PROGRAM ACQUISITION COSTS BY WEAPON SYSTEM

Department of Defense Budget
for Fiscal Years 2000/2001

February 1999

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 2000 BUDGET
PROGRAM ACQUISITION COSTS
(Dollars in Millions)

	AIRCRAFT	FY 1998	FY 1999	FY 2000	Page No.
Army					
AH-64D	Longbow Apache	505.6	630.7	773.5	1
RAH-66	Comanche Helicopter	262.6	364.8	427.1	2
UH-60	Blackhawk Helicopter	282.7	273.5	102.8	3
Navy					
AV-8B	Harrier	334.2	389.0	346.4	4
CH-60	Helicopter	59.4	176.1	325.6	5
EA-6B	Prowler	117.0	160.2	248.0	6
E-2C	Hawkeye	375.8	460.9	411.6	7
F/A-18E/F	Hornet	2,424.4	3,178.2	3,066.3	8
T-45TS	Goshawk	295.8	316.1	357.9	9
SH-60R	Helicopter	82.0	226.4	348.8	10
Air Force					
B-2	Stealth Bomber	650.4	424.7	374.6	11
C-17	Airlift Aircraft	2,367.4	3,192.2	3,561.9	12
CAP	Civil Air Patrol	2.9	3.0	2.5	13
E-8C	Joint Surveillance Target Attack Radar System (Joint STARS)	433.3	663.3	483.0	14
F-16	Falcon Multi-Mission Fighter	210.4	206.6	440.8	15
F-22	Advanced Tactical Fighter (ATF)	2,084.0	2,365.7	3,074.3	16
ABL	Airborne Laser	153.5	257.3	308.6	17
DoD-wide/Joint					
JPATS	Joint Primary Aircraft Training System	125.2	150.4	166.8	18
JSF	Joint Strike Fighter	913.4	923.3	476.9	19
V-22	Osprey	1,185.6	1,060.2	1,168.7	20
C-130J	Airlift Aircraft	544.6	493.5	42.9	21
	MISSILES				
Army					
ATACMS	Army Tactical Missile System	173.5	182.4	199.9	22
BAT	Brilliant Anti-Armor Submunition	142.4	182.9	249.8	23
JAVELIN	AAWS-M	145.7	348.6	411.1	24
LONGBOW	Longbow Hellfire Missile	231.2	345.1	294.3	25
MLRS	Multiple Launch Rocket System	176.2	152.1	192.7	26

DEPARTMENT OF DEFENSE
FY 2000 BUDGET
PROGRAM ACQUISITION COSTS
(Dollars in Millions)

	MISSILES	FY 1998	FY 1999	FY 2000	Page No.
Army Contd.					
AVENGER	Missile System	0	34.9	33.8	27
Navy					
RAM	Rolling Airframe Missile	56.4	50.7	53.6	28
STANDARD	Missile (Air Defense)	177.7	223.7	213.1	29
TOMAHAWK	Cruise Missile	129.4	201.9	198.1	30
TRIDENT II	Submarine Launched Ballistic Missile	306.0	374.4	537.0	31
Marine Corps					
JAVELIN	AAWS-M	58.2	82.9	92.9	32
DoD-wide/Joint					
AMRAAM	Advanced Medium Range Air-to-Air Missile	202.4	187.3	207.3	33
JASSM	Joint Air-to-Surface Standoff Missile	167.2	130.9	168.4	34
JSOW	Joint Standoff Weapon	178.3	231.2	275.9	35
AIM-9X	Sidewinder	106.3	117.2	142.3	36
	VESSELS				
Navy					
DDG-51	AEGIS Destroyer	3,621.6	2,899.4	2,928.0	37
NSSN	New Attack Submarine	2,975.1	2,353.9	1,105.7	38
SSN-21	Seawolf Attack Submarine	222.3	57.8	66.4	39
LPD-17	San Antonio Class Amphibious Trans.	230.8	638.2	1,523.1	40
ADC (X)	Auxilliary Dry Cargo Ship	-	-	453.1	41
	TRACKED COMBAT VEHICLES				
Army					
M1A2	Abrams Tank Upgrade	622.2	702.2	658.3	42
M2A3	Bradley Base Sustainment	302.4	440.7	348.8	43
Crusader	Artillery Systems	301.2	313.6	343.9	44
	SPACE PROGRAMS				
Army					
DSCS	Defense Satellite Communications System (Ground Systems)	101.9	126.3	89.3	45

DEPARTMENT OF DEFENSE
FY 2000 BUDGET
PROGRAM ACQUISITION COSTS
(Dollars in Millions)

		FY 1998	FY 1999	FY 2000	Page No.
	SPACE PROGRAMS				
Air Force					
DSP	Defense Support Program	103.4	100.5	119.1	46
MLV	Medium Launch Vehicles	197.5	182.4	66.1	47
MILSTAR	Satellite Communications	609.7	546.5	361.3	48
NAVSTAR GPS	NAVSTAR Global Positioning System	259.4	188.0	269.8	49
Titan	Heavy Launch Vehicles	515.7	661.0	476.7	50
EELV	Evolved Expendable Launch Vehicle	23.3	259.1	395.6	51
SBIRS-H	Space Based Infrared System-High	337.9	539.4	328.7	52
SBIRS-L	Space Based Infrared System-Low	213.5	192.2	229.0	53
	OTHER PROGRAMS				
Army					
FHTV	Family of Heavy Tactical Vehicles	112.3	196.4	190.4	54
FMTV	Family of Medium Tactical Vehicles	204.5	335.4	427.9	55
HMMWV	High Mobility Multipurpose Wheeled Vehicle	120.9	64.2	99.3	56
SADARM	Sense and Destroy Armor Munition	75.8	63.1	73.9	57
WAM	Hornet (Wide Area Munition)	36.1	32.6	23.7	58
Air Force					
SFW	Sensor Fuzed Weapon	164.4	132.6	73.1	59
WCMD	Wind Corrected Munitions Dispenser	29.4	21.1	48.9	60
DoD-wide/Joint					
TMD	Theater Millile Defense Defense	3,047.1	2,833.5	2,962.4	62
NMD	National Missile Defense	936.2	1,092.9	1,286.6	63
JDAM	Joint Direct Attack Munition	100.8	107.0	174.4	64
UAV	Unmanned Aerial Vehicles	652.3	779.6	648.1	65

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, Lockheed-Martin Corporation, Bethesda, MD and Northrup Grumman, Baltimore, MD. Boeing Helicopter Systems 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	497.5	(-)	608.9	(-)	765.2
Initial Spares		8.1		21.8		8.3
Subtotal		505.6		630.7		773.5
RDT&E		-		-		-
Military Construction		-		-		-
TOTAL		505.6		630.7		773.5

AIRCRAFT PROGRAMS
ARMY

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 Boeing Vertol of Philadelphia, PA. Engine development for the T-800 growth engine is being done by Light Helicopter Turbine Engine Company, a partnership of Allied Signal Aerospace, Phoenix, AZ and Allison Engine Company, Indianapolis, IN.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E		262.6		364.8		427.1
Military Construction		-		-		-
TOTAL		262.6		364.8		427.1

