley Fighting Vehicle, and Paladin 155mm Howitzer are all undergoing modernization. Continued technology research and concept exploration will benefit future Army and Marine Corps combat portfolios.

The Marine's long-term ground force development is focused on the Amphibious Combat Vehicle (ACV). This Pre-MDAP will deliver shore and sea-based infantry to the battlefield in vehicles designed for future operational environments.

FY 2015 Ground Systems Base: $6.3 Billion

($ in Billions)



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Joint Light Tactical Vehicle

DOD - JOINT

The Joint Light Tactical Vehicle (JLTV) is a joint program currently in development for the Army and Marine Corps. The JLTV is intended to replace the High Mobility Multipurpose Wheeled Vehicle (HMMWV), which is the current light tactical vehicle. The JLTV concept is based on a family of vehicles focused on scalable armor protection and vehicle agility, and mobility required of the light tactical vehicle fleet. The JLTV will provide defensive measures to protect troops while in transport, increase payload capability, and achieve commonality of parts and components to reduce the overall life cycle cost of the vehicle. The JLTV project seeks to optimize performance, payload, and protection of the vehicle and crew while ensuring a design that is transportable by CH-47, CH-53, and C-130 aircraft.

Mission: Provides a light tactical vehicle capable of performing multiple mission roles, and providing protected, sustained, networked mobility for personnel and payloads across the full range of military operations. There are two variants planned: Combat Support Vehicles (3,500 lb) and Combat Tactical Vehicles (5,100 lb).

FY 2015 Program: Completes engineering and manufacturing development (EMD) efforts and testing in preparation for Milestone (MS) C decision in fourth quarter. Funds Low Rate Initial Production (LRIP) following MS C decision.

Prime Contractor: EMD contracts were awarded to AM General, Lockheed Martin, and Oshkosh Corporations to build 22 vehicles each.

Joint Light Tactical Vehicle

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E USA	59.2	-	84.2	-	-	-	84.2	-	45.7	-
RDT&E USMC	35.6	-	50.4	-	-	-	50.4	-	11.5	-
Procurement USA	-	-	-	-	-	-	-	-	164.6	176
Procurement USMC	-	-	-	-	-	-	-	-	7.5	7
Total	94.8	-	134.6	-	-	-	134.6	-	229.3	183

Numbers may not add due to rounding

Armored Multi-Purpose Vehicle (AMPV)

USA

The Armored Multi-Purpose Vehicle (AMPV) will replace the M113 Armored Personnel Carrier program that was terminated in 2007. The AMPV will have five mission roles: General Purpose, Medical Treatment, Medical Evacuation, Mortar Carrier and Mission Command. The current M113 Armored Personnel Carrier Mission Equipment Packages (MEPs) will be integrated onto a modified existing vehicle platform to give the Army its required capability at an affordable cost. Platforms being considered include Stryker, Bradley and Mine-Resistant Ambush Protected (MRAP) vehicles.

Mission: Enables the Heavy Brigade Combat Team (HBCT) commander to control a relentless tempo that overwhelms the threat with synchronized and integrated assaults that transition rapidly to the next engagement.

FY 2015 Program: Funds continued development efforts to include Milestone B decision and Engineering and Manufacturing Development (EMD) award planned for first quarter FY 2015.

Prime Contractor: Plan is to award to two vendors.

Armored Multi-Purpose Vehicle (AMPV)										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	26.9	-	28.3	-	-	-	28.3	-	92.4	-
Procurement	-	-	-	-	-	-	-	-	-	-
Total	26.9	-	28.3	-	-	-	28.3	-	92.4	-

Numbers may not add due to rounding

Family of Heavy Tactical Vehicles

USA


Army photo of a PLS

The Family of Heavy Tactical Vehicles (FHTV) consists of the Palletized Load System (PLS) and the Heavy Expanded Mobility Tactical Truck (HEMTT). The PLS entered service in 1993 and consists of a 16.5 ton, 10 wheel tactical truck with self load/unload capability. The PLS carry 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 Multi-Launch Rocket System (MLRS), Wrecker to recover vehicles, and Cargo truck with a materiel handling crane. The HEMTT family entered service in 1982.

Mission: Provides transportation of heavy cargo to supply and re-supply combat vehicles and weapons systems. The PLS is fielded to transportation units, ammunition units, and to forward support battalions with the capability to self-load and transport a 20 ft. ISO container. The upgraded HEMTT A4 is an important truck to transport logistics behind quick-moving forces such as the M-1 Abrams and Stryker. The HEMTT family carries all types of cargo, especially ammunition and fuel, and is used for line haul, local haul, unit resupply, and other missions throughout the tactical environment to support modern and highly mobile combat units.

FY 2015 Program: Procures 444 FHTVs, as well as trailers and tracking systems to modernize the heavy tactical vehicle fleet for the Active, National Guard, and Reserve units and to fill urgent theater requirements.

Prime Contractor: Oshkosh Corporation, Oshkosh, WI

Family of Heavy Tactical Vehicles

	FY 2013*		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	18.0	-	28.3	-	-	-	28.3	-	12.9	-
Procurement	52.9	400	14.7	240	-	-	14.7	240	28.4	444
Total	70.9	400	43.0	240	-	-	43.0	240	41.3	444

** FY 2013 includes Base and OCO funding*

Numbers may not add due to rounding

M–1 Abrams Tank Modification

USA


US Army Photo

The M1A2 Abrams is the Army's main battle tank, which first entered service in 1980. It was produced from 1978 until 1992. Since then, the Army has modernized it with a series of upgrades to improve its capabilities, collectively known as the System Enhancement Package (SEP) and the Tank Urban Survival Kit (TUSK). Currently funded modifications to the M1 Abrams include Vehicle Health Management and Power Train Improvement & Integration Optimization, which provide more reliability, durability and fuel efficiency. Survivability enhancements include Frontal Armor upgrades.

Mission: Provides mobile and protected firepower for battlefield superiority against heavy armor forces.

FY 2015 Program: Supports modifications and upgrades needed to maintain the armor facility at a sustainable level and minimize loss of skilled labor. Procures numerous approved modifications to fielded M1A2 Abrams tanks, including the Data Distribution Unit (DDU) and Blue Force Tracking 2 to enable network interoperability, Ammunition Data Link (ADL) to enable firing of the Army's new smart 120mm ammunition, and the Low Profile Commander's Remote Operating Weapon Station (CROWS).

Prime Contractor: General Dynamics Corporation, Sterling Heights, MI

M-1 Abrams Tank (Modification)

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	86.8	-	101.3	-	-	-	101.3	-	112.5	-
Procurement	128.9	-	178.1	-	-	-	178.1	-	237.0	-
Total	215.7	-	279.4	-	-	-	279.4	-	349.5	-

Numbers may not add due to rounding

Paladin Integrated Management (PIM)

USA

The M109 Family of Vehicles (FOV) consists of the M109A6 Paladin 155mm Howitzer, the most advanced self-propelled cannon system in the Army, and the Field M992A2 Artillery Ammunition Support Vehicle (FAASV), an armored resupply vehicle. The Paladin Integrated Management (PIM) program addresses concerns about obsolescence, space, weight, and power and ensures sustainment of the M109 FOV through 2050. The PIM replaces the current M109A6 Paladin and M992A2 FAASV vehicles with a more robust platform, incorporating the M2 Bradley common drive train and suspension components. The PIM fills the capability gap created by cancellation in 2009 of the Non-Line of Sight Cannon (NLOS-C) (a component of the Future Combat System program). The PIM achieved Milestone C certification in October 2013 and has begun Low Rate Initial Production (LRIP).

Mission: Provides the primary indirect fire support for Heavy Brigade Combat Teams, armored and mechanized infantry divisions as well as an armored resupply vehicle.

FY 2015 Program: Supports Developmental Testing (DT) and procures 18 PIM systems.

Prime Contractor: BAE Systems, York, PA

Paladin Integrated Management (PIM)

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	149.7	-	121.3	1	-	-	121.3	1	83.3	-
Procurement	188.6	9	199.5	8	-	-	199.5	8	247.4	18
Total	338.3	9	320.8	9	-	-	320.8	9	330.7	18

Numbers may not add due to rounding

Amphibious Combat Vehicle (ACV)

The Amphibious Combat Vehicle (ACV) is a Pre-Major Defense Acquisition Program. The ACV will replace the aging Amphibious Assault Vehicle. The Marine Corps has refined its ACV strategy based on several factors, including knowledge gained through multi-year analysis and ongoing development of its Ground Combat Vehicle Strategy.

Mission: The ACV will provide an armored personnel carrier balanced in performance, protection, and payload for employment with the Ground Combat Element across the range of military options, including a swim capability. The program has been structured to provide a phased, incremental capability.

FY 2015 Program: Supports ACV Increment 1.1 activities, including the manufacture of prototype vehicles, testing, and studies/technology development to advance high water speed capability.

