PROGRAM ACQUISITION COSTS BY WEAPON SYSTEM

Department of Defense Budget
for Fiscal Years 2004/2005

February 2003

This document is prepared for the convenience and information of the public and the press. It is based on the best information available at the time of publication.

DEPARTMENT OF DEFENSE
FY 2004 BUDGET
PROGRAM ACQUISITION COSTS
(Dollars in Millions)

Weapon Programs by Service & Name

Army	AIRCRAFT	FY 2002	FY2003	FY2004	FY2005	Page No.
AH-64D	Longbow Apache	935.3	924.3	776.7	495.8	1
OH-58D	Kiowa Warrior	43.9	43.5	45.1	33.9	2
RAH-66	Comanche Helicopter	754.4	874.0	1,079.3	1,181.6	3
UH-60	Blackhawk Helicopter	276.1	401.8	237.2	148.0	4
Navy						
E-2C	Hawkeye	280.6	295.8	237.6	252.3	5
EA-6B	Prowler	302.0	309.7	243.7	207.4	6
F/A-18E/F	Hornet	3,353.2	3,418.6	3,210.2	3,104.9	7
MH-60R	Helicopter	155.8	209.8	475.6	510.9	8
MH-60S	Helicopter	290.9	375.5	490.6	483.5	9
T-45TS	Goshawk	180.6	214.1	339.2	237.4	10
Air Force						
B-2	Stealth Bomber	198.0	356.5	260.2	363.2	11
C-17	Airlift Aircraft	3,851.1	4,430.2	3,686.3	4,169.9	12
CAP	Civil Air Patrol	7.4	5.2	2.5	2.6	13
E-8C	Joint Surveillance Target Attack Radar System (Joint Stars)	512.1	347.5	94.4	135.1	14
F-15A	Eagle Multi-Mission Fighter	347.7	341.8	317.0	307.0	15
F-16 C/D	Falcon Multi-Mission Fighter	343.0	371.7	402.0	388.9	16
F-22	Raptor	3,908.3	5,374.4	5,170.2	5,087.5	17
DoD Wide/ Joint						
C-130J	Airlift Aircraft	373.8	770.0	734.5	1,460.5	18
JPATS	Joint Primary Aircraft Training System	253.7	231.6	283.0	292.0	19
JSF	Joint Strike Fighter	1,445.0	3,406.7	4,365.8	4,588.0	20
UAV	Unmanned Aerial Vehicles	716.5	1,199.1	1,390.3	1,935.2	21
V-22	Osprey	1,492.8	1,640.0	1,654.0	1,540.6	22
	MISSILES					
Army						
HIMARS	High Mobility Artillery Rocket System	102.2	241.4	211.6	282.4	23
JAVELIN	AAWS-M	408.7	219.2	140.7	115.7	24
LONGBOW	Longbow Hellfire Missile	255.9	194.4	43.1	28.5	25

DEPARTMENT OF DEFENSE
FY 2004 BUDGET
PROGRAM ACQUISITION COSTS
(Dollars in Millions)

Weapon Programs by Service & Name

Navy	Munitions	FY 2002	FY2003	FY2004	FY2005	Page No.
RAM	Rolling Airframe Missile	46.4	64.1	48.3	47.5	26
STANDARD	Missile (Air Defense)	169.0	174.2	225.2	251.4	27
TOMAHAWK	Cruise Missile	145.6	341.5	349.0	228.1	28
TRIDENT II	Sub Launched Ballistic Missile	578.0	614.0	780.0	910.5	29
Marine Corps						
PREDATOR	Predator Short Range Attack	-	35.7	36.4	36.9	30
Air Force						
SFW	Sensor Fuzed Weapon	108.5	124.1	117.8	117.4	31
WCMD	Wind Corrected Munitions	115.0	73.5	88.2	86.9	32
DoD WIDE/ JOINT						
AIM-9X	Sidewinder	89.0	112.9	107.6	98.0	33
AMRAAM	Advanced Medium Range Air-to-Air Missile	199.9	181.3	184.5	185.2	34
JASSM	Joint Air-to-Surface Standoff Missile	128.4	119.4	158.8	221.4	35
JDAM	Joint Direct Attack Munition	1,122.8	816.3	772.1	854.2	36
JSOW	Joint Standoff Weapon	34.2	129.8	219.3	221.0	37
Navy	**VESSELS**					
CVN-77	Aircraft Carrier	623.4	855.3	1,525.8	981.7	38
DDG-51	AEGIS Destroyer	3,386.2	2,624.9	3,404.0	3,648.6	39
LPD-17	San Antonio Class Amphibious Transport Ship	155.1	594.3	1,200.0	8.7	40
NSSN	Virginia Class Submarine	2,444.3	2,341.5	2,640.5	2,993.0	41
ADC (X)	Auxiliary Dry Cargo Ship	360.8	386.3	722.3	742.5	42
Army	**COMBAT VEHICLES**					
M1A2	Abrams Tank Upgrade	794.8	684.0	379.7	511.8	43
M2A3	Bradley Base Sustainment	387.3	437.4	113.3	71.8	44
IAV	Interim Armored Vehicle (Stryker)	751.3	898.8	1,001.0	1,022.8	45

DEPARTMENT OF DEFENSE
FY 2004 BUDGET
PROGRAM ACQUISITION COSTS
(Dollars in Millions)

Weapon Programs by Service & Name

	SPACE PROGRAMS	FY 2002	FY2003	FY2004	FY2005	Page No.
Army						
DSCS	Ground Systems	117.5	99.0	111.8	107.9	46
Navy						
MUOS	Mobile USER Objective System	34.4	59.0	315.8	790.5	47
Air Force						
AEHF	Advanced Extremely High Frequency Satellite	459.6	822.5	778.1	668.7	48
DSP	Defense Support Program	103.5	115.5	113.1	29.4	49
EELV	Evolved Expendable Launch Vehicle	321.8	222.6	617.3	773.3	50
MLV	Medium Launch Vehicles	39.3	47.8	91.1	88.6	51
NAVSTAR GPS	NAVSTAR Global Positioning System	456.3	652.6	505.9	609.9	52
SBIRS-H	Space Based Infrared Systems-High	524.5	775.4	712.6	508.9	53
TITAN	Heavy Launch Vehicle	244.3	288.7	91.5	74.7	54
	OTHER PROGRAMS					
Army						
FHTV	Family of Heavy Tactical Vehicles	159.1	252.4	133.1	99.7	55
FMTV	Family of Medium Tactical Vehicles	459.9	662.9	309.8	491.8	56
HMMWV	High Mobility Multipurpose Wheeled Vehicles	146.3	234.3	137.8	205.8	57
DoD WIDE/ JOINT						
MD	Missile Defense	7,708.7	7,593.6	9,088.3	9,727.8	58

AIRCRAFT PROGRAMS
ARMY

LONGBOW APACHE

Description: Longbow Apache consists of a mast mounted Fire Control Radar (FCR) integrated into an upgraded and enhanced AH-64 airframe. The FCR effort is being accomplished by a joint venture team comprised of two companies, Northrop-Grumman, Baltimore, MD and Lockheed-Martin Corporation, Owego, NY. Boeing Corporation is the prime contractor for the Longbow Apache program.

Mission: Longbow Apache will provide the AH-64 a fire and forget HELLFIRE capability, greatly increasing weapon system effectiveness and aircraft survivability.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(60)	895.7	(74)	880.2	(64)	776.7	(19)	495.8
RDT&E		39.6		44.1		-		-
TOTAL		935.3		924.3		776.7		495.8

ARMED OH-58D (KIOWA WARRIOR)

Description: The Armed OH-58D is a single engine, 4-bladed main rotor helicopter that has been modified with television, Thermal Imaging System (TIS), and laser rangefinder-designator incorporated into a Mast-Mounted Sight (MMS). Designed to operate autonomously, the Kiowa Warrior provides command and control, target acquisition, target designation, reconnaissance, and light attack capabilities under day, night, and adverse weather conditions. It provides adjustment of conventional artillery as well as spotting and laser designation for precision guided munitions. The Kiowa Warrior is the Army's first fully digitized helicopter. The prime contractor is Bell Helicopter of Fort Worth, TX. The engines are produced by Detroit Diesel Allison of Indianapolis, IN.