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 United Technologies Corporation, Sikorsky Aircraft Division 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(28)	280.3	(29)	271.6	(8)	102.8
Initial Spares		2.4		1.9		-
Subtotal		282.7		273.5		102.8
RDT&E		-		-		-
Military Construction		-		-		-
TOTAL		282.7		273.5		102.8

AIRCRAFT PROGRAMS
NAVY

AV-8B (V/STOL) HARRIER

Description: The AV-8B Harrier is a single-seat, single-engine, transonic jet aircraft capable of Vertical/Short Takeoff and Landing (V/STOL). This V/STOL capability, combined with high performance and combat effectiveness, provides the Marine Corps forces with a quick reaction weapon system. Prime contractors are Boeing Aircraft Corporation, St. Louis, MO for the airframe, Rolls Royce, Ltd. of Bristol, England for the engine, and British Aerospace of Kingston, England for the aft fuselage. The last year of new production for the AV-8B aircraft for the United States was FY 1992. The AV-8B Remanufacture program converts older AV-8B day attack configured aircraft to the most recent production radar/night attack configuration. The budget request supports continuation of a 3-year multiyear procurement for airframes.

Mission: The mission of the AV-8B aircraft is to provide close air support for Marine Corps forces in amphibious operations, and direct support of ground forces from austere forward bases.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
AV-8B	(12)	299.2	(12)	333.8	(12)	291.3
Initial Spares		24.7		24.4		16.5
Subtotal		323.9		358.2		307.8
RDT&E,N		10.3		30.8		38.6
Military Construction		-		-		-
TOTAL		334.2		389.0		346.4

AIRCRAFT PROGRAMS
NAVY

CH-60S Helicopter

Description: The CH-60 is a versatile twin-engine helicopter used to maintain forward deployed fleet sustainability through rapid airborne delivery of materials and personnel, and to support amphibious operations through search and rescue coverage. The budget request supports participation in the Army's multiyear procurement. The prime contractor is Sikorsky Aircraft of Stratford, CT.

Mission: The CH-60 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.

Program Acquisition Costs ($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
CH-60	(1)	29.7	(5)	137.2	(13)	282.3
Initial Spares		-		5.0		8.4
Subtotal		29.7		142.2		290.7
RDT&E,N		29.7		33.9		34.9
Military Construction		-		-		-
TOTAL		59.4		176.1		325.6

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, Tracor Aerospace, 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Modifications	-	112.5	-	95.2		160.7
Initial Spares		-		-		-
Subtotal		112.5		95.2		160.7
RDT&E,N		3.4		65.0		87.3
Military Construction		1.1		-		-
TOTAL		117.0		160.2		248.0

AIRCRAFT PROGRAMS
NAVY

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 General Motors Corporation, Allison Division, Indianapolis, IN for the engine. The budget request supports continuation of a 5-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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
E-2C	(4)	311.5	(3)	397.3	(3)	383.0
Initial Spares		6.0		17.0		12.5
Subtotal		317.5		414.3		395.5
RDT&E,N		58.3		46.6		16.1
Military Construction		-		-		-
TOTAL		375.8		460.9		411.6

AIRCRAFT PROGRAMS
NAVY

F/A-18E/F HORNET

Description: The F/A-18E/F will be a twin-engine, high-performance, multi-mission, tactical aircraft for deployment in Navy and Marine Corps fighter and attack squadrons. The development of the F/A-18E/F began in FY 1991. The F/A-18E/F possesses enhanced range, payload and survivability features compared with the current C/D model aircraft. It will replace the F/A-18C/D and will partially replace the A-6E and the F-14A. 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 provides for completion of operational evaluation and initiation of a 5 year multiyear procurement.

Mission: The F/A-18E/F will be 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
F/A-18E/F	(20)	2,106.4	(30)	2,870.6	(36)	2,854.2
Initial Spares		80.2		101.1		69.5
Subtotal		2,186.6		2,971.7		2,923.7
RDT&E,N		237.8		206.5		142.6
Military Construction		-		-		-
TOTAL		2,424.4		3,178.2		3,066.3

AIRCRAFT PROGRAMS
NAVY

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. The budget request supports procurement of the airframes.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
T-45	(15)	282.6	(15)	300.2	(15)	335.0
Initial Spares		13.2		15.9		22.9
Subtotal		295.8		316.1		357.9
RDT&E,N		-		-		-
Military Construction		-		-		-
TOTAL		295.8		316.1		357.9

AIRCRAFT PROGRAMS
NAVY

SH-60R

Description: The SH-60R is a remanufacture of the H-60 series helicopter which will improve the capability of the LAMPS MK III Weapons system to provide battle group protection by adding significant capability in coastal littorals and regional conflicts. The remanufacturing scope includes an upgrade, service life extension, standard Depot Level Maintenance , and incorporation of Engineering Change Proposals. Prime contractors are Sikorsky Aircraft of Stratford, CN for the airframe and Lockheed Martin of Owego, NY for the avionics.

Mission: The SH-60R will be the forward deployed fleet' s primary Anti-Submarine and Anti- Surface Warfare platform. This request provides funding for the remanufacture of H-60 series helicopters.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement Item	(-)	-	(-)	-	(7)	216.7
Initial Spares		-		-		13.4
Subtotal		-		-		230.1
RDT&E,N		82.0		226.4		118.7
Military Construction		-		-		-
TOTAL		82.0		226.4		348.8

AIRCRAFT PROGRAMS
AIR FORCE

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. The F-118 engine is a derivative of the F-100 engine, currently used in the F-16 fighter and is in the 19000 lb thrust class. Northrop-Grumman Corporation, Pico Rivera, CA is the prime contractor for the (21) B-2s; the engines are manufactured by General Electric, Evendale, OH. The FY 2000 budget request includes funding to continue development and for various production support costs.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	175.7	(-)	238.6	(-)	106.9
Initial Spares		12.7		55.1		60.5
Subtotal		188.4		293.7		167.4
RDT&E		434.9		131.0		201.8
Military Construction		27.1		-		5.4
TOTAL		650.4		424.7		374.6

AIRCRAFT PROGRAMS
AIR FORCE

C-17 AIRLIFT AIRCRAFT

Description: The C-17 program is a wide body, four engine, turbofan aircraft that meets the nations' s strategic airlift requirement for a new core to modernize the U.S. strategic airlift capability. The C-17 is capable of performing the entire spectrum of airlift missions and is specifically designed to effectively and efficiently operate in both the intertheater and intratheater environments. The major contractors are Boeing, Long Beach, CA (Airframe) and Pratt-Whitney, East Hartford, CT (Engine). The FY 2000 budget requests funding for operational development to continue aircraft production for a total procurement of 134 aircraft and to make product improvements.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(9)	2,130.9	(13)	2,891.0	(15)	3,385.0
Initial Spares		128.2		112.0		-
Subtotal		2,259.1		3,003.0		3,385.0
RDT&E		101.8		118.2		170.7
Military Construction		6.5		71.0		6.2
TOTAL		2,367.4		3,192.2		3,561.9

AIRCRAFT PROGRAMS
AIR FORCE

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 2000 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(27)	2.9	(27)	3.0	(27)	2.5
Initial Spares		-		-		-
Subtotal		2.9		3.0		2.5
RDT&E		-		-		-
Military Construction		-		-		-
TOTAL		2.9		3.0		2.5

AIRCRAFT PROGRAMS
AIR FORCE

E-8C JOINT STARS

Description: The E-8C Joint Surveillance Target Attack Radar System (Joint STARS) aircraft will be 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 2000 budget requests funding for continuation of development activities and aircraft production.

