OFFICE OF THE SECRETARY OF DEFENSE

JUSTIFICATION OF ESTIMATES FY 1991 BUDGET SUBMITTED TO CONGRESS

JANUARY 1990

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PROCUREMENT, DEFENSE AGENCIES

ADP EQUIPMENT MANAGEMENT FUND

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NATIONAL GUARD AND RESERVE EQUIPMENT, DEFENSE

DEFENSE PRODUCTION ACT

SPECIAL OPERATIONS FORCES

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PROCUREMENT, DEFENSE AGENCIES

PROCUREMENT, DEFENSE AGENCIES
FOR FISCAL YEAR 1991

For expenses of activities and agencies of the Department of Defense (other than the military departments) necessary for procurement, production, and modification of equipment, supplies, materials, and spare parts not otherwise provided for; the purchase of not to exceed four vehicles for physical security of personnel notwithstanding price limitations applicable to passenger carrying vehicles not to exceed $160,000 per vehicles and the purchase of not to exceed 653 passenger motor vehicles of which 650 shall be for replacement only; expansion of public and private plants, equipment, and installation thereof in such plants, erection of structures, and acquisition of land for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; reserve plant and Government and contractor-owned equipment layaway; $1,969,400,000 to remain available for obligation until September 30, 1993. (Department of Defense Appropriations Act, 1990)

Procurement, Defense Agencies
Program and Financing (in Thousands of dollars)

Identification code 97-0300-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1989 actual	1990 est.	1991 est.	1989 actual	1990 est.	1991 est.
Program by activities:						
Direct program:						
00.0101 Major equipment	1,292,721	1,260,513	1,414,204	1,311,824	1,225,259	1,438,657
00.0201 Special Operations Command			555,196			410,019
00.9101 Total direct program	1,292,721	1,260,513	1,969,400	1,311,824	1,225,259	1,848,676
01.0101 Reimbursable program	295,178	494,321	487,600	279,795	517,719	487,600
10.0001 Total	1,587,899	1,754,834	2,457,000	1,591,619	1,742,978	2,336,276
Financing:						
Offsetting collections from:						
11.0001 Federal funds(-)	-256,520	-494,321	-487,600	-254,044	-494,321	-487,600
13.0001 Trust funds(-)	-304			-331		
14.0001 Non-Federal sources(-)	-38,354			-37,175		
17.0001 Recovery of prior year obligations				-29,627		
Unobligated balance available, start of year:						
21.4002 For completion of prior year budget plans				-340,540	-350,477	-362,333
21.4003 Available to finance new budget plans		-5,247			-5,247	
21.4009 Reprograming from/to prior year budget pla	-12,342					
23.4090 Reduction pursuant to P.L. 99-177 in unob ba		5,247			5,247	
Unobligated balance available, end of year:						
24.4002 For completion of prior year budget plans				350,477	362,333	483,057
24.4003 Available to finance subsequent year budge	5,247			5,247		
25.0001 Unobligated balance lapsing	11,565			11,565		
39.0001 Budget authority	1,297,192	1,260,513	1,969,400	1,297,192	1,260,513	1,969,400
Budget authority:						
40.0001 Appropriation	1,186,100	1,300,720	1,969,400	1,186,100	1,300,720	1,969,400
40.0090 Reduction pursuant to P.L. 99-177		-18,807			-18,807	
41.0001 Transferred to other accounts(-)	-4,547	-32,000		-4,547	-32,000	
42.0001 Transferred from other accounts	115,639	10,600		115,639	10,600	
43.0001 Appropriation (adjusted)	1,297,192	1,260,513	1,969,400	1,297,192	1,260,513	1,969,400
Relation of obligations to outlays:						
71.0001 Obligations incurred, net				1,300,069	1,248,657	1,848,676
72.4001 Obligated balance, start of year				1,219,410	935,376	934,633
74.4001 Obligated balance, end of year				-935,376	-934,633	-1,317,809
77.0001 Adjustments in expired accounts (net)				-371		
78.0001 Adjustments in unexpired accounts				-29,627		
90.0001 Outlays				1,554,106	1,249,400	1,465,500

Procurement, Defense Agencies
Object Classification (in Thousands of dollars)

Identification code 97-0300-0-1-051	1989 actual	1990 est.	1991 est.
Direct obligations:			
131.001 Equipment	1,311,824	1,225,259	1,848,676
199.001 Total Direct obligations	1,311,824	1,225,259	1,848,676
Reimbursable obligations:			
231.001 Equipment	279,795	517,719	487,600
299.001 Total Reimbursable obligations	279,795	517,719	487,600
999.901 Total obligations	1,591,619	1,742,978	2,336,276

SUMMARY OF REQUIREMENTS
(In Thousands of Dollars)

	FY 1989 Estimate	FY 1990 Estimate	FY 1991 Estimate
Defense Communications Agency	102,006	58,299	64,999
Defense Contract Audit Agency	3,490	2,945	2,081
Defense Investiagative Service	2,391	3,147	4,420
Defense Logistics Agency	75,087	66,806	130,168
Defense Mapping Agency	73,333	127,575	141,940
Defense Nuclear Agency	3,395	2,603	4,686
Office of the Secretrary of Defense	118,666	107,736	247,980
Office of the Inspector General	943	1/	1/
Office of the Joint Chiefs of Staff	26,500	23,003	25,451
On-Site Inspection Agency	468	938	1,000
Uniformed Services University of the Health Sciences	853	868	890
Special Operations Forces	-	-	555,196
Classified Programs	885,589	866,593	790,589
TOTAL DIRECT PROGRAM	1,292,721	1,260,513	1,969,400
Reimbursable program	295,178	494,321	487,600
TOTAL	1,587,899	1,754,834	2,457,000
Less: Portion of program to be obligated in subsequent fiscal years	350,477	362,333	483,057
Unobligated balance lapsing	11,565	-	-
Plus: Funds available for obligation from prior years program	365,762	350,477	362,333
TOTAL OBLIGATIONS	1,591,619	1,742,978	2,336,276

1/ In FY 1990 and subsequent years, funding for the Office of the Inspector General is consolidated in the DoD Inspector General appropriation.