Mission: The Kiowa Warrior provides commanders with a survivable, real-time combat information, command and control reconnaissance, security, aerial observation, and target acquisition-designation system to operate with attack helicopter, air cavalry, and field artillery units during day, night, and other reduced visibility conditions.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	42.1	(-)	41.7	(-)	45.1	(-)	33.9
RDT&E		1.8		1.8		-		-
TOTAL		43.9		43.5		45.1		33.9

RAH-66 COMANCHE HELICOPTER

Description: The RAH-66 Comanche Helicopter program will develop an armed reconnaissance helicopter which will replace the Army's rapidly aging fleet of OH-58 and AH-1 aircraft. Two development contracts have been awarded. Airframe and avionics development is being done by a joint venture between United Technologies Corporation, Sikorsky Aircraft Division of Stratford, CT and the Boeing Company of Philadelphia, PA. Light Helicopter Turbine Engine Company, a partnership of Honeywell, Phoenix, AZ and Rolls Royce, Indianapolis, IN, is doing engine development for the T-800 growth engine.

Mission: The RAH-66 will be used for armed reconnaissance and light attack missions.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
RDT&E		**754.4**		**874.0**		**1,079.3**		**1,181.6**

UH-60 UTILITY HELICOPTER (BLACKHAWK)

Description: The BLACKHAWK is a twin engine, single-rotor helicopter that is designed to carry a crew of four and a combat equipped squad of eleven or an equal cargo load. It is also capable of carrying external loads of up to 6,000 lbs. The prime contractor is Sikorsky Aircraft of Stratford, CT.

Mission: The BLACKHAWK 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.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(12)	206.6	(19)	291.8	(10)	167.0	(8)	124.9
RDT&E		69.5		110.0		70.2		23.1
TOTAL		276.1		401.8		237.2		148.0

E-2C HAWKEYE

Description: The E-2C Hawkeye is an all-weather, carrier-based, airborne early warning aircraft. Prime contractors are Northrop-Grumman Corporation of St. Augustine, FL for the airframe and Allison Engine Company, Indianapolis, IN for the engine. The budget request supports a new 4-year multiyear procurement.

Mission: The missions of the E-2C aircraft are airborne early warning, strike and control, radar surveillance, search and rescue assistance, communication relay and automatic tactical data exchange.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(5)	273.6	(5)	288.0	(2)	228.5	(2)	246.1
RDT&E		7.0		7.8		9.1		6.2
TOTAL		280.6		295.8		237.6		252.3

AIRCRAFT PROGRAMS
NAVY

EA-6B PROWLER

Description: The EA-6B Prowler is a 4-seat twin engine derivative of the A-6 Attack aircraft that is equipped with a computer-controlled electronic surveillance and control system and high power jamming transmitters. The overall goals of the modification program are to upgrade the airframe structure and avionics systems to increase the life of the aircraft and to expand the aircraft's jamming capabilities. Contractors are Northrop Grumman and AIL Systems.

Mission: The mission of the EA-6B aircraft is to provide all weather electronic countermeasures (ECM) in support of Navy and Marine Corps strike forces. The budget request includes funding to modify the EA-6B aircraft.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement		216.6		257.1		207.1		168.9
RDT&E		85.4		52.6		36.6		38.5
TOTAL		302.0		309.7		243.7		207.4

F/A-18E/F HORNET

Description: The F/A-18E/F is a twin-engine, high-performance, multi-mission, tactical aircraft for deployment in Navy fighter and attack squadrons. The F/A-18E/F possesses enhanced range, payload and survivability features compared with the current C/D model aircraft and is designed to replace the F-14 fighter aircraft. Prime contractors are Boeing Aircraft Corporation of St. Louis, MO for the airframe and General Electric Company, Aircraft Engine Division of Lynn, MA for the engines. Northrop Grumman Corporation, Hawthorne, CA is a major subcontractor. The budget request supports continuation of a five year multiyear procurement.

Mission: The F/A-18E/F is a strike fighter capable of performing the following missions: strike, interdiction, close air support, fighter escort, and fleet air defense.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(48)	3,100.3	(46)	3,208.1	(42)	3,031.2	(42)	2,981.9
RDT&E		252.9		210.5		179.0		123.0
TOTAL		3,353.2		3,418.6		3,210.2		3,104.9

AIRCRAFT PROGRAMS
NAVY

MH-60R

Description: The MH-60R Multi-Mission Helicopter Upgrade program provides battle group protection and adds significant capability in coastal littorals and regional conflicts. The upgrade scope includes new H-60 Series airframes, significant avionics improvements, enhancements to the acoustic suite, new radar and an improved electronics surveillance system. Prime contractors are Sikorsky Aircraft of Stratford, CT for the airframe and Lockheed Martin of Owego, NY for the avionics.

Mission: The MH-60R will be the forward deployed fleet's primary Anti-Submarine and Anti- Surface Warfare platform. The budget request provides funding for continued systems development and non-recurring production efforts.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	14.4	(-)	117.0	(6)	398.6	(10)	431.7
RDT&E		141.4		92.8		77.0		79.2
TOTAL		155.8		209.8		475.6		510.9

MH-60S Helicopter

Description: 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. The budget request supports participation in the Army's multiyear procurement. The prime contractor is Sikorsky Aircraft of Stratford, CT.

Mission: The MH-60S will conduct vertical replenishment (VERTREP), 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; and day/night search and rescue. Organic Airborne Mine Countermeasures (OAMCM) has been added as a primary mission for the MH-60S. Five separate sensors will be integrated into the MH-60S helicopter and will provide Carrier Battle Groups and Amphibious Readiness Groups with an OAMCM capability.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(13)	251.5	(15)	352.8	(13)	431.5	(15)	401.8
RDT&E		39.4		22.7		59.1		81.7
TOTAL		290.9		375.5		490.6		483.5

T-45 GOSHAWK

Description: The T-45 GOSHAWK is a derivative of the British Aerospace HAWK aircraft. The T-45 Training System will integrate aircraft, simulators, academics, and a training management system into a replacement for current intermediate and advanced phase training aircraft. The prime contractor is Boeing Aircraft Company, St. Louis, MO; British Aerospace of Kingston, England provides the center and aft fuselage; and Rolls Royce, Ltd of Bristol, England provides the engine.

Mission: The T-45 will provide undergraduate jet pilot training for Navy and Marine Corps aviators.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(6)**	**180.6**	**(8)**	**214.1**	**(15)**	**339.2**	**(8)**	**237.4**

B-2 STEALTH BOMBER

Description: The B-2 is an intercontinental bomber that employs low observable technology to achieve its mission. The bomber is an all-wing, two-place aircraft with twin weapon bays. Four General Electric F-118-GE100 aircraft engines power the B-2. Northrop-Grumman Corporation, El Segundo, CA is the prime contractor for the B-2s. The FY 2004 budget request includes funding to continue modification and development of the aircraft.

Mission: The primary mission of the B-2 is to enable any theater commander to hold at risk and, if necessary, attack an enemy's war-making potential, especially those time critical targets that, if not destroyed in the first hours or days of a conflict, would allow unacceptable damage to be inflicted on the friendly side. The B-2 will also retain its potential as a nuclear bomber, reinforcing the deterrence of nuclear conflict.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement		34.5		96.8		83.4		126.6
RDT&E		163.5		259.7		176.8		236.6
TOTAL		198.0		356.5		260.2		363.2

C-17 AIRLIFT AIRCRAFT

Description: The C-17 is a wide-body aircraft capable of airlifting outsized and oversized payloads over intercontinental ranges, with or without in-flight refueling. Its capabilities include rapid direct delivery of forces by airland or airdrop into austere tactical environments and is capable of performing both intertheater and intratheater airlift missions. The major contractors are Boeing, Long Beach, CA (Airframe) and Pratt-Whitney, East Hartford, CT (Engine). The FY 2004 budget reflects the Air Force's planned follow-on multiyear procurement of 60 additional aircraft, which will provide needed airlift capability to meet both strategic (long range) and tactical (theater) requirements.

Mission: The C-17 will provide outsize intratheater airland/airdrop capability not available in the current airlift force and replace C-141s as they begin to retire.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(15)	3,745.1	(15)	4,276.4	(11)	3,502.3	(14)	3,969.7
RDT&E		106.0		153.8		184.1		200.2
TOTAL		3,851.1		4,430.2		3,686.3		4,169.9

CIVIL AIR PATROL (CAP) AIRCRAFT

Description: The Civil Air Patrol aircraft will be new or used propeller-driven commercial aircraft to be provided to the Civil Air Patrol by the Air Force from various contractors. When originally established, the Civil Air Patrol was to receive its operating equipment from excess inventory in the Department of Defense. In recent years, the inventory of propeller-driven aircraft in the Department of Defense has been decreasing, allowing for fewer aircraft for modernization of the CAP. The Congress, in recognition of this fact, has permitted the Air Force to procure used or new aircraft specifically for transfer to the CAP. The FY 2004 budget requests funding for the continued procurement of aircraft.