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

Program Acquisition Costs ($ Millions)

	FY 1998 Qty	FY 1998 Amt	FY 1999 Qty	FY 1999 Amt	FY 2000 Qty	FY 2000 Amt
Procurement						
Item	(1)	320.6	(2)	495.5	(1)	280.3
Initial Spares		-		67.3		72.2
Subtotal		320.6		562.8		352.5
RDT&E		112.7		100.5		130.5
Military Construction		-		-		-
TOTAL		433.3		663.3		483.0

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 budget request provides for continued development activities and production of 10 Block 50 aircraft.

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
(Dollars in Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(3)	115.8	(1)	67.0	(10)	282.6
Initial Spares		-		-		45.7
Subtotal		115.8		67.0		328.3
RDT&E		94.6		139.6		112.5
Military Construction		-		-		-
TOTAL		210.4		206.6		440.8

AIRCRAFT PROGRAMS
AIR FORCE

F-22 ADVANCED TACTICAL FIGHTER (ATF)

Description: The F-22 ATF program will develop the next generation air superiority fighter for the first part of the next 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, Marietta, GA, and Ft. Worth, TX; Boeing, Seattle, WA for the airframe; and Pratt & Whitney, West Palm Beach, FL for the engine. The FY 2000 budget request provides for continued development funding and the production of six aircraft.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	73.3	(2)	769.1	(6)	1,852.1
Initial Spares		-		25.6		-
Subtotal		73.3		794.7		1,852.1
RDT&E		2,010.7		1,571.0		1,222.2
Military Construction		-		-		-
TOTAL		2,084.0		2,365.7		3,074.3

AIRCRAFT PROGRAMS
AIR FORCE

AIRBORNE LASER

Description: The Airborne Laser (ABL), designated the YAL-1A Attack Laser Aircraft, provides a rapidly deployable airborne platform equipped with a long-range laser weapon. Installed on a modified Boeing 747-400F freighter, ABL will employ an advanced beam control and atmospheric compensation system to precisely direct a multi-megawatt high-energy chemical laser on a boosting missile. The new weapon system is being designed and built by the Boeing led Team ABL, which includes TRW for high-energy lasers, Lockheed Martin for beam and fire control, and Boeing for system integration, aircraft modification, and battle management. The ABL program planned production is for 7 ABL (2 refurbished test aircraft and 5 production aircraft). The FY 2000 budget request includes funding to continue the design, fabrication, integration, and test (lethal demonstration) of a prototype ABL weapon system.

Mission: The primary mission of the ABL is to provide a rapidly deployable airborne platform equipped with long-range laser weapon, capable of autonomously detecting, acquiring, tracking, identifying, and negating both liquid and solid-fueled Theater Ballistic Missiles (TBM) during the boost phase of flight. The ABL is listed as a core Upper Tier Theater Missile Defense program worked in coordination with the Ballistic Missile Defense Organization (BMDO).

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E		153.5		257.3		308.6
Military Construction		-		-		-
TOTAL		153.5		257.3		308.6

JOINT PRIMARY AIRCRAFT TRAINING SYSTEM (JPATS)

Description: The Joint Primary Aircraft Training System (JPATS) is a joint Air Force/Navy program to replace both Services 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 2000 budget provides funding for continued development activities and 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item						
Air Force	(22)	73.3	(22)	105.9	(21)	88.2
Navy					(8)	44.8
Initial Spares		-		.1		-
Subtotal		73.3		106.0		133.0
RDT&E						
Air Force		51.6		43.9		33.50
Navy		.3		.6		.3
Subtotal		51.9		44.5		33.8
Military Construction						
Air Force		-		-		-
Total						
Air Force		*124.9*		*149.9*		*121.7*
Navy		*.3*		*.6*		*45.1*
TOTAL		125.2		150.5		166.8

JOINT STRIKE FIGHTER (JSF)

Description: The Joint Strike Fighter (JSF), formerly the Joint Advanced Strike Technology (JAST) Program, was established to support development of an affordable next-generation strike fighter for the Air Force, Marine Corps, Navy and U.S. allies. This joint program will facilitate the development of affordable operational concepts for next-generation strike fighter aircraft and related systems and transition key technologies and common components to support future joint strike fighter 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 program will develop several technology demonstrator aircraft to explore different technologies that could be incorporated into future aircraft. From these technology demonstrators, prototype aircraft will be developed to help choose the next-generation strike fighter, possibly using advanced short takeoff and vertical landing (ASTOVL) technology. The FY 2000 budget requests continued development funds in support of pre-engineering and manufacturing development (EMD) efforts. Dem/Val contracts have been awarded to Lockheed Martin of Bethesda, MD, Boeing of Seattle, WA for the airframe; and Pratt and Whitney, FL for the propulsion system. EMD begins in FY 2001

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 1998 Qty	FY 1998 Amt	FY 1999 Qty	FY 1999 Amt	FY 2000 Qty	FY 2000 Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E						
Navy		*448.2*		*468.5*		*241.5*
Air Force		*444.3*		*454.8*		*235.4*
Defense-Wide		*20.9*				-
Military Construction		-		-		-
TOTAL		**913.4**		**923.3**		**476.9**

AIRCRAFT PROGRAMS
Defense-Wide/Joint

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 are Textron, Inc., Bell Helicopter Division, Fort Worth, TX and Boeing Vertol, Philadelphia, PA, for the air vehicle and General Motors Corporation, Allison Division, Indianapolis, IN, for the engine. The budget request supports aircraft procurement for the Marine Corps and weapons system trainer procurement for the Air Force. Also funds the advanced procurement to support 1st lot procurement of CV22 in FY 01.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
MV-22 (USMC)	(7)	676.6	(7)	661.7	(10)	867.4
CV-22 (AF)	-	-	-	22.2		49.5
Initial Spares	-	21.4	-	30.4		68.9
Subtotal		698.0		714.3		985.8
RDT&E,N		487.6		345.8		182.9
MILCON		-		-		-
Total		1,185.6		1,060.2		1,168.7

AIRCRAFT PROGRAMS
AIR FORCE

C-130J AIRLIFT AIRCRAFT

Description: The Hercules C-130J is planned to be 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 will be Lockheed Corporation, Marietta, GA for the airframe and General Motors Corporation, Allison Division, Indianapolis, IN for the engine. The FY 2000 budget requests funding for logistics and support.