Defense Communications Agency (DCA)

($ In Thousands)

FY 1991 Estimate	64,999
FY 1990 Estimate	58,299
FY 1989 Actual	102,006

Purpose and Scope of Work

These funds finance the procurement of essential equipment for the Defense Communications Agency (DCA). The mission of DCA is to perform system engineering and technical support for assigned communications systems; perform systems architecture functions for military satellite communications systems; provide analytical and automatic data processing support to the Joint Staff, the Secretary of Defense and other Department of Defense (DoD) components; procure leased communications and equipment for the DoD and other Government agencies; and provide Presidential and other communications support as required.

Justification of Funds

1. Worldwide Military Command and Control System (WWMCCS) Automatic Data Processing (ADP) Systems:

a. WWMCCS ADP Systems: The WWMCCS ADP Systems provide system software development, testing and maintenance support for the WWMCCS community. The FY 1991 request for $1,300 thousand provides funds for modernization changes (new host peripherals, terminals, and specialized system software modules) at the Operational Support Facility (OSF).

b. National Military Command System (NMCS) ADP Systems: The NMCS ADP systems provide analytical and ADP operational support to the Joint Staff and OSD. The FY 1991 request for $4,282 thousand is required to maintain all systems at an optimum level of functionality, to meet changing system requirements, and to provide for life-cycle management of each system. Funds will procure necessary hardware and software in support of the NMCC and the ANMCC, classified local area networking, new WWMCCS terminals and commercial software products for other ADP systems.

Defense Communications Agency (continued)

c. WWMCCS ADP Modernization (WAM) Program: The responsibility for the modernization of WWMCCS ADP was transferred from the Air Force to the Defense Communications Agency (DCA) in FY 1989. The DCA WAM program is significantly different from the Air Force WIS program. The WAM approach to modernizing WWMCCS recognizes the existence of a current system which is operating satisfactorily. Hardware modernization will focus on the testing of available commercial and government products and integrating chosen products into the existing system. This approach protects site investment hardware; permits the introduction of new technology without disrupting current operation; and provides networking tools that permit users to share data and automation resources that are available anywhere in the WWMCCS standard ADP system. Funds in the amount of $2,020 thousand will procure application development support tools, enhancements to existing computers to support evaluation of network products and protocols, and data base machines to support software development.

2. Items Less Than $2 Million Each: This line provides funding for miscellaneous support, communications, electronic, and automatic data processing (ADP) equipment as follows:

a. The Information Management Organization (IMO) requires $9,550 thousand in FY 1991. These funds will provide for ADP equipment in support of the telecommunications activities of the Defense Communications System (Operational Center Support) and for an integrated office automation system (Information Management System) for the Agency. Funds will be used for the replacement of existing central processing units, acquisition of personal computers, printers, disk storage devices, operating systems, and local area networks for two DCA facilities. Funds will also be used for a multilevel, secure data communications network, TEMPEST equipment, disk upgrades, software and other peripheral equipment, and video conferencing capability for DCA.

b. The Defense Communications Systems Organization (DCSO) requires $304 thousand in FY 1991 to be used to replace obsolete communications and COMSEC equipment, as well as to upgrade and expand ADP/automation in support of operations and network management at DCA. Funds will also be used to replace two cargo-carrying vehicles.

Defense Communications Agency (continued)

c. In FY 1991, $9,247 thousand is required for the White House Communications Agency (WHCA) support to the President, Vice President, White House Staff and the National Security Council. FY 1991 funds will provide for fixed and transportable voice and data communications equipment, facility support systems and ADP upgrades.

d. Funds in the amount of $578 thousand in FY 1991 are needed by the National Communications System (NCS) to obtain ADP and communications equipment to support the Federal Government's National Security Emergency Preparedness (NSEP) telecommunications requirements.

e. The remainder of the funds in this line provides $130 thousand in FY 1991 for various general purpose administrative equipment for elements of the DCA Headquarters.

3. Productivity Investment Funds (PIF): This line item contains FY 1991 funds in the amount of $3,700 thousand for four productivity projects to be undertaken by the Joint Data Systems Support Center (JDSSC) and the Defense Communications System Organization (DCSO). For JDSSC, $552 thousand is required for a JDSSC Analysis Network consisting of TEMPEST workstations, an interactive software environment and a supporting classified network. $1,148 thousand is needed for the second project, Computer Aided Software Engineering, and will be used to obtain a mainframe computer, associated personal computers and supporting software. For DCSO, 2 million dollars is required for the Defense Message System (DMS). These funds will be used for two projects which will provide for the acquisition of equipment and software in support of the DCA Defense Message Rapid Modernization telecommunications center systems and AUTODIN//DDN interface efforts.

4. Industrial/Depot Maintenance Equipment. This program is funded at $33,888 thousand in FY 1991. These funds provide authority to procure equipment for the common user communications backbone program. This equipment is purchased by the Communications Services Industrial Fund (CSIF). The CSIF is then reimbursed by its customers.

Defense Contract Audit Agency (DCAA)

($ in Thousands)

FY 1991 Estimate	2,081
FY 1990 Estimate	2,945
FY 1989 Estimate	3,490

Purpose and Scope of Work

These funds provide for the purchase of the latest technologically advanced electronic data processing and other capital equipment to support DCAA's contract audit mission. FY 1990 and FY 1991 procurement funds will be applied to two major programs: (i) continued financing of the DCAA Integrated Information System (DIIS); and (ii) acquisition of equipment and systems necessary for meeting normal and recurring administrative support requirements.

Justification of Funds

A. DCAA Integrated Information System (DIIS). ($1,981 thousand in FY 1991) In FY 1985, DCAA began developing and installing an integrated information processing network, the DCAA Integrated Information System (DIIS), to support word processing, data processing and telecommunications for approximately 170 field audit offices, six regional offices and the Agency Headquarters.

The decision to develop an integrated information system was based on findings of studies that identified aspects of Agency operations where productivity improvements could be achieved by applying the latest technology in data processing, telecommunications and office automation. These studies applied procedures and guidelines published by the National Bureau of Standards for performing requirements analyses for office automation projects and involved: (1) analyzing the source, use, interaction and methods of collecting and retaining information at all organizational levels; (2) determining efficiency of current management and administrative processes and systems; (3) modifying or eliminating ineffective or inefficient procedures; (4) defining new and/or validating existing information requirements; and (5) implementing an information system that maximizes auditor and administrative productivity in meeting mission requirements.