Mission: The CAP aircraft will be utilized by the CAP to perform its mission of emergency search and rescue services and to provide aeronautical education for its members and the public.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(27)	7.4	(27)	5.2	(27)	2.5	(27)	2.6

E-8C JOINT STARS

Description: The E-8C Joint Surveillance Target Attack Radar System (Joint STARS) aircraft is a Boeing 707 class aircraft modified to operate a target attack radar system to detect and track both moving and fixed enemy ground targets. Northrop-Grumman Corporation, Melbourne, FL is the prime contractor. The FY 2004 budget requests funding for aircraft production, modifications, and continued development.

Mission: Joint STARS will provide battlefield surveillance, attack planning and control and post-attack damage assessment.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(1)	364.4	(1)	287.2	(-)	36.0	(-)	45.6
RDT&E		147.7		60.3		58.4		89.5
TOTAL		512.1		347.5		94.4		135.1

F-15E EAGLE MULTI MISSION FIGHTER

Description: The F-15E is a twin-engine, two-man crew, fixed swept wing aircraft. The F-15E maintains the basic F-15 air superiority characteristics while adding air-to-surface weapons capability. Prime contractors are Boeing of St. Louis, MO for the airframe, and Pratt and Whitney of East Hartford, CT for the engine. The FY 2004 budget request provides for continuation of modification and development activities.

Mission: The F-15E performs both air superiority and all-weather, deep penetration, and night/under-the-weather attack with large air-to-surface weapon payloads.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement		247.7		281.4		204.9		191.5
RDT&E		100.0		60.4		112.1		115.5
TOTAL		347.7		341.8		317.0		307.0

AIRCRAFT PROGRAMS
AIR FORCE

F-16 FALCON MULTI-MISSION FIGHTER

Description: The F-16 is a single seat, fixed wing, high performance fighter aircraft powered by a single engine. The advanced technology features include a blended wing body, reduced static margin, and fly-by-wire flight control system. Prime contractors are Lockheed-Martin of Fort Worth, TX for the airframe and Pratt and Whitney of East Hartford, CT and General Electric, Evendale, OH for the engine. The FY 2004 budget request provides for continued modification and development activities.

Mission: The F-16 aircraft is a lightweight, high performance, multipurpose fighter capable of performing a broad spectrum of tactical air warfare tasks at affordable cost well into the next century.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement		236.0		290.1		314.5		289.0
RDT&E		107.0		81.6		87.5		99.9
TOTAL		343.0		371.7		402.0		388.9

AIRCRAFT PROGRAMS
AIR FORCE

F-22 RAPTOR

Description: The F-22 program is the next generation air superiority fighter for the first part of the century. The F-22 is being designed to penetrate enemy airspace and achieve first-look, first-kill capability against multiple targets. The contractors for Engineering & Manufacturing Development are Lockheed Martin, Marietta, GA, and Ft. Worth, TX; Boeing, Seattle, WA for the airframe; and Pratt & Whitney, West Palm Beach, FL for the engine. The FY 2004 budget request provides for continued development funding and the production of 22 aircraft, although the Air Force is committed to the buy-budget production strategy.

Mission: The F-22 will enhance U.S. air superiority capability against the projected threat and will eventually replace the F-15 aircraft.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(13)	3,031.0	(20)	4,468.5	(22)	4,233.7	(24)	4,502.1
RDT&E		877.3		905.9		936.5		585.4
TOTAL		3,908.3		5,374.4		5,170.2		5,087.5

C-130J AIRLIFT AIRCRAFT

Description: The Hercules C-130J is a tactical airlift aircraft that will address the need to modernize the U.S. tactical airlift capability. The C-130J will be capable of performing a number of tactical airlift missions including deployment and redeployment of troops and/or supplies within and between command areas in a theater of operation, aeromedical evacuation, air logistic support and augmentation of strategic airlift forces. The major contractors are Lockheed Corporation, Marietta, GA for the airframe and General Motors Corporation, Allison Division, Indianapolis, IN for the engine. The funding reflected below does not include funding to modify older model C-130 aircraft.

Mission: The mission of the C-130J is the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas through airlanding, extraction, airdrop, or other delivery techniques; and the air logistic support of all theater forces, including those engaged in combat operations. These aircraft will eventually replace C-130Es as they begin to retire.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force								
C-130	(-)	59.8	(-)	156.2	(-)	195.7	(-)	168.5
C-130J	(1)	159.1	(-)	295.9	(5)	446.0	(12)	945.3
Navy								
KC-130J	(2)	154.9	(4)	308.1	(-)	79.2	(4)	308.9
Subtotal		**373.8**		**760.2**		**720.9**		**1,422.7**
RDT&E, AF		**-**		**9.8**		**13.6**		**37.8**
TOTAL		**373.8**		**770.0**		**734.5**		**1,460.5**

JOINT PRIMARY AIRCRAFT TRAINING SYSTEM (JPATS)

Description: The Joint Primary Aircraft Training System (JPATS) is a joint Air Force/Navy program to replace both Air Force and Navy fleets of primary trainer aircraft (T-37 and T-34, respectively) and associated Ground Based Training Systems (GBTS). The program includes the purchase of aircraft, simulators, ground-based training devices, training management systems, instructional courseware, and logistics support. The contractor is Beech Aircraft Corporation, Wichita, KS (airframe). The FY 2004 budget provides funding for production aircraft.

Mission: The mission of the JPATS is to support joint Air Force and Navy specialized undergraduate pilot training. It will support training of student aviators in the fundamentals of flying prior to transition into advanced training.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force	(40)	223.4	(35)	204.0	(52)	280.6	(53)	289.5
Navy	(7)	30.3	(4)	27.6	(-)	2.4	(-)	2.5
TOTAL		**253.7**		**231.6**		**283.0**		**292.0**

JOINT STRIKE FIGHTER (JSF)

Description: The Joint Strike Fighter (JSF), is the next-generation strike fighter for the Air Force, Marine Corps, Navy and U.S. allies. This joint program will facilitate the development of affordable aircraft and related systems, with transition of key technologies and common components to support future requirements while reducing cost and risk. The Navy and Air Force will each provide approximate equal shares of development funding for the program during the Future Years Defense Program (FYDP). The Defense Advanced Research Projects Agency (DARPA) also contributed funding for the concept flight demonstration effort. The FY 2004 budget request continues the System Design and Development (SDD) phase of the program.

Mission: JSF will ultimately result in the acquisition of one or more aircraft to replace Air Force F-16s, Marine Corps AV-8Bs, and F/A-18s and provide the Navy a first day of war survivable strike fighter to complement the F/A-18E/F.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Navy		-		-		-		48.7
Air Force		-		-		-		70.8
Subtotal		-		-		-		**119.5**
RDT&E								
Navy		724.9		1,708.9		2,171.7		2,226.0
Air Force		720.1		1,697.8		2,194.1		2,242.5
Subtotal		**1,445.0**		**3,406.7**		**4,365.8**		**4,468.5**
TOTAL		**1,445.0**		**3,406.7**		**4,365.8**		**4,588.0**

AIRCRAFT PROGRAMS
DOD-WIDE/JOINT

UNMANNED AERIAL VEHICLES (UAV)

Description: The Department is acquiring a family of Unmanned Aerial Vehicles (UAV) to satisfy tactical reconnaissance mission requirements. Each air vehicle system is being specifically tailored to conduct continuous overhead surveillance in all weather conditions during the day and night, in direct support of the Joint Forces Commander. The UAVs are equipped with electro-optical and Synthetic Aperture Radar (SAR), and other sensors to perform their mission. The systems being developed and procured are: Tactical UAV (Shadow); Medium Altitude Endurance UAV (Predator); High Altitude Endurance UAV (Global Hawk); and Combat UAV (UCAV). Contractors Shadow (AAI Corporation, Hunt Valley, MD), Predator (General Atomics, Rancho Bernardo, CA), and Global Hawk (Northrop Grumman Ryan, Palmdale, CA)