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 after the turn of the century.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Air Force						
C-130J	(-)	25.6	(-)	29.4	(-)	30.6
WC-130J	(2)	123.8	(1)	75.2	(-)	-
EC-130J	(1)	48.4	(1)	84.8	(-)	-
Subtotal	(3)	197.8	(2)	189.4	(-)	30.6
Navy						
KC-130J	(2)	117.1	(2)	112.1	(-)	12.3
NG & RE						
C-130J	(4)	226.0	(3)	192.0	(-)	-
RDT&E, AF		3.7		-		-
Military Construction		-		-		-
TOTAL	(9)	544.6	(7)	493.5	(-)	42.9

MISSILE PROGRAMS
ARMY

ARMY TACTICAL MISSILE SYSTEM (ATACMS)

Description: ATACMS is a surface-to-surface deep fire guided missile used to attack high value targets such as missile sites and command, control and communications complexes. The ATACMS missiles are fired from modified Multiple Launch Rocket System (MLRS) launchers. The Block I variants are armed with an anti-personnel/anti-material warhead. The Block IA integrates Global Positioning System (GPS) into the guidance system of the missile to provide more accurate information for orientation of the missile in position and azimuth. The Block IA carries fewer M74 bomblets than the Block I (down to 300 from 950) which gives the Block IA a range approximately twice that of the ATACMS Block I missile. The ATACMS Block II will be the delivery vehicle for the guided antiarmor BAT submunition. The FY 2000 buy is a combination of 110 Block IA and 61 Block II missiles. The ATACMS prime contractor is the Lockheed Martin Vought Systems Corporation of Dallas, TX.

Mission: To provide deep fires in near all-weather conditions, day or night. All ATACMS missiles are capable of effectively engaging high priority targets at ranges beyond the capability of cannons and rockets. The Block I configurations will be used to attack tactical surface-to-surface missile sites, air defense systems, logistics elements and other fixed facilities. The ATACMS Block II will be used against deep enemy armor.

Program Acquisition Costs ($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item -- Block IA	(109)	89.8	(96)	87.8	(110)	95.6
Block II	-	-	(30)	48.9	(61)	76.8
Initial Spares		.9		-		-
Subtotal	(109)	90.7	(126)	136.7	(171)	172.4
RDT&E		82.8		45.7		27.5
Military Construction		-		-		-
TOTAL		173.5		182.4		199.9

MISSILE PROGRAMS
ARMY

BRILLIANT ANTI-ARMOR (BAT) SUBMUNITION

Description: The BAT is a dual-sensor (acoustics and infrared) smart submunition that autonomously seeks, identifies, and destroys moving armored targets. The BAT submunition is an unpowered, aerodynamically stable, glider approximately 36 inches long, 5.5 inches in diameter, and weighing 44 pounds. BAT's large footprint is designed to compensate for target location errors. A pre-planned product improvement (P3I) BAT combines acoustic, millimeter wave radar, and imaging infrared sensors through a common aperture to improve BAT' s performance against cold stationary targets and other postulated high payoff targets, as well as enhancing its countermeasure resistance and inclement weather performance. BAT and P3I BAT are carried deep into enemy territory by the Block II variant of the Army Tactical Missile System (ATACMS). Northrop Grumman Corporation is the prime contractor for the BAT submunition, while Lockheed Martin Vought Systems Corporation is the contractor for the ATACMS Block II missile.

Mission: Deep attack of moving armored vehicles before they can influence the battle. In addition, P3I BAT' s mission includes cold stationary targets, multiple rocket launchers, and surface-to-surface missile transporter erector launchers.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(420)	100.1	(846)	149.3
Initial Spares		-		-		-
Subtotal		-		100.1		149.3
RDT&E		142.4		82.8		100.5
Military Construction		-		-		-
TOTAL		142.4		182.9		249.8

JAVELIN ADVANCED ANTITANK WEAPON SYSTEM-MEDIUM (AAWS-M)

Description: The JAVELIN Advanced Antitank Weapon System-Medium is a manportable fire and forget weapon system that is replacing the existing DRAGON antiarmor 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 Lewisville, TX and Orlando, FL.

Mission: To defeat armor targets.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(894)	138.2	(3,316)	338.7	(2,682)	406.1
Initial Spares		-		4.7		4.5
Subtotal		138.2		343.4		410.6
RDT&E		7.5		5.2		.5
Military Construction		-		-		-
TOTAL		145.7		348.6		411.1

MISSILE PROGRAMS
ARMY

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 remask, improves weapons system survivability by minimizing exposure to enemy fire. The Longbow system will be 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 into the 21st century; 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.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(1,100)	231.2	(2,000)	345.1	(2,200)	294.3
Initial Spares		-		-		-
Subtotal		231.2		345.1		294.3
RDT&E		-		-		-
Military Construction		-		-		-
TOTAL		231.2		345.1		294.3

MISSILE PROGRAMS
ARMY

MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)

Description: The Multiple Launch Rocket System (MLRS) consists of a tracked, self-propelled launcher loader, disposable rocket pods, and fire control equipment firing 227 mm ballistic rockets loaded with anti-personnel/anti-materiel bomblets. Starting in FY 1998, an Improved Fire Control System and an Improved Launcher Mechanical System upgraded the MLRS launcher to the M270A1 configuration. Beginning with the FY 2000 buy, the Army is initiating a five year multiyear contract for the launchers. The prime contractor is Lockheed Martin Vought Systems Corporation of Dallas, TX.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Rockets	(624)	19.2	(-)		(-)	3.3
Launchers	(21)	123.7	(24)	120.1	(47)	146.6
Initial Spares		.3		6.8		6.3
Subtotal		143.2		126.9		156.2
RDT&E		33.0		25.2		36.5
Military Construction		-		-		-
TOTAL		176.2		152.1		192.7

MISSILE PROGRAMS
ARMY

AVENGER

Description: The Avenger is a light-weight highly mobile and transportable surface-to-air missile system consisting of a Stinger missile launcher mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV). Part of the Forward Area Air Defense System (FAADS), the Avenger is designed to counter hostile cruise missiles, unmanned aerial vehicles, and low-flying, high-speed aircraft. The Avenger is equipped with eight ready Stinger missiles and .50 caliber machine gun. It has a two-man crew and can operate in day or night, clear or adverse weather conditions. The Avenger prime contractor is Boeing Aerospace, Huntsville, AL.

Mission: Provides line of sight low altitude air defense protection.

Program Acquisition Costs ($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	0	(20)	34.9	(20)	33.8
Initial Spares		-		-		-
Subtotal		0		34.9		33.8
RDT&E		-		-		-
Military Construction		-		-		-
TOTAL		0		34.9		33.8

MISSILE PROGRAMS
NAVY

ROLLING AIRFRAME MISSILE (RAM)

Description: The Rolling Airframe Missile (RAM) is a high fire-power, low cost, lightweight complementary self-defense system to engage anti-ship cruise missiles. The prime contractor was Hughes Missile Systems Company, Tucson, AZ, which was recently acquired by Raytheon Corporation.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(100)	41.0	(100)	44.6	(90)	45.4
Initial Spares		2.2		1.9		1.7
Subtotal		43.2		46.5		47.1
RDT&E		13.2		4.2		6.5
Military Construction		-		-		-
TOTAL		56.4		50.7		53.6

MISSILE PROGRAMS
NAVY

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, Lowell, MA., which recently acquired Hughes Missile Systems Company.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(114)	176.0	(120)	214.2	(91)	198.9
Initial Spares		1.2		8.2		13.0
Subtotal		177.2		222.4		211.9
RDT&E		.5		1.3		1.2
Military Construction		-		-		-
TOTAL		177.7		223.7		213.1