Defense Contract Audit Agency (Continued)

Therefore, DIIS is designed to exploit the latest information processing technology by reducing or eliminating time expended in the collection, processing, retrieval, analysis and dissemination of information needed to accomplish the Agency's audit mission. Implementation of DIIS will improve the quality of audit management and performance, reduce the time required to perform audit activities and improve methods of handling and reporting information throughout the Agency. Savings that are achieved through productivity increases will be reapplied to other Agency programs.

DIIS was originally designed to be a three-tiered, distributed data network with separate but compatible subsystems (sets of hardware components and application software) operating independently at the Agency's three organizational levels. Local area networks, multifunctional microcomputers and supportive hardware and software were acquired to meet the needs of the first tier, the FAO subsystem. In 1988, a requirements analysis was performed to determine the regional office and Headquarters subsystems components. The Agency decided to satisfy these requirements through the use of existing FAO subsystem equipment, additional microcomputer-based local area networks, and Government timesharing facilities. These subsystems will be supplemented by microcomputers and peripheral equipment that will communicate with and be integral components of the DIIS.

FY 1990/91 funding is required for the continued expansion and enhancement of DIIS by (1) acquiring local area network ARCNET expansion components which will increase the number of auditors that have access to the network by expanding port capability on existing FAO local area networks, as well as provide network capability to the Agency's approximately 400 audit suboffices; (2) beginning a phased replacement of workstations (first 500) that have reached their last year of technological and systems life (such obsolescent equipment will be useless because of its inability to efficiently run new software to interact with upgraded network software); and (3) acquiring data base software that operates on mainframe, mini and microcomputers with interface to DB-2, the data base for the Agency Management Information System (AMIS).

Defense Contract Audit Agency (Continued)

In FY 1991, funding of $1,981 thousand is required to acquire (1) the second 500 microcomputers under the phased replacement program for those workstations that were installed in FAOs in 1986/87 which are technologically obsolete and have reached the end of their useful systems life; and (2) approximately 195 laser printers for field audit and regional offices.

B. Administrative Support Systems. In FY 1991 $100 thousand is required for the purchase of additional and replacement equipment to meet continuing administrative requirements of the Headquarters and field components. These include such items as copiers, micrographic equipment, text storage and retrieval systems.

Defense Investigative Service

	($ in Thousands)
FY 1991 Estimate	4,420
FY 1990 Estimate	3,147
FY 1989 Actual	2,391

Purpose and Scope of Work

The Defense Investigative Service (DIS) is a federal law enforcement, personnel security investigative and industrial security agency whose principle missions are:

1. to provide a single centrally-directed service to conduct all Personnel Security Investigations (PSI) for the Department of Defense (DoD).

2. to safeguard classified information entrusted to industry by the U.S and foreign governments.

3. to develop and promote physical protection of key industrial facilities important to Defense production, mobilization, and military operations.

4. to conduct inspections of DoD contractors having possession or custody of conventional arms, ammunition, and explosives in connections with Defense contractors.

5. to support these missions and the DoD Information Security Management Program by resident and extensive training.

This budget requests funds to facilitate accomplishment of this agency's programmed PSI cases and industrial inspections and surveys.

Defense Investigative Service *(continued)*

Justification of Funds

The FY 1990 funding provides $416 thousand to procure ADP equipment and other capital equipment and $2,731 thousand for the procurement of replacement passenger carrying vehicles.

The FY 1991 request of $184 thousand is to procure ADP equipment and $4,236 thousand to procure 535 replacement passenger carrying vehicles.

PROCUREMENT, DEFENSE AGENCIES

	$ in Thousands
FY 1991 Estimate	130,168
FY 1990 Estimate	66,806
FY 1989 Estimate	75,087

Defense Logistics Agency

Purpose of Scope of Work

The Defense Logistics Agency (DLA) is responsible to the Secretary of Defense for providing effective logistics support, contract administration, technical services and property disposal to all the military services, many federal civil agencies, and friendly foreign governments at the lowest feasible cost to the taxpayer. To perform its diverse activities, DLA procures mission essential items such as materiels handling equipment, automotive vehicles, mechanized materiels handling systems, automated data processing, telecommunications equipment, and miscellaneous warehouse and office equipent.

Justification of Funds

1. Materiels Handling Equipment: The $4.5 million requested in FY 1991 will procure 189 forklifts at various Supply Centers, Depots, and Defense Reutilization and Marketing Offices (DRMOs) to replace over-age equipment and to meet workload requirements. Forklifts are replaced on a schedule according to age, operating hours, and repair costs.

2. Automotive Vehicles: Automotive vehicles are required to replace an aging DLA vehicle fleet. They are needed to move stock in and around warehouses for receipt, storage, and shipment of stock. In FY 1991, $0.8 million is requested for trucks, $0.2 million for semi-trailers, $0.1 million for tractors, and $0.5 million for transporters. These items are required to replace existing units which meet or exceed established DoD replacement criteria based on mileage, age, and/or repair costs.

Defense Logistics Agency (continued)

3. Mechanized Materiel Handling Equipment: In FY 1991 DLA plans to purchase $33.3 million of equipment to modernize operations by installing various automated systems. The systems will improve speed and accuracy and reduce the cost of moving supplies and materiel. The Enhanced DLA Distribution System (EDDS) will be installed at all depots for a total of $14.6 million. EDDS will facilitate the consolidation of shipments and lower the cost of transportation of goods. Modernization projects at depots include a consolidated packing facility at Memphis, Tennessee, and Ogden, Utah, ($4.0 million); mechanization for bulk receiving at all depots ($1.3 million); a reconditioned warehouse modernization project at Mechanicsburg, Pennsylvania ($4.2 million); and automated carousels at all depots ($1.8 million). Equipment to outfit a new general purpose warehouse in Memphis, Tennessee, will cost $2.5 million, and miscellaneous warehouse equipment for all depots and centers, $2.7 million. The planned improvements will save storage space, reduce labor requirements, and enable DLA to improve supply availability. $2.2 million will be used to buy automated conveyors and other equipment to modernize 15 DRMOs (Defense Reutilization Marketing Offices).