Prime Contractor: TBD

Amphibious Combat Vehicle (ACV)										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	83.2	-	123.0	-	-	-	123.0	-	105.7	-
Procurement	-	-	-	-	-	-	-	-	-	-
Total	83.2	-	123.0	-	-	-	123.0	-	105.7	-

Numbers may not add due to rounding

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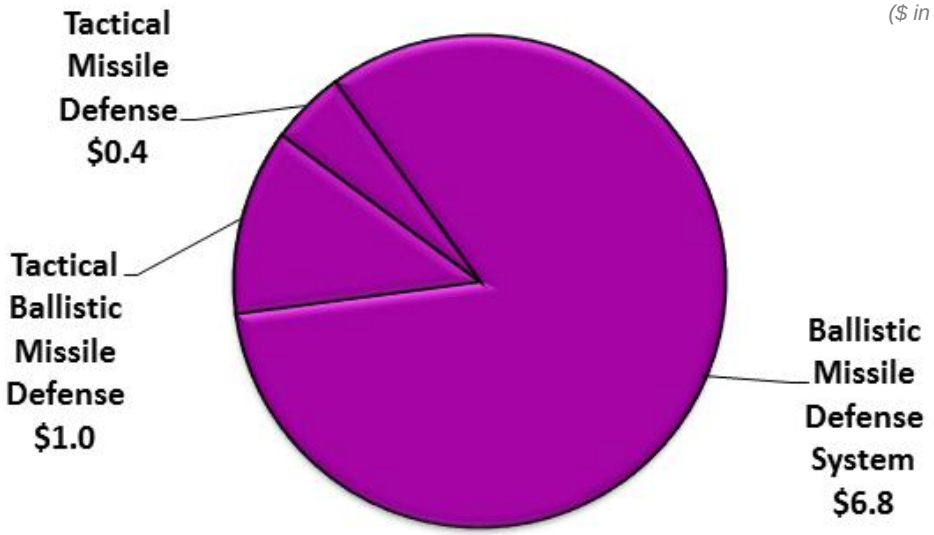
Missile Defense Programs

Missile Defense is a general term for air and missile defense. This category includes cruise missile, air and ballistic missile defense systems program development. The Missile Defense Agency and the Army are the program developers. Missile Defense includes all components designed to defeat hostile ballistic missiles of various ranges. A missile defense system includes interceptor missiles, as well as the associated sensors and command, control, battle management, and communications. Other significant investments include construction, targets and countermeasures, and research, development, testing, and evaluation activities. Encompassed in this category are all programs that are either critical to the functionality of missile defense or support missile defense as a primary mission. The Aegis Ballistic Missile Defense System (BMDS) is a key sea-based element of the Ballistic Missile Defense program and provides enduring, operationally effective and supportable BMD capability on Aegis cruisers and destroyers.

The Department continues to invest and build inventories of air and missile defense capabilities, such as the Patriot Advanced Capability-3 (PAC-3) missiles, Standard Missile-3 (SM-3) interceptors, Terminal High Altitude Area Defense (THAAD) interceptors, and the Army Navy / Transportable Radar Surveillance-2 (AN/TPY-2) radar. Further, the Department continues to seek expanded international efforts for missile defense with allies and partners to provide pragmatic and cost-effective missile defense capabilities.

FY 2015 Missile Defense Programs – Base: $8.2 Billion

($ in Billions)



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Note: $8.2 billion does not include the Missile Defense Agency's Science and Technology ($176.2 million), Military Construction ($40.7 million), nor the Operation and Maintenance ($416.6 million) funding. The total Ballistic Missile Defense funding is $8.5 billion for the FY 2015 request.

Aegis Ballistic Missile Defense

DOD - JOINT

The Aegis Ballistic Missile Defense (BMD) is the naval element of the Ballistic Missile Defense System (BMDS) and provides an enduring, operationally effective and supportable BMD capability on Aegis cruisers and destroyers. The Aegis BMD builds upon the existing Navy Aegis Weapons System (AWS) and Standard Missile-3 (SM-3) capabilities. The Aegis BMD upgrades expand capability through a series of incremental, evolutionary improvements to counter more sophisticated and longer range threats and provides engagements in the terminal phase of flight.

Mission: Provides a forward-deployable, mobile capability to detect and track ballistic missiles of all ranges, and the ability to destroy short- medium-, intermediate-range ballistic missiles, and selected long-range class threats in the midcourse phase of flight. Aegis BMD delivers an enduring, operationally effective and supportable capability on Aegis cruisers and destroyers in defense of the U.S., deployed forces, and friends and allies.

FY 2015 Program: Supports procurement of 30 SM-3 Block IB missiles. Procures BMD upgrades for three Aegis ships and installation onboard five Aegis ships. Continues the development of the Aegis BMD 5.0 and 5.1 Weapon Systems and was approved for FY 2014 low rate initial production in January 2014 after completion of initial operational test and evaluation flight testing.

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

AEGIS Ballistic Missile Defense

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	958.5	-	909.9	-	-	-	909.9	-	929.2	-
Procurement	463.4	33	580.8	52	-	-	580.8	52	435.4	30
Total	1,421.9	33	1,490.7	52	-	-	1,490.7	52	1,364.6	30

Numbers may not add due to rounding

THAAD Ballistic Missile Defense

DOD - JOINT

The Terminal High Altitude Area Defense (THAAD) is a key element of the Ballistic Missile Defense System. The THAAD Battery will provide transportable interceptors, using "Hit-To-Kill" technology to destroy ballistic missiles inside and outside the atmosphere. A Battery consists of six truck-mounted launchers, 48 interceptors (8 per launcher), one AN/TPY-2 radar, and one Tactical Fire Control/Communications (TFCC) component.

Mission: Provides Combatant Commanders with a deployable, ground-based missile defense capability against short and medium-range ballistic missiles and asymmetric threats inside and outside the atmosphere.

FY 2015 Program: Supports procurement of 31 interceptors and associated components, as well as support and training equipment. Supports the development of the initial Build 2.0 capability, and continues development and flight and ground testing of THAAD components. Provides support for the four THAAD batteries as well as the planned delivery of the fifth battery in FY 2015.

Prime Contractor: Lockheed Martin Corporation, Sunnyvale, CA

Terminal High Altitude Area Defense (THAAD)

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	267.4	-	255.9	-	-	-	255.9	-	299.6	-
Procurement	416.8	36	571.8	33	-	-	571.8	33	464.4	31
Total	684.2	36	827.7	33	-	-	827.7	33	764.0	31

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 Ballistic Missile Defense System (BMDS), providing Combatant Commanders capability to engage ballistic missiles in the midcourse phase of flight. This phase, compared to boost or terminal, allows significant time for sensor viewing from multiple platforms and, thus, 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 exo-atmospheric kill vehicle. When launched, the booster missile carries the kill vehicle toward the target's predicted location in space. Once released from the booster, the 152 pound 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 (AK), and Vandenberg Air Force Base (AFB), California (CA). The GMD fire control centers have been established in Colorado and Alaska.

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

FY 2015 Program: Continues the development and sustainment of the GMD weapon system, which includes the planned deployment of 40 GBIs at Fort Greely, AK, and 4 GBIs at Vandenberg AFB, CA by FY 2017. Continues flight testing to support the Integrated Master Test Plan (IMTP) requirements. Continues the Stockpile Reliability Program (SRP) and component aging testing in order to understand the health of the deployed assets. Continues software development, testing, and deployment for the fire control and kill vehicles to improved discrimination capabilities. Initiates the redesign of the GMD exo-atmospheric kill vehicle for improved reliability, availability, performance, and producibility.

Prime Contractor: Boeing Defense and Space (BDS), St. Louis, MO

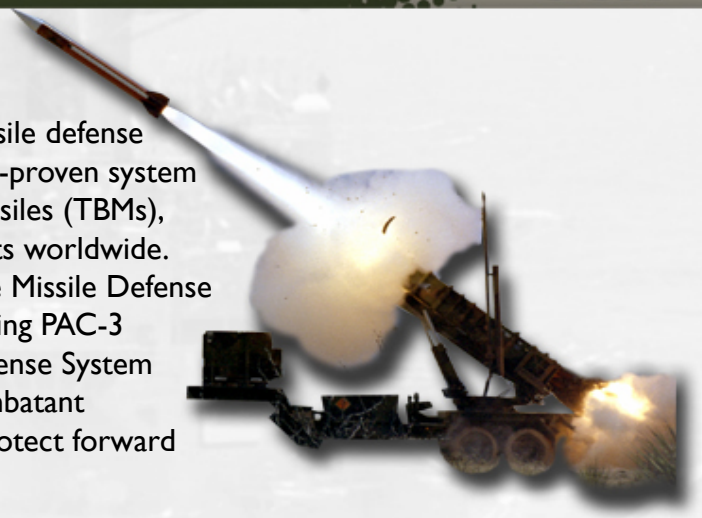
Ground-based Midcourse Defense

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	923.5	5	910.8	1	-	-	910.8	1	1,003.8	-
Procurement	-	-	-	-	-	-	-	-	-	-
Total	923.5	5	910.8	1	-	-	910.8	1	1,003.8	-

Numbers may not add due to rounding

Patriot/PAC-3

USA



The Army's Patriot Advanced Capability (PAC-3) missile is the latest improvement to the Patriot air and missile defense system. The Patriot is the only combat-proven system capable of defeating Tactical Ballistic Missiles (TBMs), Cruise Missiles, and Air-Breathing threats worldwide. Joint efforts between the Army and the Missile Defense Agency have been successful in integrating PAC-3 capabilities into the Ballistic Missile Defense System (BMDS). The PAC-3 units are the Combatant Commanders' most capable asset to protect forward deployed forces.

Mission: Contributes to the BMDS overall situational awareness for short range terminal ballistic missile threats. It can cue other systems while protecting Joint assets. The Patriot force is 15 battalions and many remain forward stationed in multiple theaters of operation.