Mission: The purpose of airborne reconnaissance UAVs is to collect and transmit intelligence information to the combat forces. The function of the UAVs in an airborne reconnaissance environment is to transport sensor, information-processing, and communications systems to locations where the desired information can be collected, to provide an acceptable level of survivability throughout the mission, and to return for repeated use.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Global Hawk (AF)	(3)	162.3	(3)	165.6	(4)	252.9	(4)	303.2
Predator (AF)	*(29)	91.8	*(25)	129.5	(16)	193.6	(19)	197.9
Shadow (Army)	(5)	56.4	(9)	99.0	(8)	73.8	(6)	57.7
UUV (Navy)	(-)	-	(-)	-	(-)	-	(2)	61.4
Subtotal	**(37)**	**310.5**	**(37)**	**394.1**	**(28)**	**520.3**	**(34)**	**620.2**
RDT&E								
Global Hawk (AF)		204.0		334.0		357.0		300.0
Global Hawk (Navy)		-		189.0		76.0		57.0
Broad Area Maritime (Navy)		-		-		25.0		224.0
Predator (AF)		4.0		15.0		40.0		40.0
Shadow (Army)		23.0		34.0		12.0		14.0
Fire Scout (Navy)		48.0		39.0		4.0		-
UCAV Air Force		19.0		57.0		182.0		428.0
UCAV Navy		-		-		57.0		172.0
UCAV DARPA		62.0		63.0		36.0		14.0
UUV (Navy)		46.0		74.0		81.0		66.0
Subtotal		**406.0**		**805.0**		**870.0**		**1,315.0**
TOTAL		**716.5**		**1,199.1**		**1,390.3**		**1,935.2**

* Includes UAV's bought with DERF.

V-22 OSPREY

Description: 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, long range special operations forces (SOF) missions for USSOCOM, and the strike rescue needs of the Navy. The aircraft will be capable of flying 2,100 miles with one refueling, giving the Services the advantage of a V/STOL aircraft that could rapidly self-deploy to any location in the world. Procurement objective is 458 (360 MV-22 aircraft for the Marine Corps; 50 CV-22 aircraft for USSOCOM; and 48 HV-22 aircraft for the Navy). The MV-22 will replace the CH-46E and CH-53D helicopters. The contractors include Textron, Inc., Bell Helicopter Division, Fort Worth, TX and Boeing Vertol, Philadelphia, PA.

Mission: The V-22 mission includes airborne assault, vertical lift, combat search and rescue, and special operations.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
MV-22 (USMC)	(9)	821.7	(11)	1057.6	(9)	877.0	(8)	879.8
CV-22 (AF)	(-)	18.2	(-)	97.6	(2)	233.1	(3)	302.1
Subtotal	**(9)**	**839.9**	**(11)**	**1,155.2**	**(11)**	**1,110.1**	**(11)**	**1,181.9**
RDT&E	**(2)**	**652.9***		**484.8**		**543.9**		**358.7**
TOTAL		**1,492.8**		**1,640.0**		**1,654.0**		**1,540.6**

* Funding includes $180 million for two CV-22 test aircraft.

HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)

Description: The High Mobility Artillery Rocket System (HIMARS) consists of a C-130 transportable, wheeled, indirect fire, rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) family of munitions. Previous variants of MLRS launchers have been cancelled in favor of HIMARS. The prime contractor is Lockheed Martin Missiles and Fire Control, Dallas, TX. The FY 2004 budget continues procurement of HIMARS Launchers, as well as provides for continued upgrade development.

Mission: To neutralize or suppress enemy field artillery and air defense systems and supplement cannon artillery fires.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	-	(28)	128.6	(24)	124.2	(37)	169.8
RDT&E		102.2		112.8		87.4		112.6
TOTAL		102.2		241.4		211.6		282.4

JAVELIN ADVANCED ANTI-TANK WEAPON SYSTEM-MEDIUM (AAWS-M)

Description: The Javelin Advanced Anti-tank Weapon System-Medium (AAWS-M) is a man-portable fire and forget weapon system that is replacing the existing DRAGON anti-armor missile system in Army Infantry, Combat Engineer, and Scout units. Javelin is highly lethal against tanks with conventional and reactive armor. Special features of Javelin are the choice of top attack or direct fire mode, integrated day/night sight, soft launch permitting fire from enclosures, and imaging infrared seeker. Procurement funds buy Missiles, Command Launch Units (CLU) and Training Devices. The prime contractor is the Raytheon TI and Lockheed Martin Javelin Joint Venture at Tucson, AZ and Orlando, FL. The FY 2004 budget funds the first year of a new multi-year procurement contract to continue the production of Javelin missiles.

Mission: To defeat armored targets.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(4,139)**	**408.7**	**(1,478)**	**219.2**	**(901)**	**140.7**	**(1,062)**	**115.7**

LONGBOW HELLFIRE MISSILE

Description: Longbow Hellfire integrates fire and forget technology in the Hellfire missile by incorporating a millimeter wave radar seeker in the Hellfire II aft section bus. The fire and forget guidance, which allows the helicopter to launch and then immediately re-mask, improves weapons system survivability by minimizing exposure to enemy fire. The Longbow system is used on the Apache and Comanche helicopters. The primary advantages of the Longbow Hellfire missile include adverse weather capability (rain, snow, fog, smoke, and battlefield obscurants); millimeter wave countermeasures survivability; an advanced warhead capable of defeating all projected armor threats; and the capability of reprogramming the missile to adapt to changing threats and mission requirements. Work is being accomplished by the Longbow Limited Liability Company, a joint venture of Lockheed Martin Corporation, Orlando, FL and Northrop Grumman, Huntsville, AL. The FY 2004 budget primarily supports deliveries of missiles under production in previous years.

Mission: Longbow Hellfire will provide an adverse weather, fire and forget, heavy antiarmor capability for the Apache and Comanche helicopters.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(2,200)	238.3	(1,797)	181.4	(-)	33.1	(-)	28.5
RDT&E		17.6		13.0		10.0		-
TOTAL		255.9		194.4		43.1		28.5

ROLLING AIRFRAME MISSILE (RAM)

Description: The Rolling Airframe Missile (RAM) is a high firepower, low cost, lightweight complementary self-defense system to engage anti-ship cruise missiles. The prime contractor is Raytheon Corporation, Tucson, AZ. The FY 2004 budget continues production.

Mission: The mission of the RAM is to provide high firepower close-in defense of combatant and auxiliary ships by utilizing a dual mode, passive radio frequency/infrared missile in a compact 21 cell launcher.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(90)**	**46.4**	**(90)**	**64.1**	**(90)**	**48.3**	**(90)**	**47.5**

STANDARD MISSILE

Description: The STANDARD missile family consists of various air defense missiles including supersonic, medium and extended range, surface-to-air and surface-to-surface missiles. The prime contractor is Raytheon Corporation, Tucson, AZ. The FY 2004 budget continues production and starts development of a follow-on Extended Range Active Missile (ERAM).

Mission: The mission of the STANDARD missile family is to provide all-weather, anti-aircraft and surface-to-surface armament for cruisers, destroyers and guided missile frigates.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(96)	155.4	(93)	153.4	(75)	148.3	(75)	150.7
RDT&E		13.6		20.8		76.9		100.7
TOTAL		169.0		174.2		225.2		251.4

TACTICAL TOMAHAWK CRUISE MISSILE

Description: The Tactical Tomahawk cruise missile weapon system is a long-range conventional warhead system which is sized to fit torpedo tubes and capable of being deployed from a variety of surface ship and submarine platforms. The prime contractor is Raytheon, Tucson, AZ. The FY 2004 budget continues production.

Mission: The mission of the TOMAHAWK is to provide a long-range cruise missile launched from a variety of platforms against land and sea targets.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(25)	73.0	(167)	244.1	(267)	277.6	(218)	192.0
RDT&E		72.6		97.4		71.4		36.1
TOTAL		145.6		341.5		349.0		228.1

MUNITIONS PROGRAMS
NAVY

TRIDENT II

Description: The TRIDENT II (D-5) is a submarine launched ballistic missile with greater range, payload capability and accuracy than the TRIDENT I. The major contractor is Lockheed Martin Missiles and Space Company, Sunnyvale, CA.