MISSILE PROGRAMS
NAVY

TOMAHAWK

Description: The TOMAHAWK cruise missile weapon system is a long-range conventionally or nuclear armed 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. FY 2000 funding supports the remanufacture of 148324 Tomahawk BLK IID Missiles into the BLK IIIC configuration.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	26.3	(-)	33.0	(148)	50.9
Initial Spares		1.4		3.2		0
Subtotal		27.7		36.2		50.9
RDT&E		101.7		165.7		147.2
Military Construction		-		-		-
TOTAL		129.4		201.9		198.1

MISSILE 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(5)	266.6	(5)	312.4	(12)	488.9
Facility Support		2.1		.2		2.2
Initial Spares		1.7		5.4		-
Subtotal		270.4		318.0		491.1
RDT&E		35.6		56.4		45.9
Military Construction		-		-		-
TOTAL		306.0		374.4		537.0

MISSILE PROGRAMS
MARINE CORPS

JAVELIN ADVANCED ANTITANK WEAPON SYSTEM-MEDIUM (AAWS-M)

Description: The JAVELIN Advanced Antitank Weapon System-Medium will replace the existing DRAGON as the infantry medium antitank weapon for the Marine Corps. It is a manportable fire and forget weapon system for the dismounted infantry capable of defeating both conventional and reactive armor. Highly lethal, the JAVELIN can operate in day/night adverse weather conditions, and in the presence of battlefield obscurants. 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 both missiles and Command Launch Units (CLU). The prime contractor is the Raytheon TI and Lockheed Martin Javelin Joint Venture at Lewisville, TX and Orlando, FL.

Mission: To defeat armor targets.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(380)	58.0	(741)	82.2	(954)	91.8
Initial Spares		-		.5		.9
Subtotal		58.0		82.7		92.7
RDT&E		.2		.2		.2
Military Construction		-		-		-
TOTAL		58.2		82.9		92.9

MISSILE PROGRAMS
DOD-WIDE/JOINT

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 2000 program provides for continuation of production.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Air Force	*(173)*	*101.9*	*(180)*	*92.2*	*(210)*	*97.3*
Navy	*(120)*	*54.1*	*(100)*	*51.1*	*(100)*	*46.3*
Item Subtotal	**(293)**	**156.0**	**(280)**	**143.3**	**(310)**	**143.6**
Air Force		*1.1*		*2.7*		*.2*
Navy		*.6*		*.9*		*.2*
Initial Spares Subtotal		**1.7**		**3.6**		**.4**
Procurement Subtotal		**157.7**		**146.9**		**144.0**
RDT&E						
Air Force		*39.2*		*35.7*		*49.8*
Navy		*5.5*		*4.7*		*13.5*
RDT&E Subtotal		**44.7**		**40.4**		**63.3**
Military Construction		**-**		**-**		**-**
Air Force		*142.2*		*130.6*		*147.3*
Navy		*60.2*		*56.7*		*60.0*
TOTAL		**202.4**		**187.3**		**207.3**

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. Lockheed Martin Integrated Systems, Inc., Orlando, FL was selected as the contractor to continue development efforts. FY 2000 funding supports continued development with low rate of production starting in FY 2000.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-	-	-		-
Subtotal		-		-		-
RDT&E						
Air Force		161.9		128.8		166.4
Navy		5.3		2.1		2.0
Subtotal		167.2		130.9		168.4
Military Construction		-		-		-
TOTAL		167.2		130.9		168.4

MISSILE PROGRAMS
DOD-WIDE/JOINT

JOINT STANDOFF WEAPON (JSOW)

Description: The Joint Standoff Weapon (JSOW - AGM-154) program is a joint development effort to provide day, night and adverse weather environment munition capability. The JSOW has three variants and development is shared between the Navy and the Air Force. The JSOW baseline development (BLU-97 Submunition) is led by the Navy and provides a day, night, and all-weather environment munition. The JSOW BLU-108 development is led by the Air Force and incorporates the Sensor Fuzed Weapon (SFW), providing a "smart" JSOW munition. The JSOW unitary warhead development is led by the Navy and provides terminal accuracy via Automatic Target Acquisition Seeker Technology. Flexible variants on a common truck reduces integration costs. The prime contractor is Raytheon Missile Systems Corp. The FY 2000 budget request continues production.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Air Force	(45)	21.3	(96)	52.0	(193)	80.0
Navy	(135)	61.3	(328)	117.0	(615)	154.9
Item Subtotal	(180)	82.6	(414)	169.0	(808)	234.9
Initial Spares (*Navy*)		-		.5		.01
Subtotal		82.6		169.5		235.0
RDT&E						
Air Force		21.5		14.8		10.3
Navy		74.2		47.3		30.6
Subtotal		95.7		62.1		40.9
Military Construction		-		-		-
TOTAL		178.3		231.6		275.9

MISSILE PROGRAMS
DOD-WIDE/JOINT

AIM-9X, Sidewinder

Description: The AIM-9X Sidewinder program is a joint Navy/Air Force program, with the Navy as the lead service, that provides the next generation short range air-to-air missile. The threshold aircraft are the F-15C/D and the F/A-18C/D using the Joint Helmet Mounted Cueing System. Objective aircraft include the F-16 and F-22. The AIM-9X program is a flagship program for Cost as an Independent Variable. A Milestone II Decision was made on December 13, 1996, proceeding into Engineering and Manufacturing Development (EMD). The current contractor is Raytheon Corporation . The FY 2000 budget request includes funding to continue the EMD and begin production.

Mission: The primary mission of the AIM-9X is a launch and leave, air combat munition that uses passive infrared energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air to Air Missile.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Air Force	*(-)*	*-*	*(-)*	*-*	*(80)*	*31.1*
Navy	*(-)*	*.3*	*(-)*	*-*	*(75)*	*29.4*
					(155)	*60.5*
Initial Spares						
Navy	*(-)*	*-*	*(-)*	*-*	*(-)*	*.7*
RDT&E						
Navy		*55.1*		*64.6*		*40.1*
Air Force		*51.2*		*52.6*		*41.0*
RDT&E Subtotal		**106.3**		**117.2**		**81.1**
Military Construction		**-**		**-**		**-**
TOTAL		**106.3**		**117.2**		**142.3**

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 2000 budget supports the continuation of the FY 1998-2001 multi-year procurement of 14 DDG-51 ships (3 ships per year with an option for a fourth that was exercised in FY 1998 and a remaining option for a fourth ship in FY 2001).

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(4)	3,473.3	(3)	2,659.0	(3)	2,681.7
Outfitting		18.5		36.0		35.1
Post Delivery		38.2		48.5		35.2
Subtotal		3,530.0		2,743.5		2,752.0
RDT&E		78.4		155.9		176.0
Military Construction		13.2		-		-
TOTAL		3,621.6		2,899.4		2,928.0

VESSEL PROGRAMS
NAVY

NEW ATTACK SUBMARINE (NSSN)

Description: The NSSN program provides for the development of a new nuclear powered attack submarine to replace existing ships as they are retired. The NSSN will be 366 feet long and will displace 7,506 tons while submerged. The first NSSN was funded in FY 1998. The FY 2000 RDT&E funding provides for the continued development of technologies for the NSSN. The FY 2000 procurement amount funds the long lead non-nuclear components for the third submarine. The contractors are Newport News Shipbuilding and Electric Boat Division of General Dynamics.