FY 2015 Program: Continues improvements in software for further probability of fratricide reduction; improved communications, interoperability, supportability, electronic warfare capabilities; and support transition to the Integrated Air and Missile Defense (IAMD) architecture. Continues procurement of ten Enhanced Launcher Electronics Systems (ELES) to increase the warfighter's PAC-3 capability.

Prime Contractor: Lockheed Martin Missiles and Fire Control, Dallas, TX

Patriot/PAC-3

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	44.6	-	35.0	-	-	-	35.0	-	153.0	-
Procurement	1,009.2	122	326.4	-	-	-	326.4	-	131.8	-
Spares	6.5	-	9.4	-	-	-	9.4	-	35.8	-
Total	1,060.3	122	370.8	-	-	-	370.8	-	320.6	-

Numbers may not add due to rounding

PAC-3/MSE Missile

USA

The Missile Segment Enhancement (MSE) is a performance improvement to the existing Patriot Advanced Capability (PAC-3) missile. The MSE upgrade enhances the PAC-3 missile by adding a dual pulse, 11-inch diameter Solid Rocket Motor (SRM), improved lethality, a thermally hardened front-end, upgraded batteries, enlarged fixed fins, more responsive control surfaces, and upgraded guidance software. These improvements result in a more agile, lethal interceptor missile with enhanced Insensitive Munitions (IM) compliance. The PAC-3 MSE can be fired from a Patriot system.

Mission: Provides 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 U.S. and allied forces.

FY 2015 Program: Procures MSE interceptor (70 missiles) to increase range and altitude capability, meeting the ever-changing threat.

Prime Contractor: Lockheed Martin Missiles and Fire Control, Dallas, TX

PAC-3/MSE

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	63.1	-	68.8	-	-	-	68.8	-	35.0	-
Procurement	8.2	-	690.4	86	-	-	690.4	86	384.6	70
Total	71.3	-	759.2	86	-	-	759.2	86	419.6	70

Numbers may not add due to rounding

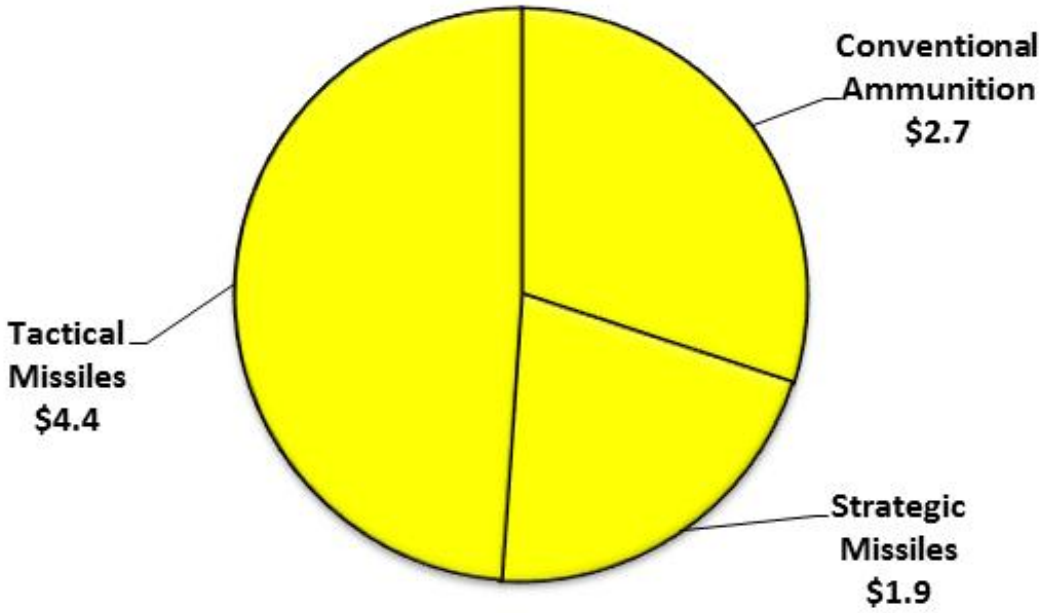
Missiles and Munitions

Munitions is a general term for ammunition and missiles. Ammunition are explosives consisting of all kinds of bombs, grenades, rockets, mines, projectiles, and other similar devices. There are conventional and nuclear missiles used for both tactical and strategic purposes. Many missiles are precision guided with the technical sophistication to allow guidance corrections during flight-to-target. 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" bomb. *Note: Interceptor missiles supporting the missile defense mission are included in the Missile Defense section.*

The Department continues to build inventories of standoff weaponry, such as the Joint Air-to-Surface Standoff Missile, the Joint Standoff Weapon, and the Small Diameter Bomb.

FY 2015 Missiles and Munitions – Base: $9.0 Billion

($ in Billions)



Numbers may not add due to rounding

Advanced Med. Range Air-to-Air Missile

DOD - JOINT

The Advanced Medium Range Air-to-Air Missile (AMRAAM) is an all-weather, all-environment radar guided missile developed to improve capabilities against very low-altitude 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.

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 has replaced the AIM-7 Sparrow as the U.S. military's standard beyond visual range intercept missile. The missile has undergone various service life improvements. The current generation, AIM-120D, has a two-way data link, Global Position System-enhanced Inertial Measurement Unit, an expanded no-escape envelope, improved High-Angle Off-Boresight capability, and increase in range over previous variants.

FY 2015 Program: Continues production as well as product improvements such as fuzing, guidance, and kinematics.

Prime Contractor: Raytheon Company, Tucson, AZ

Advanced Medium Range Air-to-Air Missile

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
Air Force	68.7	-	70.6	-	-	-	70.6	-	82.2	-
Navy	2.7	-	2.6	-	-	-	2.6	-	10.2	-
Subtotal	71.4	-	73.2	-	-	-	73.2	-	92.4	-
Procurement							-	-		
Air Force	201.4	113	323.0	183	-	-	323.0	183	329.6	200
Navy	86.9	67	82.5	44	-	-	82.5	44	32.2	-
Subtotal	288.3	180	405.5	227	-	-	405.5	227	361.8	200
Spares	1.4	-	2.1	-	-	-	2.1	-	3.7	-
Total	361.1	180	480.8	227	-	-	480.8	227	457.9	200

Numbers may not add due to rounding

Air Intercept Missile – 9X

DOD - JOINT

USAF Image

The Air Intercept Missile-9X (AIM-9X), also known as SIDEWINDER, is a short range air-to-air missile that provides a launch-and-leave air combat missile, which uses passive infrared energy for acquisition and tracking of enemy aircraft. The AIM-9X retains several components from the previous Sidewinder generation, the AIM-9M (primarily the motor and warhead), but incorporates a new airframe with much smaller fins and canards, and relies in a jet-vane steering system for significantly enhanced agility. The new guidance unit incorporates an imaging infrared seeker.

The AIM-9X Block II incorporates additional air-to-air beyond visual range targeting capabilities, a new fuze, and a two way datalink. The AIM-9X is a joint Navy/Air Force program led by the Navy.

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

FY 2015 Program: Begins AIM-9X Block II full rate production of as well as product improvements, such as data link capabilities, and battery and safety improvements.

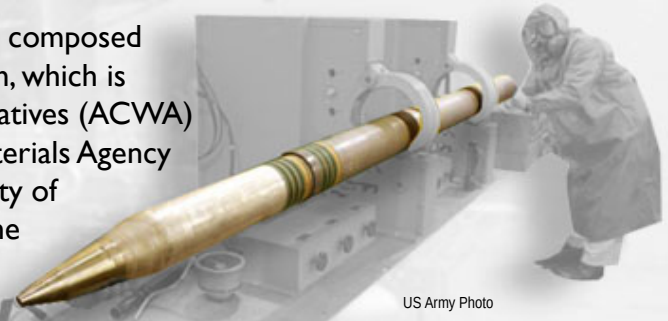
Prime Contractor: Raytheon Missile Systems, Tucson, AZ

Air Intercept Missile – 9X										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
Air Force	6.0	-	12.8	-	-	-	12.8	-	29.7	-
Navy	18.9	-	15.5	-	-	-	15.5	-	47.3	-
Subtotal	**24.9**	**-**	**28.3**	**-**	**-**	**-**	**28.3**	**-**	**77.0**	**-**
Procurement							-	-		
Air Force	72.2	164	100.6	225	-	-	100.6	225	133.0	303
Navy	69.0	150	101.7	225	-	-	101.7	225	73.9	167
Subtotal	**141.2**	**314**	**202.3**	**450**	**-**	**-**	**202.3**	**450**	**206.9**	**470**
Spares	11.9	-	14.0	-	-	-	14.0	-	13.9	-
Total	**178.0**	**314**	**244.6**	**450**	**-**	**-**	**244.6**	**450**	**297.8**	**470**

Numbers may not add due to rounding

Chemical Demilitarization

DOD - JOINT


US Army Photo

The Chemical Demilitarization Program is composed of one Major Defense Acquisition Program, which is the Assembled Chemical Weapons Alternatives (ACWA) Program, and the U. S. Army Chemical Materials Agency (CMA), with the goal of destroying a variety of chemical agents and weapons, including the destruction of former chemical weapon production facilities. This program is designed to eliminate the existing chemical weapons stockpile in compliance with the Chemical Weapons Convention (CWC) signed in 1997 – while ensuring the safety and security of the workers, the public, and the environment.