Mission: The mission of the TRIDENT II is to deter nuclear war by means of assured retaliation in response to a major attack on the U.S. and to enhance nuclear stability by providing no incentive for enemy first strike.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(12)	534.9	(12)	574.7	(12)	675.2	(5)	770.8
RDT&E		43.1		39.3		104.8		139.7
TOTAL		578.0		614.0		780.0		910.5

MUNITIONS PROGRAMS
MARINE CORPS

PREDATOR

Description: The Predator is a one man portable, fire-and-forget system designed to defeat the next generation of advanced armor threats, including those equipped with explosive reactive or supplemental armor. The system consists of a missile and disposable launcher. It is lightweight (less than 21 pounds) and features an advanced warhead coupled with a guidance system capable of hitting both stationary and moving targets. The Predator is capable of soft launch, which increases the gunner's survivability and allows the weapon to be fired from enclosures. Once launched, the Predator travels in a top-attack profile using magnetic and optical sensors to detect the target; and explosively formed penetrator warhead defeats the target. Procurement funds buy missiles and launchers. The prime contractor is Lockheed Martin Electronics and Missiles Division in Troy, AL. The FY 2004 budget continues production.

Mission: To defeat armor targets.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(-)**	**-**	**(445)**	**35.7**	**(526)**	**36.4**	**(673)**	**36.9**

SENSOR FUZED WEAPON (SFW)

Description: The Sensor Fuzed Weapon (CBU-97/B) is a cluster munition designed for direct attack against armored targets. The SFW is manufactured by Textron Defense Systems, Wilmington, MA. The FY 2004 budget continues production.

Mission: The objective of the SFW is to develop and produce a conventional munition capable of multiple kills per pass against operating armored vehicles, air defense units, and other support vehicles.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(270)**	**108.5**	**(310)**	**124.1**	**(294)**	**117.8**	**(285)**	**117.4**

MUNITIONS PROGRAMS
AIR FORCE

WIND CORRECTED MUNITIONS DISPENSER (WCMD)

Description: The Wind Corrected Munitions Dispenser (WCMD) guidance kit for the Combined Effects Munition, Gator Mine, and Sensor Fuzed Weapon provides inertial navigation to correct for the effects of wind transients and ballistic errors caused by wind when these munitions are released from medium to high altitudes. The contractor is Lockheed-Martin, Orlando, Florida. The FY 2004 budget continues production as well as development of an extended range variant of WCMD to provide standoff range for the above munitions.

Mission: The objective of the WCMD is to improve the war-fighting effectiveness of both bombers and fighters.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(6,917)	115.0	(3,262)	70.0	(2,516)	72.4	(2,130)	62.3
RDT&E		-		3.5		15.8		24.6
TOTAL		115.0		73.5		88.2		86.9

MUNITIONS PROGRAMS
DOD-WIDE/JOINT

AIR INTERCEPT MISSILE – 9X (AIM-9X)

Description:. The AIM-9X short range air-to-air missile provides a launch and leave, air combat missile that uses passive infrared energy for acquisition and tracking of enemy aircraft. AIM-9X is a joint Navy/Air Force program led by the Navy. The prime contractor is Raytheon Corporation, Tucson, AZ. The FY 2004 budget continues production.

Mission: The mission of the AIM-9X is to destroy low and high altitude, high-speed enemy targets in an electronic countermeasures environment.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force	(138)	38.4	(286)	55.9	(386)	69.1	(275)	52.7
Navy	(105)	25.8	(284)	52.2	(167)	35.8	(162)	35.6
Subtotal	**(243)**	**64.2**	**(570)**	**108.1**	**(553)**	**104.9**	**(437)**	**88.3**
RDT&E								
Air Force		6.9		2.9		.4		5.6
Navy		17.9		1.9		2.3		4.1
Subtotal		**24.8**		**4.8**		**2.7**		**9.7**
TOTAL		**89.3**		**112.9**		**107.6**		**98.0**

ADVANCED MEDIUM RANGE AIR-TO- AIR MISSILE (AMRAAM)

Description: 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. AMRAAM is a joint Navy/Air Force program led by the Air Force. The prime contractor is Raytheon Corporation, Lowell, MA. The FY 2004 budget continues production, as well as upgrade developments.

Mission: The mission of the AMRAAM is to destroy low and high altitude, high-speed enemy targets in an electronic countermeasure environment.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force	(190)	100.2	(158)	87.9	(201)	105.2	(202)	107.7
Navy	(55)	36.5	(100)	50.0	(53)	37.6	(46)	36.1
Subtotal	**(245)**	**136.7**	**(258)**	**137.9**	**(254)**	**142.8**	**(248)**	**143.8**
RDT&E								
Air Force		53.5		35.5		32.4		33.4
Navy		9.7		7.9		9.3		8.0
Subtotal		**63.2**		**43.4**		**41.7**		**41.4**
TOTAL		**199.9**		**181.3**		**184.5**		**185.2**

JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)

Description: The Joint Air-to-Surface Standoff Missile (JASSM) is a joint Air Force and Navy development program led by the Air Force to provide a conventional precision guided, long range standoff cruise missile that can be delivered from both fighters and bombers. The prime contractor is Lockheed Martin Integrated Systems, Inc., Orlando, FL. The FY 2004 budget continues production as well as follow-on development activities.

Mission: The mission of the JASSM is to destroy targets from a long-range standoff position and is deliverable by both fighters and bombers.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force	**(76)**	**42.7**	**(100)**	**53.8**	**(250)**	**102.5**	**(360)**	**148.3**
RDT&E								
Air Force		82.8		51.0		31.2		45.9
Navy		2.9		14.6		25.1		27.2
Subtotal		**85.7**		**65.6**		**56.3**		**73.1**
TOTAL		**128.4**		**119.4**		**158.8**		**221.4**

JOINT DIRECT ATTACK MUNITION

Description: The Joint Direct Attack Munition (JDAM) program is a joint Air Force/Navy program led by the Air Force. The JDAM improves the existing inventory of MK82, MK83, MK84, and BLU-109 weapons by integrating a Global Positioning System (GPS)/inertial navigation guidance capability that improves accuracy and adverse weather capability. The prime contractor is Boeing, St. Louis, MO. The FY 2004 budget continues production. The FY 2002 program includes JDAM kits bought with the Defense Emergency Response Fund (DERF).

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

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force	(20,305)	581.5	(22,873)	477.1	(20,244)	427.7	(23,137)	523.3
Navy	(22,441)	466.0	(12,280)	275.2	(12,326)	277.3	(11,014)	264.9
Subtotal	**(42,746)**	**1,047.5**	**(35,153)**	**752.3**	**(32,570)**	**705.0**	**(34,151)**	**788.2**
RDT&E								
Air Force		26.3		16.2		34.1		-
Navy		49.0		47.8		33.0		66.0
Subtotal		**75.3**		**64.0**		**67.1**		**66.0**
TOTAL		**1,122.8**		**816.3**		**772.1**		**854.2**

JOINT STANDOFF WEAPON (JSOW)

Description: The Joint Standoff Weapon (JSOW - AGM-154) program is a joint weapon providing day, night and adverse weather environment munition capability. The JSOW has three variants shared between the Navy and the Air Force. The JSOW baseline (BLU-97 Submunition) is led by the Navy and provides a day, night, and all-weather environment submunition for soft targets. The JSOW BLU-108 is led by the Air Force and incorporates the BLU-108 submunition for capability against armored targets. The JSOW unitary development is a Navy-only effort and incorporates the dual-stage Broach penetrating warhead with terminal accuracy via Automatic Target Acquisition Seeker Technology. The prime contractor is Raytheon Missile Systems Corp., Tucson, AZ. The FY 2004 budget request continues production for JSOW Baseline and Unitary variants.