Mission: NSSN is being designed to meet the potential threats of the next century in a multi-mission capable submarine that has the ability to provide covert sustained presence in denied waters. NSSN operational missions will include: surveillance, strike warfare, mine countermeasures, and anti-submarine warfare.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(1)	2,510.0	(1)	1,995.5	(-)	748.5
Outfitting		-		-		-
Post Delivery		-		-		-
Subtotal	(1)	2,510.0	(1)	1,995.5		748.5
RDT&E		465.1		358.4		357.2
Military Construction		-		-		-
TOTAL		2,975.1		2,353.9		1,105.7

VESSEL PROGRAMS
NAVY

SEAWOLF ATTACK SUBMARINE (SSN-21)

Description: The Seawolf Attack Submarine program provides for the development and procurement of the most advanced and robust attack submarine built by the United States. It is approximately 353 feet long and displaces 9,150 tons of water while submerged. Three submarines are currently under construction at the Electric Boat Division of the General Dynamics Corporation in Groton, CT. The first ship, the USS Seawolf, delivered to the Navy in July, 1997, and is currently undergoing a year-long post-shakedown availability. The SSN-22 (Connecticut) was commissioned in December, 1998. The last of the Seawolf class, SSN 23, is 52% complete and will serve as the transition ship going to the New Attack Submarine (NSSN) which began construction in FY 1998.

Mission: The mission of the SSN-21 is to provide multi-mission submarine capabilities in the areas of surveillance, strike warfare, mine countermeasures, ASW, forward presence and deterrence.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	149.6	(-)	-	(-)	
Outfitting		1.3		1.2		10.9
Post Delivery		4.9		23.5		17.0
Subtotal		155.8		24.7		27.9
RDT&E		66.5		33.1		38.5
Military Construction		-		-		-
TOTAL		222.3		57.8		66.4

VESSEL PROGRAMS
NAVY

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. Possible improvements include composite masts, advanced sensors, advanced computers, advanced command and control software, advanced information systems technologies, and ship based logistics concepts. The contractors are Avendale Industries, New Orleans, LA, and bath Iron Works, Bath, Maine

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	96.1	(1)	636.9	(2)	1,508.3
Outfitting		-		-		12.2
Subtotal		96.1		636.9		1,520.5
RDT&E		134.7		1.3		2.6
Military Construction		____		____		____
TOTAL		230.8		638.2		1,523.1

VESSEL PROGRAMS
NAVY

ADC(X) AUXILIARY DRY CARGO SHIP

Description: ADC(X) is a new United States Navy ship acquisition program. The ADC(X) 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.

Mission: The ADC(X) 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item		-		-	(1)	440.0
Outfitting		-		-		-
Post Delivery		-		-		-
Subtotal		-		-		440.0
RDT&E		-		-		13.1
Military Construction		-		-		-
TOTAL		-		-		453.1

TRACKED COMBAT VEHICLES
ARMY

ABRAMS (M1) TANK UPGRADE PROGRAM

Description: The M1 Tank Upgrade program will provide continued modernization to the Abrams tank fleet by upgrading older M1 tanks to the M1A2 configuration. Upgrades include improved armor, a 120mm gun, a Commander's Independent Thermal Viewer, an Improved Commander's Weapon Station, digitized communications and nuclear, biological and chemical protection. Beginning in FY 99 the upgrades also include 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 Upgrade 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(120)	571.8	(120)	683.0	(120)	636.4
Initial Spares		13.4		9.8		9.8
Subtotal		595.2		692.8		646.2
RDT&E		37.0		9.4		12.1
Military Construction		-		-		-
TOTAL		622.2		702.2		658.3

TRACKED COMBAT VEHICLES
ARMY

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	225.4	(-)	363.2		336.4
Initial Spares		.3		7.1		9.2
Subtotal		595.8		685.4		345.6
RDT&E		76.7		70.4		3.2
Military Construction		-		-		-
TOTAL		302.4		440.7		348.8

TRACKED COMBAT VEHICLES
ARMY

CRUSADER

Description: The Crusader system is the Army' s next generation self-propelled howitzer (SPH) and artillery re-supply vehicle (RSV) designed to support ARMY XXI and the Army After Next (AAN) Crusader will incorporate advanced technologies to increase rate-of-fire in excess of 250% improve accuracy, mobility and ammunition handling while reducing ownership costs by 25% and crew size by 33%. This system provides the firepower required to support the force commander' s goals of dominating the maneuver battle, leveraging information dominance, and protecting the force. The prime contractor is United Defense Limited Partnership, (UDLP) Minneapolis, MN. On 15 November 1994 Crusader entered the Program Definition and Risk Reduction (PDRR) acquisition phase. The Army will field 1138 Crusader systems between FY 05 and FY 14 displacing the M109Ag, Paladin, SPH (an upgraded 40 year-old howitzer) and M992, Field Artillery Ammunition Supply Vehicle.

Mission: Provides the advanced Direct Support/General Support 155mm self propelled howitzer (SPH) and resupply vehicle (RSV) required to support the future maneuver force of Army XXI and the AAN fire support and artillery ammunition resupply capability to the maneuver force.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E		301.2		313.6		343.9
Military Construction		-		-		-
TOTAL		301.2		313.6		343.9

SPACE PROGRAMS
ARMY

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.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	82.4	(-)	94.2	(-)	68.5
Initial Spares		5.7		16.0		11.8
Subtotal		88.1		110.2		80.3
RDT&E		13.8		16.1		9.0
Military Construction		-		-		-
TOTAL		101.9		126.3		89.3

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, 5 of which remain to be launched over the next six years. DSP-19 through DSP-22 will be launched with Titan IV boosters using an Inertial Upper Stage (IUS); DSP-23 will be launched with the heavy variant of the Evolved Expendable Launch Vehicle (EELV). The prime contractor for DSP is TRW, Los Angeles, CA. Aerojet, Los Angeles, CA makes the primary sensor.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	85.8	(-)	88.7	(-)	111.6
Initial Spares		-		-		-
Subtotal		85.8		88.7		111.6
RDT&E		17.6		11.8		7.5
Military Construction		-		-		-
TOTAL		103.4		100.5		119.1

SPACE PROGRAMS
AIR FORCE

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.

Mission: The Delta MLV launches NAVSTAR Global Positioning System satellites and experimental satellites from the Space Test Program. The Atlas MLV launches Defense Satellite Communications System (DSCS) satellites.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(4)	195.5	(5)	175.1	(-)	64.9
Initial Spares		-		-		-
Subtotal		195.5		175.1		64.9
RDT&E		2.0		7.3		1.2
Military Construction		-		-		-
TOTAL		197.5		182.4		66.1

SPACE PROGRAMS
AIR FORCE

MILSTAR

Description: Milstar is a joint service program to develop and acquire communications satellites featuring Extremely High Frequency (EHF) transponders for survivable, jam-resistant, worldwide, secure communications for both strategic and tactical users. These satellites are launched with Titan IV boosters with a Centaur Upper Stage. The first two satellites were launched in 1994 and 1996 and provide low data rate communications. The remaining four satellites will be launched from 1999 through 2002 and will provide medium data rate communications. The prime contractor for the Milstar Program is Lockheed, Sunnyvale, California. Principal subcontractors are TRW, Redondo Beach, California, and Hughes, El Segundo, California.