Mission: There are three mission areas within the Chemical Demilitarization Program:
1.Destroy chemical agents and weapons stockpile using neutralization technologies;
2.Recovered chemical warfare material (RCWM) assessment and destruction; and
3.Chemical stockpile emergency preparedness (CSEP).

FY 2015 Program: Continues closure activities at three CMA sites (Tooele, UT; Anniston, AL; and Umatilla, OR). Continues the assessment and destruction of RCWM. Completes construction efforts and continuous systemization activities at the ACWA Program sites (Pueblo, CO and Blue Grass, KY) working towards complete destruction of the remaining 10 percent of the U.S. stockpile as close to 2017, as possible, in accordance with the National Defense Authorization Act for FY 2011. Continues the CSEP program at CO and KY.

Prime Contractors: URS Corporation, Arlington, VA; Bechtel National Incorporated, Pueblo, CO; Bechtel Parsons, Richmond, KY

Chemical Demilitarization

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
Chemical Agents and Munitions Destruction	1,300.1	-	1,004.1	-	-	-	1,004.1	-	828.9	-
MILCON	144.8	-	122.5	-	-	-	122.5	-	38.7	-
Total	1,444.9	-	1,126.6	-	-	-	1,126.6	-	867.6	-

Numbers may not add due to rounding

Joint Air to Surface Standoff Missile

DOD - JOINT

USAF Image

The Joint Air to Surface Standoff Missile (JASSM) Baseline provides a survivable, precision cruise missile to kill hard, medium, and soft targets. It is a 2,000-pound class weapon with a 1,000-pound 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. Maximum unclassified range for the baseline JASSM variant is greater than 200 nautical miles. The JASSM is integrated on the F-15E, F-16, B-52, B-1, and B-2 aircraft.

The JASSM-Extended Range (ER) increment is highly common with the JASSM Baseline variant, offers a more fuel-efficient engine and greater fuel capacity, and adds 2.5 times the standoff range (>500nm). JASSM-ER maintains the same outer mold line and low-observable properties as JASSM Baseline, but replaces the turbojet engine (Teledyne) with higher thrust, more fuel efficient turbofan engine (Williams International). Maximum unclassified range for the JASSM-ER variant is greater than 500 nautical miles. The JASSM-ER is currently only integrated on the B-1 aircraft.

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

FY 2015 Program: Continues Full Rate Production (FRP) for JASSM while JASSM-ER FRP is planned for FY 2015.

Prime Contractor: Lockheed Martin Corporation, Troy, AL

Joint Air to Surface Standoff Missile

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	7.1	-	6.4	-	-	-	6.4	-	15.9	-
Procurement	230.2	233	271.2	187	-	-	271.2	187	337.4	224
Total	237.3	233	277.6	187	-	-	277.6	187	353.3	224

Numbers may not add due to rounding

Joint Direct Attack Munition

DOD - JOINT

USAF Image

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 that improves accuracy and adverse weather capability.

A Laser JDAM (LJDAM) variant increases operational flexibility for an expanded target set. The laser sensor kit added to the JDAM weapon kit provides ability to attack targets of opportunity, including land-moving and maritime targets, when designated by an airborne or ground laser.

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 2015 Program: Continues production of the system at low rate, given the acceptable inventory levels of JDAM.

Prime Contractor: The Boeing Company, St. Charles, MO

Joint Direct Attack Munition

	FY 2013*		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	-	-	2.5	-	-	-	2.5	-	**2.5**	**-**
Procurement										
Air Force	144.6	4,678	178.5	7,536	72.0	2,879	250.5	10,415	**101.4**	**2,973**
Total	**144.6**	**4,678**	**181.0**	7,536	**72.0**	2,879	**253.0**	**10,415**	**101.4**	**2,973**

** FY 2013 includes Base and OCO funding.*

Numbers may not add due to rounding

Joint Standoff Weapon

DOD - JOINT

USAF Image

The Joint Standoff Weapon (JSOW – AGM-154) program is a joint Navy and Air Force program led by the Navy. The JSOW is an air-to-ground weapon designed to attack a variety of targets during day, night, and adverse weather conditions. The JSOW consists of three variants: JSOW-A and A-1 (baseline), JSOW-B (Anti-armor), JSOW-C and C-1 (Unitary).

The JSOW baseline contains BLU-97 sub-munitions each with a shaped charge for armor defeating capability and a fragmenting case for material destruction. The JSOW-B carries BLU-108/B sensor fuzed sub-munitions. Production was deferred for JSOW-B. The infrared sensors detect targets and fire creating an explosively formed penetrator capable of defeating vehicle armor. The JSOW-C is a unitary weapon that uses an Imaging Infrared (IIR) terminal seeker with autonomous guidance to increase accuracy and lethality to attack hardened targets. The JSOW-C1 adds a weapon data link and seeker upgrade to attack moving maritime targets in addition to the JSOW-C stationary land target mission set.

Mission: Enhances aircraft survivability by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems.

FY 2015 Program: Continues JSOW C-1 (Unitary) production which is the only variant currently in production along with product improvements to introduce a network-enabled, maritime target capability for the Navy only.

Prime Contractor: Raytheon Missile Systems, Tucson, AZ

Joint Standoff Weapon

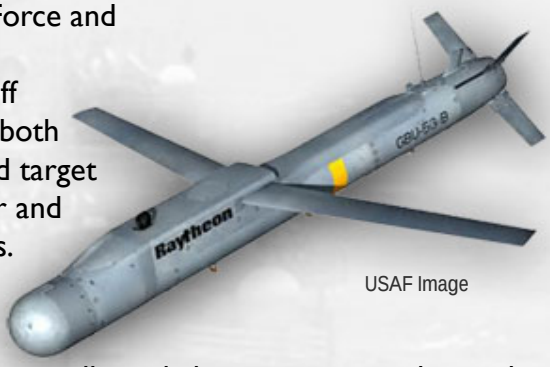
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	5.5	-	0.1	-	-	-	0.1	-	4.4	-
Procurement	120.2	202	117.6	212	-	-	117.6	212	130.8	200
Spares	0.2	-	0.3	-	-	-	0.3	-	0.2	-
Total	125.9	202	118.0	212	-	-	118.0	212	135.4	200

Numbers may not add due to rounding

Small Diameter Bomb (SDB)

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, standoff air-to-ground weapon that can be delivered from both fighter and bomber aircraft. The SDB I was a fixed target attack weapon. The SDB-II incorporates a seeker and data link 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 2015 Program: Funds Engineering and Manufacturing Development (EMD) and continues production of SDB II missiles for use against moving, relocatable, and fixed targets.

Prime Contractor: Raytheon Missile Systems, Tucson, AZ (SDB II)

Small Diameter Bomb

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E										
Air Force	125.1	-	113.3	-	-	-	113.3	-	68.8	-
Navy	28.9	-	24.9	-	-	-	24.9	-	71.8	-
Subtotal	154.0	-	138.2	-	-	-	138.2	-	140.6	-
Procurement										
Air Force	2.0	-	36.0	144	-	-	36.0	144	70.6	246
Spares	14.8	-	8.0	-			8.0	-	7.9	
Total	170.8	-	182.2	144	-	-	182.2	144	219.1	246

Numbers may not add due to rounding

Javelin Advanced Anti-Tank Weapon

USA

USMC Photo

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 can be employed for a variety of combat missions, but is used primarily against armored vehicles and in a direct-attack mode for use against buildings and bunkers. It uses an imaging infrared two-dimensional staring Focal plane array (FPA) 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.

Mission: Provides the dismounted soldier with a 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 2015 Program: Begins procurement of FGM-148F (F model) Javelin missiles with a new Multi-Purpose Warhead, which improves lethality against exposed personnel. Begins development of a lightweight CLU to reduce soldier burden and bulk.

Prime Contractor: Raytheon Missile Systems/Lockheed Martin Javelin Joint Venture, Tucson, AZ and Orlando, FL

Javelin Advanced Anti-Tank Weapon

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	4.5	-	5.0	-	-	-	5.0	-	4.1	-
Procurement	75.2	307	110.5	449	-	-	110.5	449	77.7	338
Total	79.7	307	115.5	449	-	-	115.5	449	81.8	338

Numbers may not add due to rounding

Guided Multiple Launch Rocket System

US Army Photo

The Guided Multiple Launch Rocket System (GMLRS) provides a persistent, responsive, all-weather, rapidly-deployable and long range precision strike capability.

The GMLRS are fired by the M142 High Mobility Artillery Rocket System (HIMARS) and the M270A1 Multiple Launch Rocket System (MLRS) launchers. The GMLRS uses an on-board Inertial Measurement Unit (IMU) in combination with a Global Positioning System (GPS) guidance system to provide improved performance. The missile has a range of approximately 70 kilometers and can carry a variety of different warheads, including unitary and scatterable sub-munitions. A third GMLRS increment, GMLRS Alternative Warhead (AW), is being developed as a replacement for GMLRS Dual Purpose Improved Conventional Munition to meet requirements outlined in the 2008 Department of Defense Cluster Munitions Policy. The GMLRS AW will be produced on a shared production line and is about 90% common with the GMLRS Unitary increment.

Mission: Neutralizes or suppresses enemy field artillery and air defense systems and supplements cannon artillery fires.

FY 2015 Program: Continues at full rate production of GMLRS (Unitary) as well as product improvements such as insensitive munition and alternative warhead development. Supports GMLRS AW for a combined Milestone C and Full Rate Production decision.