4. Automated Data Processing Equipment: Automated Data Processing Equipment (ADPE) is vital to the successful completion of all DLA missions. Prudent investments in ADPE in the past have enabled the Agency to maintain high levels of supply availability and accomplish increasing workload with fewer people. Since 1975, composite workload at DLA has increased by 60 percent while the number of personnel employed has remained relatively constant. The increased productivity is a direct result of investments in automation. The Operations and Maintenance appropriation portion of this budget submission again reflects these savings. We can expect savings to be attainable only if we continue to invest significantly in ADPE.

Defense Logistics Agency (continued)

The FY 1991 request for $62.6 million includes $44.1 million for three DLA MAISRC, and one Navy MAISRC (EDMICS), approved programs. They are SAMMS I^3 (Standard Automated Materiel Management System Immediate Improvement Initiative) at two DLA Supply Centers, for $14 million; CTOL (Cataloging Tools On-Line) which is part of SAMMS I^3, for $6.5 million; DAASO (Defense Automatic Addressing System Office) upgrade at Dayton, Ohio, and Tracy, California, for $10.3 million; and EDMICS (Engineering Data Management Information and Control System) at two DLA Supply Centers, for $13.3 million. The CTOL procurement is a stand-alone program and would be installed regardless of SAMMS I^3. It is a modernization tool that directly supports SAMMS. $17.1 million is requested to meet the various ADPE requirements for the consolidation of the contract administration services within DLA, and $1.4 million for the ADPE portion of the Enhanced DLA Distribution System (EDDS).

5. Telecommunications: In FY 1991 DLA requires $18.5 million to procure telecommunications equipment. This includes $5.0 million to replace an antiquated private branch exchange (PBX) system at the DLA complex in Columbus, Ohio. The growth of DLA activity in Columbus has over-burdened the current PBX system. An additional $5.6 million is also required for telecommunications equipment associated with the DWASP (Defense Warehousing and Shipping Procedures) implementation at the depots, and $0.6 is requested for the telecommunications portion of the Enhanced DLA Distribution System. $7.2 million is included in this request for PIF (Productivity Investment Funds) programs, $1.4 million of which is at DLA.

Defense Logistics Agency (continued)

6. Other Major Equipment: Cranes, tractors, loaders, mowers, saws, sprayers, lab equipment, and test systems are required to operate and maintain DLA facilities. In FY 1991 $7.7 million is requested. Of this amount, $1.2 million is required for cranes to be used at the Defense Reutilization Marketing Offices, $1.7 million for tractors to be used at the Defense National Stockpile Center, and $2.3 million for test systems to be used at the Defense Electronics Supply Center. The remaining $2.2 million will provide various items to several DLA field activities.

7. Items Less Than $2 Million: In FY 1991 $1.2 million is requested to purchase $0.1 million in a variety of general office equipment, such as file systems, duplicators, entrance control systems, projection systems, collators, and audiovisual equipment. This equipment will be used to continue replacing general office equipment which has exceeded its useful life cycle. The miscellaneous warehouse equipment requirements include $1.1 million for new and replacement items such as compactors, scanners, drum handlers, conveyors, carton seal machines, stretch wrap machines, shredder/bailers, and pallet repair equipment. This equipment is required to maintain or improve warehouse operations throughout DLA.

8. Industrial/Depot Maintenance Equipment: $812 thousand is requested in FY 1991 to provide equipment for the clothing factory at the Defense Personnel Support Center in Philadelphia, Pennsylvania. This line is established to allow budget oversight of funds previously controlled through the Asset Capitalization Program.

Defense Mapping Agency

	($ in Thousands)
FY 1991 Estimate	141,940
FY 1990 Estimate	127,575
FY 1989 Estimate	73,333

Purpose and Scope of Work

These funds provide for procurement of equipment essential to the mission of the Defense Mapping Agency (DMA) in support of the mapping, charting, and geodesy requirements of the Department of Defense and in support of the general navigation needs of all United States vessels and of mariners in general. This submission in its entirety is also included in the Tactical Intelligence and Related Activities (TIARA) justification book.

Justification of Funds

1. FY 1990

The FY 1990 DMA budget estimate includes $110.7 million for the Digital Production System which is required to purchase the hardware for one of the DMA production sites, the Hydrographic/Topographic Center located in Brookmont, Maryland, as well as some long lead components, parts and materials for the final production center, the Aerospace Center. The majority of the hardware being purchased for the final site is budgeted in FY 1991.

The Digital Production System is a $2.6 billion program to develop and implement a capability to produce DMA products from current and advanced source materials using computer assisted techniques. Without the Digital Production System, DMA cannot use the new source materials which support 90 percent of the mapping, and charting requirements of DoD operational commanders.

Defense Mapping Agency (Continued)

The Digital Production System has two phases, the first phase, MARK 85, is the transitional step to improve our ability to support military requirements while we convert to an all digital system. The second phase, MARK 90, achieves a fully operational all digital production system by the mid-1990's.

MARK 90 is a softcopy or digital exploitation capability to be turned over for production in 1992. It will permit maximum use of new source materials and result in cost benefits, increased throughput, greater product flexibility, and improved responsiveness.

Beginning in FY 1990 MARK 90 equipment currently under development in the Research and Development phase of MARK 90 will be delivered to the first DMA production center, the Reston Center. In FY 1991 and FY 1992, the equipment being acquired using Procurement funds will be delivered to the other two DMA production centers with production scheduled for 1992. The details of this program are classified and included in the Tactical Intelligence and Related Activities (TIARA) justification book.

In addition to the Digital Production System, $2.8 million of the FY 1990 procurement program is for base operations and mission support equipment including air conditioning and power conditioner units and communications equipment related to MARK 90 implementation.

Also included is $.5 million for the Defense Reconnaissance Support Program; the details of this program are classified and included in the TIARA justification book.