Mission: The Milstar system will support the highly survivable, jam-resistant, worldwide, secure communications needs of the President and commanders for the command and control of U.S. strategic and tactical forces through all levels of conflict.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E		609.7		546.5		361.3
Military Construction		-		-		-
TOTAL		609.7		546.5		361.3

SPACE PROGRAMS
AIR FORCE

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. Additional Block IIF satellites will be procured in FY 2001 and subsequent years, and these satellites will incorporate a second and third civil signal as well as Navigation Warfare (NAVWAR) improvements. Blocks II, IIA, and IIR are launched with Delta boosters, and Block IIF will be launched with the Evolved Expendable Launch Vehicle (EELV). The fully operational GPS constellation consists of 24 satellites in orbit at all times.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(3)	162.6	(-)	93.6	(-)	170.9
Initial Spares		-		-		-
Subtotal		162.6		93.6		170.9
RDT&E		96.4		94.4		98.9
Military Construction		-		-		-
TOTAL		259.4		188.0		269.8

SPACE PROGRAMS
AIR FORCE

TITAN SPACE LAUNCH VEHICLES

Description: Provides for the procurement and launch of Titan IV and the refurbishment of Titan II 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 30 Titan IV boosters have been procured, of which 14 remain to be launched over the next 4 years. Lockheed Martin, Denver, Colorado is the prime contractor. Alliant, Salt Lake City, Utah makes the solid rocket motors. Aeroject, Sacramento, California makes the liquid rocket engines. Boeing, Seattle, WA provides the IUS.

Mission: Program provides the capability to launch critical DoD heavyweight operational payloads through FY 2002.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	453.3	(-)	583.8	(-)	431.3
Initial Spares		-		-		-
Subtotal		453.3		583.8		431.3
RDT&E		62.4		77.2		45.4
Military Construction		-		-		-
TOTAL		515.7		661.0		476.7

SPACE PROGRAMS
AIR FORCE

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 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 cost of developing EELV will be shared by the Air Force and the two EELV contractors. EELV began the Demonstration and Validation (Dem/Val) phase in December 1996 and entered Engineering and Manufacturing Development (E&MD) in October 1998. Two contractors will develop and produce their own EELVS. The contractors are Boeing, Huntington Beach, California, and Lockheed Martin, Denver, Colorado.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(1)	70.8
Initial Spares		-		-		-
Subtotal		-		-		70.8
RDT&E		23.3		259.1		324.8
Military Construction		-		-		-
TOTAL		23.3		259.1		395.6

SPACE PROGRAMS
AIR FORCE

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 now scheduled for late 2004.

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E		337.9		539.4		328.7
Military Construction		-		-		-
TOTAL		337.9		539.4		328.7

SPACE PROGRAMS
AIR FORCE

SPACE BASED INFRARED SYSTEM (SBIRS) - LOW

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 Low, formerly known as the Strategic Missile Tracking System (SMTS), will field a constellation of approximately 24 satellites in low earth orbit (LEO) to provide midcourse tracking and discrimination data for National and Theater Missile Defense. SBIRS Low will enhance ground based radars for missile targeting and tracking for National Missile Defense. It will also be used for battlefield characterization and for technical intelligence. The program is currently in the Demonstration and Validation (Dem/Val) phase with two contractor teams planning to launch demonstration satellites in late 2000. One team consists of TRW, Redondo Beach, California, and Hughes, El Segundo, California, and the other team consists of Boeing, Seal Beach, California, and Lockheed, Sunnyvale, California. A full and open competition is currently underway to select two contractors for the next phase of the program, the Program Definition (PD) phase. At the conclusion of the PD phase, only one of the two PD teams will be continued into Engineering and Manufacturing Development (E&MD) and production. First launch of an operational satellite is now scheduled for late 2006.

Mission: SBIRS Low will use new technologies to provide midcourse tracking and discrimination data for defense against strategic and tactical ballistic missiles.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(-)	-	(-)	-	(-)	-
Initial Spares		-		-		-
Subtotal		-		-		-
RDT&E		213.5		192.2		229.0
Military Construction		-		-		-
TOTAL		213.5		192.2		229.0

OTHER PROGRAMS
ARMY

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 (MOADS). 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.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement	(286)	112.3	(489)	189.1	(450)	190.4
Initial Spares		-		-		-
Subtotal		112.3		189.1		190.4
RDT&E		-		7.3		-
Military Construction		-		-		-
TOTAL		112.3		196.4		190.4

OTHER PROGRAMS
ARMY

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 Air Drop (LVAD) model). FMTV' s support combat support and combat service support unit missions as well as civil disaster relief.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(1,179)	201.6	(1,439)	331.1	(2,179)	425.9
Initial Spares		-		4.3		-
Subtotal		201.6		335.4		425.9
RDT&E		2.9		-		2.0
Military Construction		-		-		-
TOTAL		204.5		335.4		427.9

OTHER PROGRAMS
ARMY

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 as an uparmored vehicle for scout and military police missions.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(1768)	120.9	(671)	64.1	(867)	91.7
Initial Spares		-		.1		.1
Subtotal		120.9		64.2		91.8
RDT&E		-		-		7.5
Military Construction		-		-		-
TOTAL		120.9		64.2		99.3

OTHER PROGRAMS
ARMY

SENSE AND DESTROY ARMOR (SADARM)

Description: The 155MM Sense and Destroy Armor (SADARM) projectile is a fire and forget, multisensor smart munition designed to detect and destroy countermeasure armored vehicles, primarily self-propelled artillery. SADARM is delivered to the target area in 155MM artillery projectiles. Each projectile carries 2 SADARM submunitions. Once dispensed, each submunition detects targets using dual-mode millimeter-wave and infrared sensor and fires an explosively formed penetrator through the top of the target. These capabilities will be enhanced by the SADARM Product Improvements Program. SADARM is manufactured by Aerojet Electronic System Division, Azusa, CA.

Mission: The 155MM SADARM projectile provides enhanced fire/counterfire support against stationary, armored vehicles well beyond the forward line of troops. SADARM enables rapid engagement under inclement weather, degraded battlefield conditions and Nuclear, Biological, and Chemical (NBC) environments, both day and night.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
SADARM	(300)	65.3	(100)	31.5	(227)	54.5
Initial Spares		-		-		-
Subtotal		65.3		31.5		54.5
RDT&E		10.5		31.6		19.4
Military Construction		-		-		-
TOTAL		75.8		63.1		73.9

OTHER PROGRAMS
ARMY

HORNET (WIDE AREA MUNITION, M93)

Description: The M93 HORNET (Wide Area Munition) is a smart, remotely-programmable antitank munition. It is one soldier portable with a weight of 35 pounds. It has the capability to recognize armor and heavy truck targets and to autonomously aim and launch its submunition at targets within 1000 meters. The M93 is designed for command and control of the arm/destruct functions. A product improvement program (PIP) will provide two-way command and control capability, redeployment capabilities, advanced sensors, and improved warhead to extend HORNET range, lethality, and effectiveness. The HORNET will be manufactured by Textron Defense Systems, Wilmington, MA.