Prime Contractor: Lockheed Martin Corporation, Dallas, TX

Guided Multiple Launch Rocket System

	FY 2013*		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	110.9	-	96.4	-	-	-	96.4	-	45.4	-
Procurement	214.3	1,608	234.0	1,789	39.0	383	273.0	2,172	127.1	534
Total	325.2	1,608	330.4	1,789	39.0	383	369.4	2,172	172.5	534

** FY 2013 includes Base and OCO funding*

Numbers may not add due to rounding

Evolved Seasparrow Missile

NSPO Photo

The Evolved Seasparrow Missile (ESSM) is an improved version of the NATO Seasparrow missile, designed for ship self-defense.

The ESSM has an 8-inch diameter forebody that tapers to a 10-inch diameter rocket motor. The guidance package uses a semi-active homing seeker, in combination with a midcourse data uplinks. The missile uses a solid-propellant rocket motor that provides high thrust for maneuverability with tail control via a Thrust Vector Controller (TVC). This gives the missile, a capability to engage and defeat agile, high-speed, low-altitude anti-ship cruise missiles (ASCMs), low velocity air threats (LVATs), such as helicopters, and high-speed, maneuverable surface threats.

Mission: Provides Navy combatants, aircraft carriers and amphibious ships with the capability to defeat current and projected threats that possess low altitude, high velocity, and highly maneuverable characteristics beyond the engagement capabilities of other ship self-defense systems.

FY 2015 Program: Continues full rate production for the Block I ESSM. Begins the planned Engineering and Manufacturing Development for Block II in FY 2015.

Prime Contractor: Raytheon Missile Systems, Tucson, AZ

Evolved Seasparrow Missile

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	30.9	-	42.0	-	-	-	42.0	-	84.2	-
Procurement	48.2	37	76.7	53	-	-	76.7	53	119.4	104
Total	79.1	37	118.7	53	-	-	118.7	53	203.6	104

Numbers may not add due to rounding

Rolling Airframe Missile

The 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 infra-red 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 (RF) for midcourse guidance, and transitions to Infrared (IR) guidance for terminal engagement. Currently there are two RIM-116 configurations: Block 1 (RIM-116B) and Block 2 (RIM-116C).

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 2015 Program: Funds the low rate of production for the Block II (RIM-116C) missile as well as the ongoing developmental and operational testing.

Prime Contractor: Raytheon Missile Systems, Tucson, AZ

Rolling Airframe Missile

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	-	-	-	-	-	-	-	-	-	-
Procurement	60.4	61	65.9	66	-	-	65.9	66	80.8	90
Total	60.4	61	65.9	66	-	-	65.9	66	80.8	90

Numbers may not add due to rounding

Standard Family of Missiles

The STANDARD missile family consists of various air defense missiles including supersonic, medium and extended range; surface-to-air. The Standard Missile-6 is a surface Navy Anti-Air Warfare (AAW) 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 (LACM), and Anti-Ship Cruise Missiles (ASCM) in flight. It was designed to fulfill the need for a vertically launched, extended range missile compatible with the Aegis Weapon System (AWS) 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 (RF) 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.

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

FY 2015 Program: Continues production of the SM-6 variant.

Prime Contractor: Raytheon Missile Systems, Tucson, AZ

Standard Family of Missiles

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	47.0	-	67.1	-	-	-	67.1	-	53.2	-
Procurement	332.5	89	368.0	81	-	-	368.0	81	445.8	110
Spares	14.5	-	18.9	-			18.9	-	16.2	
Total	379.5	89	454.0	81	-	-	454.0	81	515.2	110

Numbers may not add due to rounding

Tactical Tomahawk Cruise Missile

Tomahawk provides an attack capability against fixed and mobile/moving targets, and can be launched from both surface ships and submarines. Key elements of the Block IV Tomahawk design are an improved navigation and guidance computer; improved anti-jam Global Positioning System (GPS) capability; improved responsiveness and flexibility through two-way satellite communications for in-flight re-targeting; a loiter capability; and the ability to send a Battle Damage Indication Image (BDII) of over flown areas prior to impact.

Block IV Tomahawk delivers a 1,000 lb class unitary warhead at a range of 900 nm. For guidance, the Block IV Tomahawk normally employs inertial guidance or GPS over water to follow a preset course; once over land, the missile's guidance system is aided by Terrain Contour Matching (TERCOM). Terminal guidance is provided by the Digital Scene Matching Area Correlation (DSMAC) system or GPS, producing an accuracy of about 10 meters.

Mission: Provides a long-range cruise missile launched from a variety of platforms against land and sea targets.

FY 2015 Program: Continues limited production Tomahawk Block IV missiles.

Prime Contractor: Raytheon Missile Systems, Tucson, AZ

Tactical Tomahawk Cruise Missile

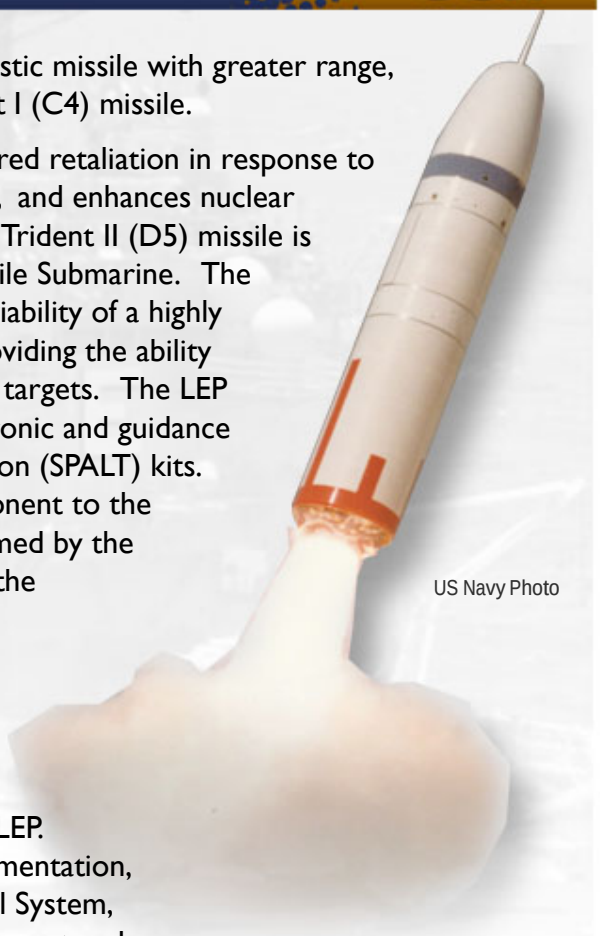
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	10.2	-	12.4	-	-	-	12.4	-	32.4	-
Procurement	293.6	196	312.5	196	-	-	312.5	196	194.3	100
Total	303.8	196	324.9	196	-	-	324.9	196	226.7	100

Numbers may not add due to rounding

Trident II Ballistic Missile Modifications

The Trident II (D5) is a submarine launched ballistic missile with greater range, payload capability, and accuracy than the Trident I (C4) missile.

Mission: Deters nuclear war by means of assured retaliation in response to a major attack on the United States or its Allies, and enhances nuclear stability by deterring an enemy first strike. The Trident II (D5) missile is carried on the OHIO CLASS Fleet Ballistic Missile Submarine. The ongoing Life Extension Program (LEP) ensures viability of a highly survivable strategic deterrent through 2042, providing the ability to precisely attack time-critical, high value, fixed targets. The LEP consists of the procurement of 24 missile electronic and guidance Supportability Mods/Strategic Programs Alteration (SPALT) kits. 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 ratification of the New START Treaty in 2011.



US Navy Photo

FY 2015 Program: Funds the development of advanced components to improve the reliability, safety and security of Arming, Fuzing and Firing systems and studies to support the National Nuclear Security Administration W88 LEP. Funds the production costs for flight test instrumentation, 12 Solid Rocket Motors, the Post Boost Control System, the Life Extension Program (LEP), support equipment and spares.

Prime Contractor: Lockheed Martin Corporation, Sunnyvale, CA

Trident II Ballistic Missile Mods

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	94.8		98.1				98.1		96.9	-
Procurement	1,266.6	-	1,355.3				1,355.3	-	1,420.3	-
Total	1,361.4	-	1,453.4	-	-	-	1,453.4	-	1,517.2	-

Numbers may not add due to rounding

B61 Tail Kit Assembly (TKA)

The B61 is a gravity-driven nuclear bomb developed by the Department of Energy, National Nuclear Security Administration (DOE/NNSA) for the Department of Defense. Current versions in the inventory were fielded between 1978-1990 and require component refurbishment and replacement to maintain a safe, secure and effective capability.

Mission: Provides the strategic weapons for the airborne leg of the nuclear triad and are carried on the B-52, the B-2, and NATO dual-use aircraft today. The new variant consolidates four versions and will be carried by the B-52, the B-2 and NATO aircraft as well as the F-35 and the Next Generation Bomber. To extend the life of this weapon, DOE/NNSA and the Air Force are jointly implementing a Life Extension Program (LEP) to refurbish the B-61 with a First Production Unit in 2020. The Air Force portion of the LEP is to provide the development, acquisition and delivery of a guided tail kit assembly and all up round technical integration, system qualification and fielding of the B61-12 variant.

FY 2015 Program: Continues the development, design, test, integration, qualification and nuclear certification activities in support of the B61-12 LEP to complete Phase 1 engineering and manufacturing development to meet a Critical Design Review in early FY 2016. Continues software development and integration for the F-15E and F-16 aircraft and begins B-2 and PA-200 integration.