The DMA Distribution Management System (DDMS), requiring $13.5 million, is scheduled for acquisition in FY 1990. The DDMS, compatible with an all digital production environment, will replace the existing distribution system with an enhanced ADP capability to handle incoming requirements and control distribution of MARK 90 maps, charts, and geodetic products.

The purchase of five vehicles costing $.1 million is scheduled for FY 1990.

Defense Mapping Agency (Continued)

2. FY 1991

Within the Other Capital Equipment line item, the Digital Production System continues the MARK 90 acquisition at a slightly higher level of $114.4 million in FY 1991. The FY 1991 equipment purchase consists of hardware for the Aerospace production facility in St. Louis, Mo.

The Defense Reconnaissance Support Program requires $2.7 million and is detailed in the TIARA justification book.

Other Capital Equipment also includes $1.1 million for a Personnel Concept III Air Force developed personnel management system that is required if DMA is to continue using the Air Force automated management personnel system. Communications requirements totalling $3.0 million will fund the mandated telephone purchase for the Aerospace Center in St. Louis, Mo.($1.5 million), the Defense Data Network gateway host computers($.6 million), AUTODIN replacements at two production centers($.6 million) and smaller other requirements related to the DPS implementation ($.3 million). Replacement and some initial purchases of non-Digital Production System production equipment, such as the Hi Speed Raster Plotter($.2 million), Global Positioning System Receivers ($.4 million), production related Moveable Shelving System($.5 million), and other small items($.4 million) requires $1.5 million. The request also includes $.3 million for Productivity Enhancing Capital Equipment.

Automatic Data Processing equipment to be purchased in FY 1991 totalling $18.6 million completes the acquisition of equipment needed to process requirements and control distribution of maps, charts, and digital products to DMA users when MARK 90 production capabilities are operational.

The replacement of fourteen vehicles for $.3 million is included in the FY 1991 program.

Defense Nuclear Agency (DNA)

	($ in Thousands)
FY 1991 Estimate	4,686
FY 1990 Estimate	2,603
FY 1989 Actual	3,395

Purpose and Scope of Work

To provide resources necessary to replace mission-essential vehicles in support of the Defense Nuclear Agency (DNA) Nuclear Weapons Effects Test Program at the Nevada Test Site, and for base support functions at Johnston Atoll, in the Pacific and to replace overage and leased equipment or to procure new investment items required to perform DNA assigned missions. The main objective in procurement of DNA equipment is: a) to plan, program and execute an efficient, orderly, and cost effective vehicle replacement program based on established Department of Defense criteria related to age, mileage and condition of vehicles to assure adequate vehicle support at the Permanent High Explosives Test Site (PHETS) Nevada Test Site, Johnston Atoll, Field Command, DNA and Headquarters DNA; b) to provide effective management of equipment items in the DNA inventory to include replacement of overage items when condition of equipment and maintenance costs warrant, and procurement of leased equipment when cost effective; c) to procure new items of equipment when required in support of Agency missions.

A detailed inventory is maintained on a current basis and on-site inspections are made to assure that all vehicles replaced not only meet DoD criteria for replacement but actually require replacement due to operating condition. Requirements for other equipment items are carefully screened prior to replacement or new procurement. Leased equipment is only procured after performance of a cost-benefit analysis.

Justification of Funds

The procurement program provides for a vehicle program that will ensure uniform serviceability to all areas. The vehicle program requires the replacement of twenty (20) vehicles at a cost of $413,000 in FY 1990 and twenty-eight (28) vehicles costing $433,000 in FY 1991. The increase in FY 1991 is due to the eligibility of more and different types of vehicles for replacement.

The procurement program also includes other capital equipment costing $2,190,000 and $4,253,000 in FY 1990 and FY 1991 respectively. Some of the major costs are associated with the Support Team replacement equipment, Local Area Network (LAN), Office Automation, Computer Processor Upgrade and Productivity Investment Funds (PIF).

Defense Nuclear Agency (continued)

In support of a DNA mission directed by the Joint Chiefs of Staff, $82 thousand of security equipment will be acquired in FY 1991. Additional equipment and replacement compenents must be purchased for the program to maintain established schedules.

Purchase of equipment and software for the Local Area Network (LAN) at Headquarters, DNA and Field Command, DNA is continuing. Integration of Field Command, the Nevada Test Site and AFRRI into the DNA Wide-Area Network (WAN) is scheduled for the end of FY 1991.

The office automation program is continuing in FY 1991 ($370 thousand) and will continue through FY 1992. This program is necessary for DNA to maintain its level of competence in processing data in a decreasing manpower structure.

Upgrade of the mainframe computer resources is required to support the increasing financial and administrative requirements of DNA and the On-Site Inspection Agency (OSIA).

Productivity Investment Funds (PIF) in the amount of $1,600 thousand will be used to modify DNA x-ray above ground testing facilities and upgrade the instrumentation to provide better quality data and limit system degradation due to lengthy exposure to test environment.

Office of the Secretary of Defense and DoD Field Activities

	($ in Thousands)
FY 1991 Estimate	247,980
FY 1990 Estimate	107,736
FY 1989 Actual	118,666

Purpose and Scope

These funds provide for procurement of mission essential new and replacement equipment for the Office of the Secretary of Defense (OSD), including the Unmanned Aerial Vehicle Program, and the Department of Defense (DoD) Field Activities. DoD Field Activities include the Washington Headquarters Services, the American Forces Information Service, the Civilian Health and Medical Program of the Uniformed Services, the Department of Defense Dependents Education, the Defense Medical Support Activity and the Defense Technology Security Administration. In FY 1991, a new Corporate Information Management (CIM) activity is established within OSD to promote the more effective development and use of information systems and technology supporting DoD in various functional areas. CIM initiatives will ensure the standardization, quality, and consistency of data for DoD's multiple management information systems, identify and implement management efficiencies throughout the information system life cycle, and eliminate duplication of efforts in the development of multiple information systems designed to meet a single DoD functional requirement.