Mission: The M93 HORNET supports high mobility/offensive operations. Its design for flexible/rapid deployment combined with cost effective logistics and a self covering minefield capability provides increased performance and lethality over current mines in the inventory.

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item	(74)	14.7	(65)	9.6	(79)	10.4
Initial Spares		-		-		-
Subtotal		14.7		9.6		10.4
RDT&E		21.4		23.0		13.3
Military Construction		-		-		-
TOTAL		36.1		32.6		23.7

OTHER PROGRAMS
AIR FORCE

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 2000 budget request 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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Sensor Fuzed Weapon	(550)	148.6	(397)	125.1	(203)	61.3
Initial Spares		-		-		-
Subtotal		148.6		125.1		61.3
RDT&E		15.8		7.5		11.8
Military Construction		-		-		-
TOTAL		164.4		132.6		73.1

OTHER PROGRAMS
AIR FORCE

WIND CORRECTED MUNITIONS DISPENSER (WCMD)

Description: The Wind Corrected Munitions Dispenser (WCMD) guidance kit for the CBU-87/B, CBU-89/B and the CBU-97/B provides inertial navigation to correct for the effects of wind transients and ballistic errors caused by wind when these CBU munitions are released from medium to high altitudes. The FY 2000 budget request continues production.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Dispensers	(280)	11.8	(676)	13.8	(2922)	48.9
Initial Spares		-		-		-
Subtotal		11.8		13.8		48.9
RDT&E		17.6		7.3		-
Military Construction		-		-		-
TOTAL		29.4		21.1		48.9

OTHER PROGRAMS
DOD-WIDE/JOINT

THEATER MISSILE DEFENSE (TMD)

Description: The Ballistic Missile Defense (BMD) program provides for the acquisition of weapon systems capable of defending U.S. interests from ballistic missile attacks. The FY 2000 program emphasizes the development of the Theater Missile Defense (TMD) and the National Missile Defense (NMD) systems. The primary components of the TMD program are the Patriot Advance Capability - 3 (PAC-3) missile; the Theater High Altitude Area Defense (THAAD) system; the Navy Area Theater Ballistic Missile Defense (TBMD) system; and the Navy Theater-Wide (NTW) program. The Air Force provides for the Airborne Laser program. The Space Based Laser program is funded jointly between the Air Force and BMDO.

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 U.S. and allied forces from a missile attack.

Program Acquisition Costs*
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
RDT&E (BMDO)						
THAAD		387.3		433.9		611.6
Support Technologies		289.7		245.3		164.0
Navy Area		292.1		242.6		268.4
Navy Theater Wide		437.9		344.3		349.8
Supplemental		(-)		(10.0)		(20.0)
Patriot PAC-3		242.7		240.8		109.1
Supplemental		-		(60.0)		(80.0)
MEADS		49.7		9.9		48.6
Space Based Laser		118.3		125.0		75.0
Joint TMD		684.2		200.1		195.7
Family of Systems		-		95.7		141.8
BMD Technical Operations		-		184.8		190.7
Other Programs**		14.0		88.7		53.1
Subtotal BMDO		2,515.9		2,211.1		2,207.9
Supp. Subtotal		(-)		(70.0)		(100.0)
RDT&E (AF)						
Airborne Laser		153.5		257.3		308.6
Space Based Laser		-		33.8		63.8
Subtotal Air Force		153.5		296.1		372.4
RDT&E (Army) Aerostat		29.9		14.6		24.9
Subtotal RDT&E		2,699.3		2,521.8		2,605.2

Cont.

OTHER PROGRAMS
DOD-WIDE/JOINT

THEATER MISSILE DEFENSE (TMD) (Cont.)

Military Construction (BMDO)		2.0		.3	1.4
Procurement (BMDO)					
Patriot PAC-3	(-)	316.8	(-)	245.5	300.9
TMD BMC3	(-)	14.2	(-)	22.8	-
Navy Area	(-)	14.9	(-)	43.2	55.0
Subtotal Procurement		345.8		311.4	355.9
TOTAL TMD		3,047.1		2,833.5	2,962.5
Supplemental Total		(-)		(70.0)	(100.0)

* The totals include funding from the FY 1999 Emergency Supplemental in the year it would be executed.
** Includes Int'l Cooperative, Threat and Countermeasures, and Boost Phase Intercept.

OTHER PROGRAMS
DOD-WIDE/JOINT

NATIONAL MISSILE DEFENSE (NMD)

Description: The Ballistic Missile Defense (BMD) program provides for the acquisition of weapon systems capable of defending U.S. interests from ballistic missile attacks. The FY 2000 BMD program provides for the continued development of technology leading to future deployment of a National Missile Defense (NMD) capability.

Mission: To develop systems that protect the U.S. from a missile attack.

Program Acquisition Costs*
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
RTD&E		935.7		1,083.2		1,286.6
Supplemental		(-)		(150.0)		(450.0)
Subtotal RDT&E		935.7		1,083.2		1,286.6
Military Construction		.5		9.7		-
Procurement		-		-		-
TOTAL NMD		936.2		1,092.9		1,286.6

*** The totals include funding from the FY 1999 Emergency Supplemental in the year it would be executed.**

OTHER PROGRAMS
DOD-WIDE/JOINT

JOINT DIRECT ATTACK MUNITION

Description: The Joint Direct Attack Munition (JDAM) program is a joint AF/Navy program led by the Air Force. The JDAM will improve the existing inventory of 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 2000 budget request continues production.

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

Program Acquisition Costs
($ Millions)

	FY 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Item						
Air Force	*(1,655)*	*39.2*	*(1,782)*	*46.0*	*(5,410)*	*125.6*
Navy	*(547)*	*25.1*	*(745)*	*37.8*	*(785)*	*35.6*
Item Subtotal	**(2,202)**	**64.3**	**(2,527)**	**83.8**	**(6,195)**	**161.2**
Initial Spares		-		-		-
Subtotal		**64.3**		**83.8**		**161.2**
RDT&E						
Air Force		*21.1*		*12.0*		*1.4*
Navy		*15.4*		*11.2*		*11.8*
RDT&E Subtotal		**36.5**		**23.2**		**13.2**
Military Construction		-		-		-
Air Force		*60.3*		*58.0*		*127.0*
Navy		*40.5*		*49.0*		*47.4*
TOTAL		**100.8**		**107.0**		**174.4**

OTHER 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; Medium Altitude Endurance UAV (Predator); High Altitude Endurance UAV (Global Hawk); and the Low Observable High Altitude Endurance UAV (DarkStar).

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 1998		FY 1999		FY 2000	
	Qty	Amt	Qty	Amt	Qty	Amt
Procurement						
Predator UAV (AF)	(20)	135.8	(15)	114.2	(3)	38.0
Subtotal		135.8		114.2		38.0
RDT&E						
Army		42.2		145.2		16.9
Navy		.3		108.6		111.2
Air Force		24.7		380.0		217.7
Defense-wide		449.3		31.6		64.3
Subtotal		516.5		665.4		610.1
Military Construction		-		-		-
TOTAL		652.3		779.6		648.1