Prime Contractors: Boeing Company

B61 Tail Assembly (TKA)

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	62.4	-	33.0	-	-	-	33.0	-	198.4	-
Procurement	-	-	-	-	-	-	-	-	-	-
Total	62.4	-	33.0	-	-	-	33.0	-	198.4	-

Numbers may not add due to rounding

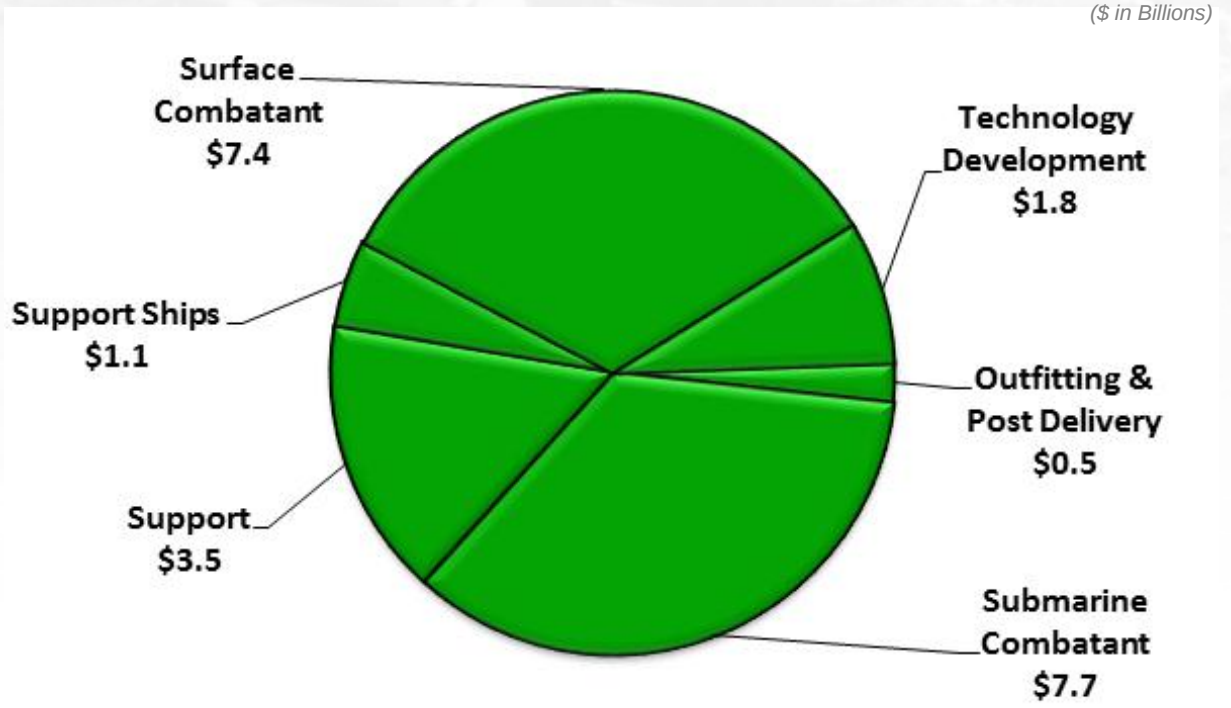
Shipbuilding and Maritime Systems

A central principle to the U.S. Maritime Strategy is forward presence. Forward presence 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 need.

The Shipbuilding Portfolio for FY 2015 includes the funding for the construction of 7 new ships (two Virginia Class SSN 774 nuclear attack submarines; two Arleigh Burke DDG 51 Class Flight IIA destroyers; and three Littoral Combat Ships (LCS).) The funding in this category finances the developmental efforts, the equipment procurements, and the construction of ships that will allow the U.S. Navy to maintain maritime superiority well into the 21st century. The following highlights the FY 2015 Shipbuilding Portfolio budget request:

FY 2015 Shipbuilding and Maritime Systems – Base: $22.0 Billion

($ in Billions)



Numbers may not add due to rounding

CVN 78 FORD Class Nuclear Aircraft Carrier

US Navy Image

Aircraft carriers are the centerpiece of U.S. Naval forces. Currently, there are 10 active carriers in the Navy's fleet. The CVN 78 class ships will include new technologies and improvements so that the ship and air wings can operate with fewer personnel by replacing maintenance-intensive systems with low maintenance systems. The new A1B reactor, Electromagnetic Aircraft Launch System (EMALS), Advanced Arresting Gear (AAG), and Dual Band Radar all offer enhanced capability.

Mission: Provides the United States with the core capabilities of 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 2015 Program: Funds third year of construction for USS John F. Kennedy (CVN 79), completion costs for USS Gerald R. Ford (CVN 78), and continued development of ship systems.

Prime Contractor: Huntington Ingalls Industries, Newport News, VA

CVN 78 FORD Class Nuclear Aircraft Carrier										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	168.1	-	154.0	-	-	-	154.0	-	128.9	-
Procurement	491.0	1	1,549.3	-	-	-	1,549.3	-	2,008.9	-
Total	659.0	1	1,703.3	-	-	-	1,703.3	-	2,137.8	-

Numbers may not add due to rounding

DDG 51 AEGIS Destroyer


US Navy Photo

The DDG 51 class guided missile destroyers provide a wide range of warfighting capabilities in multi-threat air, surface and subsurface environments. The DDG 51 class ship 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. The DDG 51 class is the first class of destroyers with a ballistic missile defense capability. The Arleigh Burke class is comprised of three 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 and later ships are Flight IIA ships.

Mission: Provides air and maritime dominance and land attack capability with its AEGIS Weapon System, AN/SQQ-89 Anti-Submarine Warfare System, and Tomahawk Weapon Systems.

FY 2015 Program: Funds two DDG 51 AEGIS class destroyers as part of a multiyear procurement for nine ships from FY 2013 - FY 2017 and provides advance procurement for two ships beginning construction in FY 2016.

Prime Contractors: General Dynamics Corp., Bath, ME
Huntington Ingalls Industries, Pascagoula, MS

DDG 51 AEGIS Destroyer

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	163.3	-	159.2	-	-	-	159.2	-	119.1	-
Procurement	4,504.1	3	2,094.1	1	-	-	2,094.1	1	2,941.1	2
Total	4,667.4	3	2,253.3	1	-	-	2,253.3	1	3,060.2	2

Numbers may not add due to rounding

Littoral Combat Ship

The Littoral Combat Ship (LCS) is a fast, agile, and small surface combatant capable of anti-access missions against asymmetric threats in the littorals. The LCS was designed for operations in the littorals against limited threats in three primary anti-access mission areas: Surface Warfare (SUW) operations emphasizing defeat of small boats, Mine Warfare (MCM, and Anti-Submarine Warfare (ASW). The ship is designed to be open-ocean capable, but is designed to defeat the littoral threats and provide access to coastal areas. Interchangeable mission modules for Mine Warfare, Anti-Submarine Warfare, and Anti-Surface Warfare are used to counter anti-access threats close to shore such as mines, quiet diesel submarines, and swarming small boats. The seaframe acquisition strategy procures two seaframe designs which are a separate and distinct acquisition program from the mission module program. The two programs are synchronized to ensure combined capability.

Mission: Defeats asymmetric threats, and assures naval and joint forces access into contested littoral regions by prosecuting small boats and craft, conducting mine countermeasures, and performing anti-submarine warfare.

FY 2015 Program: Funds construction of three LCS seaframes and procurement of mission modules.

Prime Contractors: Lockheed Martin, Middle River, MD
Austal USA, Mobile, AL

Littoral Combat Ship										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	375.0	-	372.0	-	-	-	372.0	-	285.7	-
Procurement	1,913.7	4	2,017.8	4	-	-	2,017.8	4	1,785.5	3
Total	2,288.7	4	2,389.8	4	-	-	2,389.8	4	2,071.2	3

Numbers may not add due to rounding

SSN 774 Virginia Class Submarine

US Navy Photo

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 ocean anti-submarine warfare and littoral operations. Equipped with vertical launchers and torpedo tubes, the submarine is able to launch Tomahawk cruise missiles as well as heavy weight torpedoes.

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

FY 2015 Program: Funds two ships as part of an multiyear procurement contract and advance procurement for two ships beginning construction in FY 2016. Continues funding development of the Virginia Payload Module and technology, prototype components, and systems engineering needed for design and construction.

Prime Contractors: General Dynamics Corporation, Groton, CT
Huntington Ingalls Industries, Newport News, VA

SSN 774 Virginia Class Submarine

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	81.2	-	121.6	-	-	-	121.6	-	205.3	-
Procurement	4,774.0	2	6,595.9	2	-	-	6,595.9	2	6,095.1	2
Total	4,855.1	2	6,717.5	2	-	-	6,717.5	2	6,300.4	2

Numbers may not add due to rounding

Ship to Shore Connector

Image courtesy of the U.S. Navy

The Ship-to-Shore Connector (SSC) is the replacement for the existing fleet of Landing Craft, Air Cushioned (LCAC) vehicles, which are nearing the end of their service life. It is an Air Cushion Vehicle designed for a 30-year service life. The SSC mission is to land surface assault elements in support of Operational Maneuver from the Sea, at over-the-horizon distances, while operating from amphibious ships and mobile landing platforms. The SSC provides increased performance to handle current and future missions, as well as improvements To increase craft availability. The SSC Program requirement is for 73 vessels.