Justification of Funds

1. Major Equipment

a. The Washington Headquarters Services (WHS) request of $36,980 thousand in FY 1991 funds mission essential capital investment equipment in support of various Office of the Secretary of Defense activities that support Department of Defense missions in areas of policy and program planning; command, control, and communications; and financial management. Planned equipment purchases include mainframe computers and associated peripherals, communications hardware, microcomputers, network cabling and related equipment, building security systems, and other office equipment.

Office of the Secretary of Defense
and DoD Field Activities (Continued)

b. The Corporate Information Management (CIM) Fiscal Year 1991 program request of $145,000 thousand funds capital investment equipment for the development of standard ADP systems, and for planned computer-aided acquisition and logistics support (CALS) equipment purchases. Planned buys include standard hardware and software systems, software tools, and peripheral equipment, including specialized printing equipment for print-on-demand requirements.

c. The American Forces Information Service (AFIS) Fiscal Year 1991 program of $3,283 thousand will continue to provide for the acquisition of state-of-the-art equipment and normal replacement of broadcast equipment. The equipment will benefit and give better service to approximately 70 manned and over 1,000 unmanned Armed Forces Radio and Television outlets worldwide. There will be four additional sites added to the overseas AFRTS Management Information Systems (ONET). An encoded low-power TV Transmission System will be provided to small overseas audiences. This will enable the audiences over a ten mile radius to receive AFRTS programming. Defense Audiovisual Policy will update the teleconferencing network to enable management and users to receive better service. Also the audiovisual record centers will be upgraded to provide optimum service to customers. Armed Forces Radio and Television Service-Broadcast Center will upgrade with state-of-the-art Digital Audio Production Recorders. This will provide time saving production with quality improvement. The Broadcast Center will provide normal replacement of broadcast equipment based on life expectancy and industry standards.

d. The Department of Defense Dependents Education (DoDDE) funding of $2,404 thousand in FY 1991 provides for: updated replacement educational support equipment for school administrators, teachers, and students; new and replacement equipment for physical education classes and athletic teams; automatic data processing equipment to support school administration initiatives; and kitchen and vocational, automotive, photography, and logistical support equipment.

e. The Defense Medical Support Activity (DMSA) FY 1991 procurement program of $28,980 thousand supports the Composite Health Care System (CHCS) by purchasing automated data processing equipment at Defense medical facility sites.

Office of the Secretary of Defense
and DoD Field Activities (Continued)

f. The Defense Technology Security Administration (DTSA) FY 1991 procurement program of $6,665 thousand will purchase automatic data processing equipment which includes workstations, file servers, processing units and upgrades, telecommunications devices, software, and peripheral equipment. These purchases are in support of the internal DTSA automation initiative, the Defense Export License and Tracking Analysis System (DELTA), and the external, DoD-wide effort, the High Technology Export Analysis and Control System for the 1990's (HI-TRAC 90). DELTA is a hierarchical design which started in FY 1988 with installation of a secure local area network and will continue throughout FY 1991. HI-TRAC 90 funding begins in FY 1991 with the primary emphasis being on building a core repository for export licensing policy information and the communications interfaces needed for the community to access the core systems as well as exchange information with each other.

g. The CHAMPUS Fiscal Year 1991 procurement program of $346 thousand completes the systems upgrade begun in FY 1990. The funds will be used to purchase the final peripheral equipment (tape drives, processors, etc.) necessary to complete the upgrade. This upgrade, which has been planned for several years, will allow CHAMPUS to satisfactorily respond to the increased ADP demand from the military services.

2. Unmanned Aerial Vehicles

The Department of Defense Joint Unmanned Aerial Vehicle (UAV) Program consists of a family of non-lethal systems including existing Pioneer systems and planned Short Range, Medium Range, and Close/Endurance joint systems. The FY 1991 funding of $24,322 thousand will purchase training support and replacement hardware for Pioneer systems. It will also buy upgrade hardware items for Short Range joint systems undergoing test and evaluation during FY 1991.

The Joint Staff

($ In Thousands)	
FY 1991 Estimate	25,451
FY 1990 Estimate	23,003
FY 1989 Actual	26,500

Purpose and Scope of Work

These funds provide for procurement of equipment essential to the mission of the Joint Staff in support of the CINC C2 Initiatives Program, centralized data processing, improved office automation, wargaming, force planning and analysis, security systems, and document storage.

Justification of Funds

The majority of the funds requested will support the immediate command and control requirements of the CINCs through the CINC C2 Initiatives Program (C2IP). In FY 1990, $13.3 million is required to fund this program. In FY 1991, $14.5 million will be provided for C2IP.

The FY 1990 submission also includes $3.4 million for computer hardware under the CINC Analytical Support, formerly called Modern Aids to Planning Program. These funds will provide a state-of-the-art, analytical capability to the unified and specified commands. Three major site upgrades, nine minor site upgrades, and developmental site upgrades are scheduled for FY 1990. In FY 1991, $3.9 million will provide for an additional four major site upgrades, minor upgrades at nine sites, and developmental site upgrades.

In addition, the FY 1990 and FY 1991 requests include continued procurement in support of the Joint Information Management System ($3.1 million in FY 1990 and $2.1 million in FY 1991). In FY 1990, funds in the amount of $1.7 million are needed to purchase two data base machines for processing and management of corporate data.

The Joint Staff (continued)

The FY 1990 request also includes $795 thousand for the purchase and upgrade of computer hardware for Nuclear Forces Analysis. In FY 1991, $698 thousand is required for additional workstations, optical disks, and graphic printers to advance modeling techniques. This program directly supports the Chairman and the Joint Chiefs of Staff in their responsibility to advise the Secretary of Defense and the President concerning strategic and non-strategic nuclear force issues.

The FY 1990 and FY 1991 requests include $1.4 million to upgrade the hardware of the Joint Staff Support Information System ($188 thousand in FY 1990 and $1.2 million in FY 1991). These funds are needed to consolidate up to six Wang VS-85 computers into two processors. This will greatly reduce floor space requirements and operation and maintenance costs.

Other procurements of $1.9 million in FY 1990 and $2.6 million in FY 1991 are required for various systems. These systems include the Logistic Readiness Center, the Joint Center for Lessons Learned, and the War Game Support System. Also included are the Force Planning, Programming, and Budgeting Analysis Program; the In-Place Monitoring System; audio visual equipment; and other computer equipment to be used in the Force Structure, Resource, and Assessment Directorate.