Mission: JSOW is a primary standoff precision guided munition. The day/night, adverse weather capability provides continuous munitions operations from a survivable standoff range.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement								
Air Force	(-)	4.2	(18)	12.2	(325)	80.0	(363)	83.4
Navy	(-)	-	(165)	101.3	(429)	138.5	(463)	137.1
Subtotal	**(-)**	**4.2**	**(183)**	**113.5**	**(754)**	**218.5**	**(826)**	**220.5**
RDT&E								
Air Force		-		-		-		-
Navy		30.3		16.3		0.8		0.5
Subtotal		**30.3**		**16.3**		**0.8**		**0.5**
TOTAL		**34.2**		**129.8**		**219.3**		**221.0**

CARRIER REPLACEMENT PROGRAM

Description: The Carrier Replacement Program provides for the new construction of aircraft carriers. Currently, there are twelve active carriers in the Navy's fleet. Eight of these are Nimitz class carriers. The last Nimitz Class carrier, CVN-77, was awarded to Newport News Shipbuilding in January 2001 and is scheduled to deliver in March 2008. CVN-77 will also serve as the "bridge" platform for technologies that will enable the Navy to transition from the Nimitz class to the next generation aircraft carrier (CVN-21). CVN-21 will include new technologies such as an integrated topside island which includes a new multi-function radar, new propulsion plant monitoring improvements, manpower reduction, flight deck enhancements for greater sortie generation rates, and advanced arresting gear. The FY 2004 and FY 2005 budgets include funding for procurement of long-lead items to support construction of CVN-21, scheduled to begin in FY 2007.

Mission: Nuclear Aircraft Carriers support and operate aircraft to engage in attacks on targets afloat and ashore which threaten our use of the sea and to engage in sustained operations in support of other forces.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	317.1	(-)	483.7	(-)	1,186.6	(-)	626.0
RDT&E		306.3		371.6		339.2		355.7
TOTAL		623.4		855.3		1,525.8		981.7

VESSEL PROGRAMS
NAVY

DDG-51 AEGIS DESTROYER

Description: The ARLEIGH BURKE Flight IIA Class Guided Missile Destroyer is 471 feet long and displaces 9,300 tons (full load). It is armed with a Vertical Launching System accommodating 96 missiles, including TOMAHAWK, SM-2 and ASROC. Prime features include the SPY-1D and SPS-67(V)3 radars, SQS-53C sonar, three MK-99 illuminators, 5"/54 rapid fire gun with SEAFIRE fire control system, SLQ-32 Electronic Warfare System and decoy launchers, and 6 torpedo tubes in 2 triple mounts. The ship also carries two LAMPS (Light Airborne Multi-Purpose System) Mk III helicopters. The DDG-51 is powered by four General Electric LM2500 gas turbines, which can drive the ship in excess of 31 knots. The lead ship was awarded to Bath Iron Works, Bath, ME in FY 1985. Ingalls Shipbuilding Division of Pascagoula, MS has also been awarded contracts for follow-on ships. The FY 2004 budget supports the continuation of the FY 2002-2005 multi-year procurement of 10 DDG-51 ships (one of the three FY 2002 ships is an option on the FY 1998-2001 multiyear procurement contract). The ships acquired under the current multi-year contract are equipped with additional war-fighting upgrades, including CEC, SPY-ID (V), ESSM, 5"/62 Gun, SQQ-89 (V)15 and SLQ-32. The FY 2002 and FY 2003 procurement estimates exclude funds appropriated to complete prior year shipbuilding programs.

Mission: The DDG-51 Class ships operate defensively and offensively as units of Carrier Battle Groups and Surface Action Groups, in support of Underway Replenishment Groups and the Marine Amphibious Task Force in multi-threat environments that include air, surface, and subsurface threats.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(3)	3,066.1	(2)	2,284.5	(3)	3,198.3	(3)	3,440.6
RDT&E		320.1		340.4		205.7		208.0
TOTAL		3,386.2		2,624.9		3,404.0		3,648.6

LPD-17 SAN ANTONIO CLASS AMPHIBIOUS TRANSPORT DOCK

Description: The SAN ANTONIO Class Amphibious Transport Dock ships are functional replacements for 41 ships of four classes of amphibious ships. The LPD 17 design includes systems configurations that reduce operating and support costs and facilitate operational performance improvements. System engineering and integration efforts have developed further reductions in life cycle costs and integrated performance upgrades in a rapid, affordable manner. Improvements include composite masts, advanced sensors, advanced computers, advanced command and control software, advanced information systems technologies, and ship based logistics concepts. The contractor is Northrop Grumman Ship Systems. The FY 2002 and FY 2003 procurement estimates exclude funds appropriated to complete prior year shipbuilding programs.

Mission: The LPD-17 class ships embark, transport, and land elements of Marine landing forces in an amphibious assault by helicopters, landing craft, and amphibious vehicles. As tactics, techniques, and tools for naval expeditionary warfare continue to evolve, the LPD-17 class configuration must have the flexibility to respond to this evolutionary process, since these ships are expected to be in service until almost 2050.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	154.2	(1)	584.4	(1)	1,192.0	(-)	-
RDT&E		0.9		9.9		8.0		8.7
TOTAL		155.1		594.3		1,200.0		8.7

VIRGINIA CLASS SUBMARINE

Description: The Virginia class is the next-generation of attack submarines and will provide the Navy with the capabilities to maintain undersea supremacy well into the 21st century. Virginia class submarines are able to attack targets ashore with Tomahawk cruise missiles and conduct covert long-term surveillance of land areas, littoral waters or other sea-based forces. Four submarines are under contract with the lead ship scheduled to deliver in June 2004. The Navy is scheduled to award the contract for the fifth submarine in the second quarter of FY 2003. The FY 2004 budget reflects a multiyear contracting strategy for seven ships over FY 2004 through FY 2008. The contractors are Newport News Shipbuilding, Newport News, VA and Electric Boat Division of General Dynamics, Groton, CT. The FY 2002 and FY 2003 procurement estimates exclude funds appropriated to complete prior year shipbuilding programs.

Mission: The Virginia class operational missions will include: surveillance, strike warfare, mine countermeasures, and anti-submarine warfare.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(1)	2,252.2	(1)	2,100.8	(1)	2,528.1	(1)	2,874.7
RDT&E		192.1		240.7		112.4		118.3
TOTAL		2,444.3		2,341.5		2,640.5		2,993.0

VESSEL PROGRAMS
NAVY

LEWIS AND CLARK CLASS (T-AKE) AUXILIARY DRY CARGO SHIP

Description: The T-AKE will replace the aging fleet of refrigerated cargo and food stores ships (designated AFS Class) and ammunition ships (designated AE Class) in the Navy's Combat Logistics Force. The first three ships were awarded to National Steel and Shipbuilding Company (NASSCO) San Diego, CA with the lead ship scheduled to deliver in May 2005.

Mission: The T-AKE class ships will provide a steady stream of ammunition, spare parts and provisions (dry, refrigerated and frozen) to naval forces at sea in its role as a shuttle ship.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(1)**	**360.8**	**(1)**	**386.3**	**(2)**	**722.3**	**(2)**	**742.5**

TRACKED COMBAT VEHICLES
ARMY

ABRAMS (M1) TANK

Description: The M1 Abrams Tank Program is comprised of a series of modification and upgrade programs for the vehicle, major components, and training devices. Upgrades include improved armor, a 120mm gun, a Commander's Independent Thermal Viewer, an Improved Commander's Weapon Station, digitized communications, nuclear, biological and chemical protection, 2nd generation Forward Looking Infrared sensors, an under armor Auxiliary Power Unit and a Thermal Management System. The prime contractor is General Dynamics Land Systems of Sterling Heights, MI.

Mission: The mission of the M1 program is to provide a main battle tank with increased survivability, mobility, firepower, and lethality for U.S. armor forces.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(-)**	**794.8**	**(-)**	**684.0**	**(-)**	**379.7**	**(-)**	**511.8**

BRADLEY BASE SUSTAINMENT PROGRAM

Description: The Bradley Upgrade program continues to modernize the Bradley Fighting Vehicle fleet. The program includes upgrading first and second-generation Bradley vehicles to the current M2A2 (Operation Desert Storm) configuration as well as the M2A3 upgrade program that provides enhanced command and control, situational awareness, increased lethality and survivability and improved sustainability and supportability. The prime contractor is United Defense Limited Partnership, San Jose, CA.

Mission: The mission of the Bradley upgrade program is to provide a fighting vehicle with enhanced command and control, situational awareness, lethality and sustainability.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	387.3	(-)	437.4	(-)	113.3	(-)	71.8

STRYKER FAMILY OF ARMORED VEHICLES

Description: The Stryker Interim Armored Vehicle (IAV) is a full time four-wheel drive, selective eight-wheel drive, armored vehicle weighing approximately 19 tons. It can reach speeds of 62 mph on the highway and has a maximum range of 312 miles. The vehicles have armor that protects its two-man crew and passengers from machine gun fire, mortar and artillery fragments. GM/GDLS Defense Group, a joint venture between General Motors and General Dynamics Land Systems, produces the Stryker light armored vehicle series.