Mission: Hauls vehicles, heavy equipment, and supplies through varied environmental conditions from amphibious ships to over the beach. The SSC will enhance the Navy and Marine Corps capability to execute a broad spectrum of missions from humanitarian assistance and disaster response to multidimensional amphibious assault.

FY 2015 Program: Procures two vessels and continues research and development of ship design, engineering and specifications.

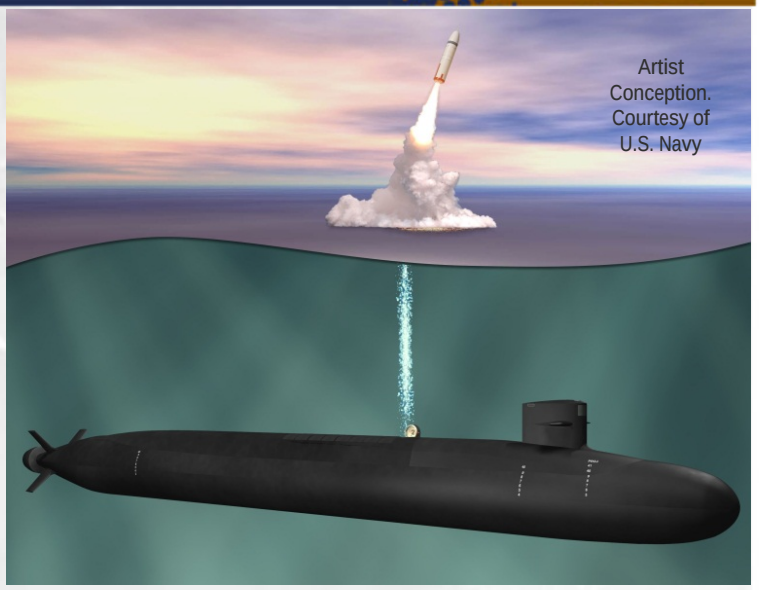
Prime Contractors: Textron Inc., New Orleans, LA

Ship to Shore Connector

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	111.9	1	87.4	-	-	-	87.4	-	124.6	-
Procurement	-	-	-	-	-	-	-	-	123.2	2
Total	111.9	1	87.4	-	-	-	87.4	-	247.8	2

Numbers may not add due to rounding

Ohio Replacement (OR) Program



The Ohio Replacement Program is designed to replace the current class of ballistic missile submarines. Currently in the research and development stage, ship requirements and specifications are being refined. The ships will begin construction in FY 2021 for FY 2028 delivery when the first Ohio class ships are due to be decommissioned.

Mission: Provides a sea-based strategic nuclear force.

FY 2015 Program: Funds the research and development of nuclear technologies and systems for future ships.

Prime Contractor: TBD

Ohio Replacement (OR) Program

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	573.9	-	1,146.1	-	-	-	1,146.1	-	1,289.8	-
Procurement	-	-	-	-	-	-	-	-	-	-
Total	573.9	-	1,146.1	-	-	-	1,146.1	-	1,289.8	-

Numbers may not add due to rounding

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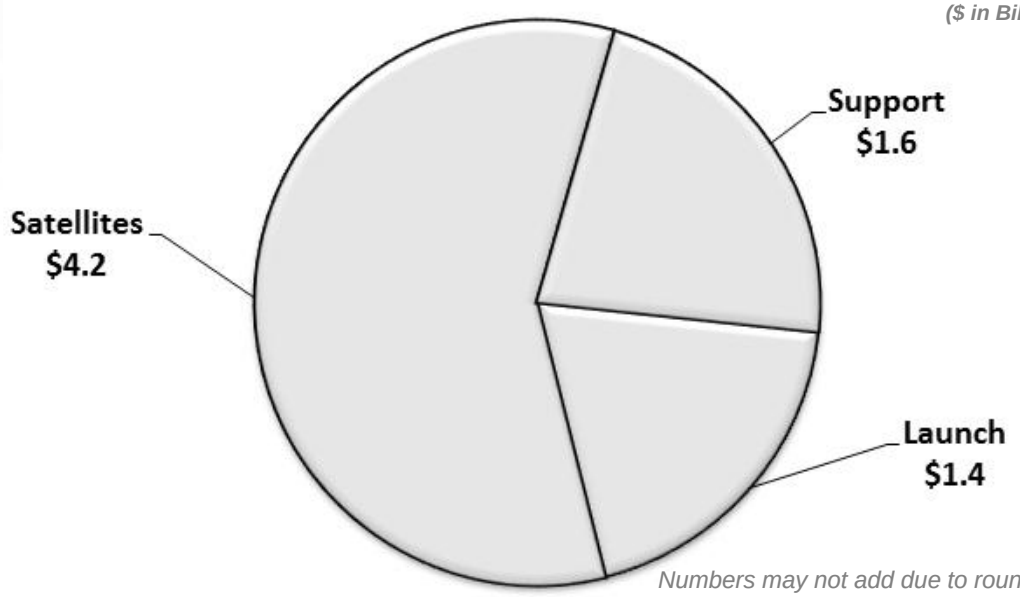
Space Based Systems

Space assets support deployed United States 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. 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. Generally speaking, the first two satellites of a new system are purchased with Research, Development, Test & Evaluation (RDT&E) funding and the remainder of the satellites are purchased with procurement funding. The Air Force is continuing approaches to maximize efficient satellite and launch vehicle acquisitions. These approaches include using block buys and fixed-price contracting to stabilize requirements, and promoting a stable RDT&E investment for evolutionary growth.

The FY 2015 budget highlights include the continued funding for procurement of the space vehicles Advanced Extremely High Frequency (AEHF)-5, AEHF-6, Space Based Infrared System (SBIRS) Geosynchronous Earth Orbit (GEO)-5 and GEO-6, and continues the Space Modernization Initiative RDT&E activities. Also funds the procurement of Global Positioning System (GPS) III satellite 9, and the advanced procurement for 10, as well as the block buy of Evolved Expendable Launch Vehicle (EELV) Launch Services, specifically three launch vehicles, and up to eight Launch Capability activities per year.

FY 2015 Space Based Systems – Base: $7.2 Billion

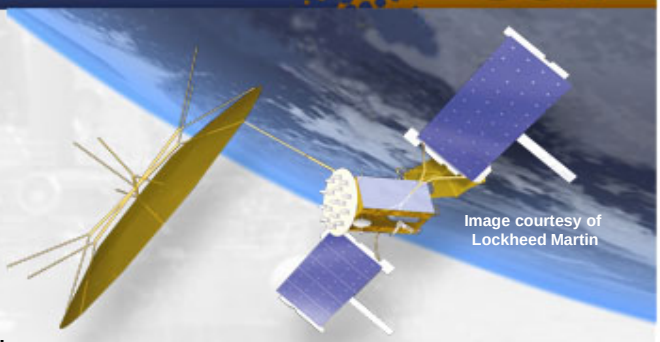
($ in Billions)



Numbers may not add due to rounding

Does not include MDA or S&T Space related funding

Mobile User Objective System



The Mobile User Objective System (MUOS) is DoD's next generation advanced narrow band Ultra High Frequency (UHF) communications satellite constellation. It consists of four satellites in geosynchronous orbit with one on-orbit spare and a fiber optic terrestrial network connecting four ground stations. The MUOS satellite includes the new networked payload and a separate legacy payload. The MUOS will replace the existing UHF Follow-On (UFO) constellation and provide a much higher data rate capability for mobile users.

- There will be 16 beams per satellite with data rates of 64 kbps "on-the-move."
- The DoD Teleport will be the portal to the Defense Information System Network (DSN, SIPRNET and NIPRNET).
- MUOS-1 was launched in February 2012 and is currently providing legacy UHF satellite communications in the Pacific Command Area of Responsibility.
- MUOS-2 successfully launched in July 2013; with the five-satellite global constellation expected to achieve full operational capability in 2017.

Mission: Provides the mobile warfighter with point-to-point and netted communications services with a secure, "communications-on-the-move" capability on a 24 hours a day, 7 days a week basis.

FY 2015 Program: Funds procurement of Evolved Expendable Launch Vehicle (EELV) for satellite #5; remaining testing and preparation efforts to support launch of satellite #3 scheduled for January 2015; and continues production of satellites #4 and #5, scheduled for launch in August 2015 and October 2016, respectively.

Prime Contractor: Lockheed Martin Corporation, Sunnyvale, CA

Mobile User Objective System

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	141.2	-	35.9	-	-	-	35.9	-	12.3	-
Procurement	21.4	-	16.9	-	-	-	16.9	-	208.7	-
Total	162.6	-	52.8	-	-	-	52.8	-	221.0	-

Numbers may not add due to rounding

Advanced Extremely High Frequency

The Advanced Extremely High Frequency (AEHF) system will be a four satellite constellation of communications satellites in geosynchronous orbit that will replenish the existing EHF system, Military Strategic Tactical Relay (MILSTAR), at a much higher capacity and data rate capability.

- 24-hour low, medium, and extended data rate satellite connectivity from 65 N to 65 S latitude worldwide
- 8 full-time spot beam antennas @ 75 bps to 8.192 Mbps data rate
- 24 time-shared spot beam coverages @ 75 bps to 2.048 Mbps data rate
- 2 crosslink antennas per satellite (60 Mbps)
- AEHF-1 and AEHF-2 are in orbit and operational; AEHF-3 was launched September 18, 2013
- The launch of AEHF-4 is planned for 2017; AEHF-5 and AEHF-6 are scheduled to replace AEHF-1 and AEHF-2 at the end of their useful life

Mission: Provides survivable, anti-jam, worldwide secure communications for strategic and tactical users aimed at withstanding shocks from a nuclear attack. It also provides transmission of tactical communications, such as real-time video, battlefield maps, and targeting data. The AEHF is a collaborative program that also includes resources for Canada, the United Kingdom, and the Netherlands.