PROCUREMENT, DEFENSE AGENCIES
FY 1991 BUDGET SUBMISSION

	$ in Thousands
FY 1991	1000
FY 1990	938
FY 1989	468

On-Site Inspection Agency

I. Purpose and Scope of Work

To provide resources necessary to procure new investment items for the On-Site Inspection Agency (OSIA), and to replace mission-essential vehicles in support of OSIA beginning in FY 1991.

II. Justification of Funds

In FY 1990 the procurement program provides $938 thousand for Other Capital Equipment. $275 thousand support the Local Area Network (LAN); specifically workstations, removable disk drives, controllers, printers, connecting hardware and software packages. $663 thousand is for a mainframe and miscellaneous equipment in support of office automation.

The FY 1991 request of $950 thousand will continue procurement for the LAN by providing additional workstations and printers and will provide office automation equipment to support the increased manpower, along with the purchase of a second mainframe.

The FY 1991 procurement program also includes the replacement of two (2) vehicles at a cost of $50 thousand. Vehicles purchased in FY 1988 are eligible for replacement in accordance with established Department of Defense criteria related to age, mileage and condition of vehicles. The vehicles are used in the Soviet Union under extremely severe climatic conditions. Additionally, vehicle maintenance, high quality fuel and even, well-paved roads are virtually nonexistent.

Uniformed Services University of the Health Sciences

	($ in Thousands)
FY 1991 Estimate	890
FY 1990 Estimate	868
FY 1989 Actual	853

Purpose and Scope of Work

These funds provide for the cost of equipment required for the operation of the F. Edward Hebert School of Medicine in the Uniformed Services University of the Health Sciences. USUHS was established to ease the critical shortage of military physicians. Its mission is to provide high quality career dedicated military and Public Health Service physicians. The current level of operation of the University is designed to produce a core cadre of approximately 25 to 28 percent of the projected total military physician requirement.

Justification of Funds

The FY 1991 budget estimates will provide essential equipment for: teaching a full medical curriculum; equipping laboratories and animal facilities in support of the clinical investigation programs; and for the full range of administrative and support functions an educational facility requires. The funds provide for the replacement of technologically outmoded or no longer economically repairable equipment and for the acquisition of new items to the equipment inventory.

Special Operations Forces

	$ In Thousands
FY 1991	555.196
FY 1989	*
FY 1990	*

PART I PURPOSE AND SCOPE

USSOCOM is a unified command with worldwide responsibilities to train, maintain, and provide Special Operations Forces (SOF) in support of the contingency plans developed by the five regionally oriented unified commands (USEUCOM, USCENTCOM, USPACOM, USLANTCOM, and USSOUTHCOM). When directed by the President, USCINCSOC will assume command of a special operation anywhere in the world. USSOCOM's Army forces include special forces (Green Berets), Rangers, short to medium range infiltration/exfiltration aircraft, civil affairs specialists, and psychological operations specialists. Navy forces consist of SEAL (Sea, Air, Land) Teams and special boat units. The Air Force special operation units provide medium to long range air infiltration/exfiltration aircraft, specially equipped gun ships, and aerial refueling capability. USSOCOM is the only operational command directly responsible for determining its own force structure requirement, determining the related materiel requirements, procuring the SOF unique equipment, training, and deploying its own units.

PART II JUSTIFICATION OF FUNDS REQUESTED

Aviation Programs

1. MC-130H Combat Talon II (FY 1991 - $85.8 Million) - FY 1991 funds provide for acquisition of peculiar support equipment for the MC-130H Combat Talon II, including radar support equipment, extendable integrated support environment (EISE) and completion of flight test. In addition, peculiar support equipment for the last two operational sites will be purchased.

2. C-130 Modifications (FY 1991 - $96.3 Million) - FY 1991 funds are required to support eight separate mission essential C-130 Special Operations Forces modifications. $17 million is required to equip 14 MC-130E Combat Talon aircraft with ALQ-172 (V1) Pave Mint, ALE-40 dispensers, AAR-44 infrared warning receivers, and retrofit existing 40 KVA generators to a 60/90 KVA electrical system. $4.4 million is needed for improvements to 31 active HC-130 P/Ns, including heads-up displays, burst and secure satellite communications, digital scan radar conversion radar warning receivers, missile warning

*Funding for unique Special Operations Forces equipment has been consolidated into one Budget Activity within Procurement, Defense Agencies beginning in FY 1991. Prior fiscal year funding is included in the Military Departments' budgets as appropriated.

Special Operations Forces (Continued)

receivers, forward-looking infrared (FLIR) and flare/CHAFF dispensers. $11.7 million is essential to upgrade/modify four EC-130E (R) Volant solo ANG aircraft with higher powered transmitters capable of color broadcasts on worldwide standards, thereby improving standoff range. $9.2 million will equip 14 active MC-130E Combat Talons with night vision goggle heads-up-displays. It will also convert the MC-130E fleet to dual-role Talon I/tankers by adding helicopter refueling plumbing pods, hoses and fuselage fuel tanks. Six Combat Talon I's are already equipped with a marginal helicopter refueling capability which requires upgrading. The other eight will require complete systems. $9.1 million will equip 24 MC-130H Combat Talon II aircraft with the following mission essential equipment: global positioning system, inflight INS alignment, communications upgrade and interphone communications upgrade. It also provides for high altitude release point and upgrade to the infrared detection set. $22.3 million is required to replace center wings on the MC-130E Combat Talon I, AC-130H Gunship and HC-130H/P/N tanker SOF aircraft (24 active, 23 reserve and 8 ANG). The requirement to replace the center wings is substantiated by the fact that cracks have been found in spar caps. Cracks and crack growth in this critical structural area can be difficult to detect and the probability for their development is high, given the flight parameters and profiles of the SOF fleet. $21.4 million is required to update the APQ-122(V) 8 X band terrain following/terrain avoidance radar, which has a low reliability (12-18 hours MTBF). This modification affects 14 MC-130E Combat Talons. The lack of bits, pieces and repairable assemblies has resulted in intensive management of this system. The terrain following/terrain avoidance radar will use power management developed under Volant Knight testing. The remaining $1.2 million will equip 24 MC-130H Combat Talon II aircraft with upgraded high-frequency radios.