Stryker configurations include Reconnaissance, Anti-Tank, Guided Missile, and Medical Evacuation vehicle variants, as well as carriers for Mortars, Engineering Squads, Command Groups, and Fire Support Teams. A Mobile Gun System variant consists of a General Dynamics Land Systems 105mm cannon mounted in a low-profile turret integrated into the General Motors LAV-III chassis.

Mission: The Stryker program provides a medium weight fighting vehicle with enhanced mobility, lethality, survivability and sustainability to meet the Army's transformation strategy in support of the Army's new vision of full spectrum dominance and strategic mobility.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(300)	653.3	(302)	774.8	(301)	955.0	(340)	969.8
RDT&E		98.0		124.0		46.0		53.0
TOTAL		751.3		898.8		1,001.0		1,022.8

DEFENSE SATELLITE COMMUNICATIONS SYSTEM (GROUND SYSTEMS) (DSCS)

Description: The Defense Satellite Communications System (Ground Systems) develops strategic and tactical Ground Subsystem equipment to support unique and vital Command, Control, Communications and Intelligence (C3I) systems for the worldwide Super High Frequency (SHF) Defense Satellite Communications System (DSCS) program. DSCS provides war-fighters multiple channels of tactical connectivity as well as interface with strategic networks and national level decision-makers. The prime contractor is Lockheed Martin Corp., Sunnyvale CA.

Mission: DSCS provides SHF wide-band and anti-jam satellite communications supporting critical national strategic and tactical C3I requirements.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	104.8	(-)	87.4	(-)	98.3	(-)	94.5
RDT&E		12.7		11.6		13.5		13.4
TOTAL		117.5		99.0		111.8		107.9

MOBILE USER OBJECTIVE SATELLITE SYSTEM (MUOS)

Description: The mobile USER Objective System (MUOS) is the next generation DoD advanced narrow band communications satellite constellation. Component Advanced Development (CAD) phase contracts were awarded in FY 2002 to teams led by Lockheed Martin Space Systems, Sunnyvale, California and Raytheon Corporation, St. Petersburg, Florida. Lockheed's principal sub-contractor is General Dynamics, Scotsdale, Arizona and Raytheon's principal sub-contractor is Space Systems Loral, Palo Alto, California. The first satellite launch is scheduled for FY 2008.

Mission: This program satisfies narrow-band communications requirements.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	-	(-)	-	(-)	-	(1)	362.3
RDT&E		34.4		59.0		315.8		428.2
TOTAL		34.4		59.0		315.8		790.5

ADVANCED EXTREMELY HIGH FREQUENCY SATELLITE

Description: The Advanced Extremely High Frequency (AEHF) Satellite is a constellation of communications satellites that will replenish the existing EHF system (MILSTAR) at a much higher capacity and data rate capability. The AEHF constellation will provide survivable, anti-jam, worldwide secure communications for the strategic and tactical warfighter. The first satellite is expected to launch in 2007 aboard an intermediate sized variant of the Evolved Expendable Launch Vehicle (EELV). The prime contractors for the AEHF Program are Lockheed Martin Space Systems, Sunnyvale, California and Northrop Grumman, Redondo Beach, California.

Mission: The Advanced EHF Satellite will provide the Department with secure, survivable worldwide communications. It will support both strategic and tactical users and be backward compatible with the MILSTAR communication system.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	-	(-)	-	(-)	-	(-)	95.0
RDT&E		459.6		822.5		778.1		573.7
TOTAL		459.6		822.5		778.1		668.7

SPACE PROGRAMS
AIR FORCE

DEFENSE SUPPORT PROGRAM (DSP)

Description: The Defense Support Program provides worldwide missile attack warning and surveillance. It specifically provides an early detection and warning of ballistic missiles and space launches during the boost phase. It is also capable of providing detection and reporting of nuclear detonations. A total of 23 DSP satellites have been procured, 2 of which remain to be launched over the next 3 years. DSP-22 will be launched in October 2003 with a Titan IV booster using an Inertial Upper Stage (IUS). DSP-23 will be launched in November 2004 with the heavy variant of the Evolved Expendable Launch Vehicle (EELV). The prime contractor for DSP is Northrop Grumman, Los Angeles, CA. Aerojet, Los Angeles, CA makes the primary sensor.

Mission: Improves the U.S. capability to detect and assess missile launches and detonations both in and outside of earth atmosphere.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	97.6	(-)	113.5	(-)	113.1	(-)	29.4
RDT&E		5.9		2.0		-		-
TOTAL		103.5		115.5		113.1		29.4

EVOLVED EXPENDABLE LAUNCH VEHICLE (EELV)

Description: EELV will replace the current families of Delta, Atlas, and Titan expendable launch vehicles with a new, lower cost program for the acquisition of space launch services for FY 2002 and subsequent years. The goal of EELV is to reduce launch costs 25-50 percent over current systems by redesigning launch hardware and ground processing facilities and by introducing commercial business practices. The Air Force and two EELV contractors will share the cost of developing EELV. EELV began the Demonstration and Validation (Dem/Val) phase in December 1996 and entered Engineering and Manufacturing Development (E&MD) in October 1998. The contractors Boeing, Huntington Beach, California, and Lockheed Martin, Denver, Colorado will each develop and produce an EELV. Both EELV contractors conducted successful maiden launches in FY 2002. The FY 2004 funds will buy launch vehicles and services for the four scheduled EELV launches in FY 2006.

Mission: EELV will provide the DoD, the NRO, and other government and commercial purchasers of launch services with low cost, highly reliable access to space for medium to heavy lift class of satellites starting in FY 2002.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	-	(1)	165.6	(4)	609.3	(6)	758.3
RDT&E		321.8		57.0		8.0		15.0
TOTAL		321.8		222.6		617.3		773.3

MEDIUM LAUNCH VEHICLES (MLV)

Description: Provides for procurement and launch of Medium Launch Vehicles (MLVs) for use in launching medium weight satellites into orbit. The prime contractor for the Delta MLV is Boeing, Huntington Beach, California. The prime contractor for the Atlas MLV is Lockheed Martin, Denver, Colorado. FY 2004 funds the launch service costs for the four medium launch vehicles scheduled to launch in FY 2004.

Mission: The Delta MLV launches NAVSTAR Global Positioning System satellites. The Atlas MLV launches National Reconnaissance Office payloads to orbit.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	39.3	(-)	47.8	(-)	91.1	(-)	88.6

NAVSTAR GLOBAL POSITIONING SYSTEM (NAVSTAR GPS)

Description: The NAVSTAR Global Positioning System (NAVSTAR GPS) provides a global, three-dimensional positioning, velocity and time information system for aircraft, artillery, ships, tanks and other weapons delivery systems. Boeing, Seal Beach, California, manufactured the 28 Block II/IIA satellites, the last of which was launched in November 1997. Prime contractor for the 21 Block IIR satellites is Lockheed Martin, Valley Forge, Pennsylvania. The first Block IIR satellite was launched in mid 1997. Boeing, Seal Beach, California, is manufacturing 6 Block IIF satellites awarded in FY 1997 and FY 1998. Ten additional Block II variant satellites will be procured in FY 2005 through FY 2008 with increased anti-jam capabilities. Block IIR satellites are launched with Delta boosters, and subsequent satellites will be launched with the Evolved Expendable Launch Vehicle (EELV). The fully operational GPS constellation consists of 24 satellites in orbit at all time.

The budget includes funds to modernize the GPS constellation. The last 8 Block IIR satellites will incorporate a second civil signal as well as a new military signal. All Block IIF satellites will include a second and third civil signal and the new military signal.

Mission: To provide a global system of satellites for navigation and position locating purposes.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	161.9	(-)	226.4	(-)	258.8	(3)	334.9
RDT&E		294.4		426.2		247.1		275.0
TOTAL		456.3		652.6		505.9		609.9

SPACE BASED INFRARED SYSTEM (SBIRS) - HIGH

Description: SBIRS is a "system of systems" that will include both a High and a Low space segment and a consolidated ground processing system. SBIRS High will field a constellation of four satellites in geosynchronous orbit (GEO) and two satellites in highly elliptical orbit (HEO) to provide initial warning of a ballistic missile attack against the United States, its deployed forces, or its allies. SBIRS High will support National Missile Defense and will also be used to collect a variety of technical intelligence. The High segment, which will replace the Defense Support Program (DSP), entered Engineering and Manufacturing Development (E&MD) in October 1996. The first two GEO satellites and the two HEO satellites will be acquired with RDT&E appropriations. The third, fourth, and fifth GEO satellites will be funded with Procurement appropriations. SBIRS High will be launched with a medium variant Evolved Expendable Launch Vehicle (EELV). Lockheed, Sunnyvale, California, is the prime contractor for SBIRS High. The first launch of SBIRS High is scheduled for FY 2007.