FY 2015 Program: Continues funding for procurement of the space vehicles AEHF-5 and AEHF-6, and continues the Space Modernization Initiative (SMI) development activities to reduce future production costs by improving insertion of new technologies to replace obsolete parts and materials.

Prime Contractor: Lockheed Martin Corporation, Sunnyvale, CA

Advanced Extremely High Frequency										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	211.6	-	265.6	-	-	-	265.6	-	314.4	-
Procurement	476.6	-	328.4	-	-	-	328.4	-	298.9	-
Total	688.2	-	594.0	-	-	-	594.0	-	613.3	-

Numbers may not add due to rounding

Evolved Expendable Launch Vehicle

USAF

The Evolved Expendable Launch Vehicle (EELV) replaced the heritage Delta, Atlas, and Titan launch vehicle families. The EELV provides the Air Force, Navy, and the National Reconnaissance Office (NRO), and other government and commercial purchasers of launch services for medium to heavy lift class satellites. As of December 2006, the United Launch Alliance joint venture is the sole provider of EELV launch services.

- 100% mission success with over 67 consecutive operational launches.
- The program is being structured to introduce competition. EELV intends to include new entrants when certified.
- Increased quantity buy authorities and improved contracting approaches resulted in substantial savings in FY 2015.

Mission: Provides launch services and capability for medium and heavy class satellites.

FY 2015 Program: Continues the block buy of EELV Launch Services (ELS), specifically three launch vehicles, which are usually ordered no-later-than 24 months prior to the planned mission; and funds EELV Launch Capability (ELC) activities, such as launch preparation, site and operations activities, post mission analysis, and other related task. to support up to eight launches in a year.

Prime Contractor: United Launch Alliance (ULA), Centennial, CO

Evolved Expendable Launch Vehicle

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	29.9	-	24.9	-	-	-	24.9	-	-	-
Procurement	1,434.0	4	1,367.4	5	-	-	1,367.4	5	1,381.0	3
Total	1,463.9	4	1,392.3	5	-	-	1,392.3	5	1,381.0	3

Numbers may not add due to rounding

Global Positioning System

The Global Positioning System (GPS) provides world-wide, 24 hour a day, all weather 3-dimensional position, navigation, and precise timing (PNT) information for military and civil users. The fully operational GPS constellation is expected to consist of 27 satellites.

The GPS III space vehicles will be fully backward compatible with legacy signals while delivering new capabilities and enhancements to include a new L1C Galileo-compatible signal (civil), L5 (safety-of-life), and a more powerful M-code (military) signal, and a path for graceful growth to on-ramp future capabilities. The GPS Next Generation Operational Control System (OCX) will enable operational use of all modernized GPS signals, as well as enabling improved PNT performance.

Mission: Provides worldwide PNT to military and civilian users.

FY 2015 Program: Funds the procurement of GPS III satellite 9, as well as the advanced procurement for satellite 10. Continues the development of GPS OCX Blocks 1 and 2, Funds the technology development of Military GPS User Equipment (MGUE) Increment 1. Funds the GPS Program Office's responsibility as the Prime Integrator (Enterprise Integration) to synchronize space, control and user segment programs and manage civil/military specifications and requirements.

Prime Contractors: GPS III: Lockheed Martin Corporation, Newtown, PA
GPS OCX: Raytheon Company, Aurora, CO
GPS MGUE Inc 1: L3 Interstate Electronics Corp, Anaheim, CA
Rockwell Collins International, Cedar Rapids, IA
Raytheon Company, El Segundo, CA

Global Positioning System

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	681.1	-	701.2	-	-	-	701.2	-	669.0	-
Procurement	540.3	2	506.1	2	-	-	506.1	2	344.5	1
Total	1,221.5	2	1,207.4	2	-	-	1,207.4	2	1,013.5	1

Numbers may not add due to rounding

Space Based Infrared System

Space Based Infrared System (SBIRS) will field a four satellite constellation in Geosynchronous Earth Orbit (GEO) and a two hosted payload constellation in Highly Elliptical Orbit (HEO) with an integrated centralized ground station serving all SBIRS space elements. The SBIRS is the follow-on system to the Defense Support Program (DSP).

The infrared (IR) payload consists of a scanning IR sensor that provides two times the revisit rate and three times the sensitivity of DSP and a staring IR sensor that provides a higher fidelity and persistent coverage for areas of interest.

- HEO-1 and HEO-2 payloads went operational in 2008 and 2009, respectively. HEO-3 was delivered to the host satellite program in June 2013; HEO-4 delivery is planned in May 2015.
- GEO-1 and GEO-2 satellites launched in 2011 and 2013, respectively, and both have been accepted for operations. GEO-5 and GEO-6 are scheduled to replace GEO-1 and GEO-2 at the end of their useful lives.
- GEO-3 and GEO-4 will be delivered in September 2015 and September 2016, respectively.

Mission: Provides initial warning of ballistic missile attack on the United States, its deployed forces, and its allies.

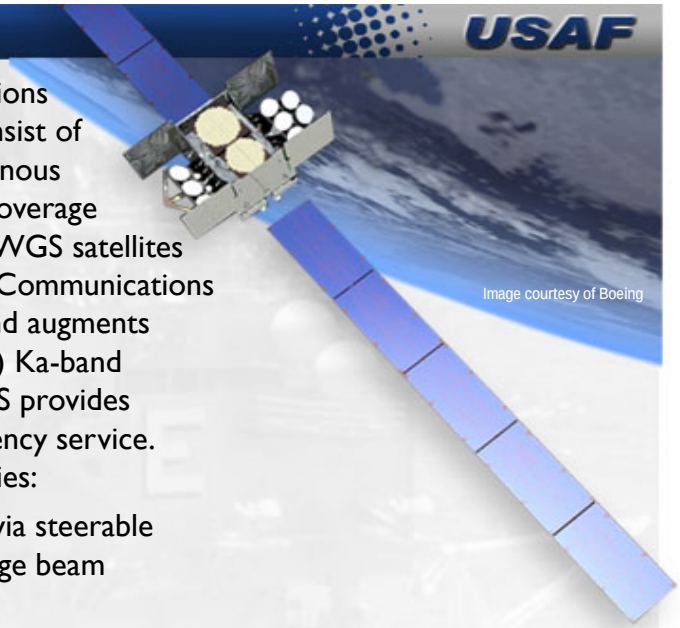
FY 2015 Program: Continues funding for procurement of the space vehicles GEO-5 and GEO-6, and continues the Space Modernization Initiative (SMI) development activities to reduce future production costs by improving insertion of new technologies to replace obsolete parts and materials.

Prime Contractor: Lockheed Martin Corporation, Sunnyvale, CA

Space Based Infrared System										
	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	486.6	-	322.4	-	-	-	322.4	-	319.5	-
Procurement	392.3	2	524.6	-	-	-	524.6	-	450.9	-
Total	878.9	2	847.0	-	-	-	847.0	-	770.4	-

Numbers may not add due to rounding

Wideband Global SATCOM



The Wideband Global Satellite Communications (SATCOM) (WGS) system is planned to consist of an eight satellite constellation in geosynchronous orbit providing worldwide communication coverage for tactical and fixed users. Dual-frequency WGS satellites augment, then replace the Defense Satellite Communications System (DSCS) X-band frequency service and augments the one-way Global Broadcast Service (GBS) Ka-band frequency capabilities. Additionally, the WGS provides a new high capacity two-way Ka-band frequency service. Each satellite features the following capabilities:

- X-band: 8 transmit/receive spot-beams via steerable phased-array antennas; one Earth coverage beam
- Ka-band: 10 gimbaled dish antennas

The WGS system currently consists of eight U.S.-funded satellites, and two funded via international partnerships with Australia, Canada, Denmark, Luxembourg, the Netherlands and New Zealand. WGS #1-3 have been operational since the beginning of 2008 and WGS #4 became operational in July 2012. Satellite vehicles WGS #5 and #6 launched in 2013. The remaining Block II Follow-on satellite vehicles WGS #7 through WGS #10 will be fully operational by 2019.

Mission: Provides high-capacity communications capabilities to support national objectives and to enable joint and coalition operations.

FY 2015 Program: Funds the checkout, launch, and support costs of WGS # 5 and #6. Development continues Command and Control System-Consolidated (CCS-C) system architecture changes to increase WGS capacity and reduce downtime, plus funds upgrades to WGS space and ground software/hardware to implement constellation-wide changes that will locate and neutralize ground-based jamming threats.

Prime Contractor: The Boeing Company, El Segundo, CA

Wideband Global Satellite

	FY 2013		FY 2014						FY 2015	
			Base Budget		OCO Budget		Total Enacted			
	$M	Qty	$M	Qty	$M	Qty	$M	Qty	$M	Qty
RDT&E	10.4	-	12.5	-	-	-	12.5	-	31.4	-
Procurement	36.8	-	34.0	-	-	-	34.0	-	39.0	-
Total	47.2	-	46.5	-	-	-	46.5	-	70.4	-

Numbers may not add due to rounding

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