Mission: SBIRS High will use new technologies to enhance detection and improve reporting of strategic and tactical ballistic missile launches.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurment	(-)	-	(-)	-	(-)	*95.4	(-)	-
RDT&E		524.5		775.4		617.2		508.9
TOTAL		524.5		775.4		712.6		508.9

* For outfitting the Mission Control Station Backup (MCSB)

SPACE PROGRAMS
AIR FORCE

TITAN SPACE BOOSTERS

Description: Provides for the procurement and launch of Titan IV boosters and the conversion of Titan II ICBMs into space launch vehicles. The Titan IV is used to launch the Department's heavier payloads and can accommodate either the Centaur upper stage or the Inertial Upper Stage (IUS). A total of 39 Titan IV boosters have been procured by the Air Force, of which 2 remain to be launched over the next year. A total of 14 Titan IIs were modified for spacelift, of which 1 remains available for launch. Lockheed Martin, Denver, Colorado is the prime contractor. Alliant, Salt Lake City, Utah makes the solid rocket motors. Aerojet, Sacramento, California makes the liquid rocket engines. Boeing, Seattle, WA manufactures the IUS. FY 2004 funds the final Titan launch (scheduled for October 2003) as well as contract close out costs.

Mission: Program provides the capability to launch critical DoD heavyweight operational payloads through FY 2004.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	(-)	244.3	(-)	288.7	(-)	91.5	(-)	74.7

FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)

Description: The FHTV consists of the Palletized Load System (PLS), Heavy Equipment Transporter System (HETS) and Heavy Expanded Mobility Tactical Truck (HEMTT). The PLS consists of a 16.5-ton tactical vehicle composed of a truck (10x10 with central tire inflation system (CTIS) with integral self load/ unload capability, 16.5-ton companion trailer and demountable cargo beds (flatracks). HETS consists of the M1070 tractor (8x8 w/CTIS) and the M1000 semitrailer (70-ton). The HEMTT is a 10-ton (8x8) which comes in five configurations (M977-Cargo w/Crane, M978-Fuel Tanker 2500 gallons, M983-Tractor, M9841A1-Wrecker, M985-Cargo w/Heavy Crane). The prime contractor is Oshkosh Truck Corporation of Oshkosh, WI.

Mission: PLS is a key transportation component of the Maneuver Ammunition Distribution System. PLS is assigned to self-propelled artillery units, Forward Support Battalions, and selected ammunition and transportation companies. HETS provides the transportation and evacuation of the M1 Main Battle Tank. HEMTT provides resupply of combat vehicles, helicopter and missile systems in combat support units across all tactical mobility levels. FY 2004 continues procurement.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(-)**	**159.1**	**(-)**	**252.4**	**(-)**	**133.1**	**(-)**	**99.7**

FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)

Description: The FMTV is a family of diesel powered trucks in the 2 1/2 ton (4x4) and 5 ton (6x6) payload classes that will modernize and improve the existing medium-tactical wheeled vehicle fleet. This Non-Developmental Item (NDI) procurement capitalizes on current state of the art automotive technology including a diesel engine, automatic transmission, and central tire inflation system (CTIS). The FMTV consists of multiple body styles: cargo, wrecker, dump, tractor, airdrop, etc. The FMTV with its enhanced mobility, state of the art components, and logistics commonality between Light (4x4 LMTV) and Medium (6x6 MTV) will improve unit operational capabilities and reduce Operation and Support (O&S) costs. The prime contractor is Stewart and Stevenson, Inc. in Sealy, TX.

Mission: FMTV performs numerous unit mobility and unit resupply missions including the transport of equipment and personnel. FMTV's numerous models perform a wide variety of missions including cargo transport (cargo model), vehicle recovery operations (wrecker), construction (dump), line haul (tractor), and airdrop missions (Low Velocity AirDrop (LVAD) model). FMTV's support combat support and combat service support unit missions as well as civil disaster relief. FY 2004 continues procurement.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(-)**	**459.9**	**(-)**	**662.9**	**(-)**	**309.8**	**(-)**	**491.8**

HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV)

Description: The High Mobility Multipurpose Wheeled Vehicle (HMMWV) is a light, highly mobile, diesel powered air transportable and air dropable, 4-wheel drive tactical vehicle. The HMMWV can be configured through the use of common components and kits to become a cargo/troop carrier, armament carrier, shelter carrier, ambulance, and TOW and Stinger weapons carrier. The prime contractor is AM General of Mishawaka, IN.

Mission: The HMMWV fulfills specific missions such as serving as the platform for several weapon systems and provides for a partially armored (Uparmored) vehicle for scout and military police missions. FY 2004 funding continues procurement and modification programs.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
Procurement	**(-)**	**146.3**	**(-)**	**234.3**	**(-)**	**137.8**	**(-)**	**205.8**

OTHER PROGRAMS
DOD-WIDE/JOINT

MISSILE DEFENSE

Description: A multi-layer, multifaceted development program designed to protect the United States, our Allies and deployed forces from missile attack. The program is managed as one system that will explore concepts and eventually develop air, sea, ground, and space systems that will intercept any range of threat in the boost, midcourse or terminal phases of flight trajectory. As these programs mature in their acquisition cycle they will transfer to the respective military department. Major systems include Ground Based Midcourse (formerly National Missile Defense), Airborne Laser, Sea Based Midcourse (formerly Navy Theater Wide), Theater High Altitude Area Defense (THAAD), PATRIOT PAC-3 and Space Tracking and Surveillance System (formerly Space Based Infra-Red System - Low (SBIRS-L)).

Mission: To conduct research and development of defensive technologies and related systems that may enable the destruction of ballistic missiles and warheads in flight; and to develop systems that protect the U.S. as well as allied forces from a missile attack.

Program Acquisition Costs
($ Millions)

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
RDT&E (MDA)								
BMD Technologies		145.0		151.1		240.8		205.8
Advanced Concepts		-		-		151.7		216.8
BMD System Segment		790.5		1,046.7		-		-
THAAD		818.6		888.3		730.6		843.1
Patriot PAC-3		130.6		176.2		-		-
MEADS		64.3		114.8		-		-
Midcourse Def Segment		3,655.1		3,103.8		3,613.3		3,841.4
Boost Defense Segment		583.5		718.0		626.3		653.6
International Coop Pgms		147.3		204.3		148.4		215.0
BMD Sensors		262.0		301.4		408.2		485.4
BMD System Interceptors		-		-		301.1		541.2
BMD Test & Targets		-		-		611.5		711.2
BMD Products		-		-		343.6		384.8
BMD System Core		-		-		484.0		522.5
Navy Area		96.1		-		-		-
Other Programs		217.0		14.0		69.4		58.2
Subtotal		**6,909.9**		**6,718.6**		**7,728.9**		**8,679.0**

OTHER PROGRAMS
DOD-WIDE/JOINT

MISSILE DEFENSE

	FY 2002		FY 2003		FY 2004		FY 2005	
	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt	(Qty)	Amt
RDT&E (Army)								
PATRIOT PAC-3		-		-		174.5		78.4
PATRIOT Improvement		9.4		41.8		44.5		32.0
MEADS		-		-		276.3		267.3
Subtotal		**9.4**		**41.8**		**495.3**		**377.7**
RDT&E (The Joint Staff)								
JTAMDO		**26.7**		**68.9**		**87.3**		**86.6**
Military Construction		**8.2**		**23.4**		**2.6**		**7.6**
Procurement								
PATRIOT PAC-3	(72)	729.6	*(100)	592.2	(108)	561.6	(131)	490.8
PATRIOT Mods	(-)	24.8	(-)	148.7	(-)	212.6	(-)	86.1
Subtotal	**(72)**	**754.4**	**(100)**	**740.9**	**(108)**	**774.2**	**(131)**	**576.9**
TOTAL Missile Defense		**7,708.7**		**7,593.6**		**9,088.3**		**9,727.8**

* Contains the amount reflected in the Congressional Reprogramming.