3. MH-47 Modifications (FY 1991 - $25.5 Million) - FY 1991 funds will modify two CH-47D CHINOOK helicopters for Special Operations Forces longer penetration missions. Mission performance will be improved over longer ranges, in adverse weather, and in unfamiliar, mountainous terrain. The modified aircraft will have an unrefueled range of 1260 nautical miles. The FY 1991 funds will modify the CH-47D with extended range fuel systems that include aerial refueling capability, an integrated computerized cockpit/mission management system, a forward-looking infrared radar for improved night flying, a multimode radar, a world-wide communications system, upgraded engines, and other equipment that will provide SOF units with improved opportunities for mission success. The CH-47D will provide SOF units the capability of inserting/extracting up to 47 soldiers over longer ranges, in adverse weather and at night for rapid deployment, strategic intelligence missions, and other SOF missions.

4. MH-60 Modifications (FY 1991 - $73.9 Million) - FY 1991 funds will modify six UH-60L BLACK HAWK helicopters for Special Operations Forces long-range, clandestine penetration missions. The modified aircraft will have unrefueled range of 600 nautical miles. This aircraft will provide SOF with the capability for low-level flight in adverse weather, extended range, and precision navigation through

Special Operations Forces (Continued)

unfamiliar mountainous terrain. The UH-60L BLACK HAWK will be modified with extended range fuel systems including aerial refueling capability, an integrated computerized cockpit/mission management system, forward looking infrared radar (FLIR) multimode radar (MMR), a worldwide communication system, and other equipment that will afford the opportunity for a successful mission. The mission covers insertion/extraction rapid deployment strategic intelligence strikes, and other operational missions supported by the Special Operations Forces.

5. HH-53 Modifications (FY 1991 - $7.8 Million) - FY 1991 funds provide required support to four mission essential HH-53 Special Operations Forces modifications. One modification, the Service Life Extension Program, includes 14 initiatives for 47 active aircraft. It requires $3.1 million for major refurbishment of electrical and hydraulic systems, upgraded engines and gearboxes, improvements to landing gear secure intercoms, swashplates, self-retaining bolts and tail rotor blades. Also, some structural rework is necessary to accommodate subsystem changes. Another $2.9 million is needed to modify the main fuel systems of 49 active H-53 aircraft to make the systems crashworthy. While the aircraft are presently equipped with crashworthy external auxiliary fuel tanks, the main fuel systems remain only crash resistant. An Accident Investigation Board recommended this modification five years ago following a class "A" mishap of an H-53 in which five of seven fatalities resulted from the post-crash fire. These funds support installation of main crashworthy fuel cells; valves; fittings; and flexible, self-sealing fuel lines. A third modification requires $1.4 million to provide 41 active aircraft with accurate torque monitoring capability, presently limited by an indicator that measures only 130%, while the engine measures 165% torque. The main gearbox limit is 140%. This modification will enable maintenance and flight crews to accurately determine over-torque, eliminating the needless current requirement for depot over-torque testing. The remaining $.4 million is required for miscellaneous Class IV modifications to improve reliability, maintainability, safety and mission performance, and to reduce logistics costs.

6. Other Aircraft Modifications (FY 1991 - $13.5 Million) - FY 1991 funds provide for two other critically needed SOF aircraft modifications: First, the Interactive Defensive Avionics System (Phase II), which integrates the stand alone defense avionics currently on SOF aircraft (14 MC-130E, 10 AC-130H, and 41 MH-53J). The integration includes electronic warfare avionics equipment, constant source and standard SOF flare dispensers. The integration effort varies on the three aircraft due to equipment complement; therefore, the unit cost varies with the different aircraft. The second modification, AAQ-10 Common Module Upgrade (for C-130 and HH-53 SOF aircraft), requires $7.6 million. It provides upgrade to a common module and improves reliability and maintainability. Common modules will permit a high degree of component interchangeability with other SOF aircraft. The meantime between failure is expected to improve from 9.9 hours to 200 hours.

Special Operations Forces (Continued)

7. Aircraft Support (FY 1991 - $55.3 Million) - FY 1991 funds provide for the development of an integrated, state-of-the-art SOF aircraft, ground-based aircrew training system (ATS) to support initial and mission qualification, continuation training, and combat mission rehearsal for MC-130 aircrews where no system currently exists. This requirement is driven by operational, weather, and safety limitations which dictate performing certain critical tasks in a ground-based device. Additionally, aircrews require the capability to rehearse real-world missions prior to execution to enhance the probability of mission success and crew survivability. The proposed solution meets these requirements by providing both a weapon system trainer and a mission rehearsal device. These two devices account for $44 million with support costs of $10.9 million for special support equipment ($2.6 million), technical data ($.5 million), and other support ($4.5 million). The capabilities provided by SOF ATS are essential to the mission readiness of SOF aircrews and their ability to effectively execute their demanding mission.

Ammunition Programs

1. 25 MM Ammunition (FY 1991 - $15.7 Million) - FY 1991 funds procure 25 MM ammunition for the Special Operations Forces AC-130 Gunship. This cartridge is a combat mix of high explosive incendiary (HEI) on the GAU-12 aircraft cannon. These cartridges are used in the air-to-ground role by combat aircrews and will be used in training of these aircrews. The cartridge is electrically primed and incorporates a centrifugally armed impact activated fuse for the projectile. The $15.7 million will purchase 1,090,000 rounds of ammunition.

2. Rocket, Hydra (FY 1991 - $1.4 Million) - FY 1991 funds will procure approximately 5,036 Hydra Rockets (MK66 motors) that are designed to provide a common 2.75 inch rocket motor for helicopter and high performance aircraft. The MK66 motor uses a doublebase extruded propellant to utilize existing production facilities and mass production considerations. The resulting MK90 propellant grain is 5 inches longer and of a different aluminum alloy. The fins are a spring loaded warp around design and are attached around the circumference of a signal nozzle. The MK66 motor can be fired from the Army's M260 and M261 Lightweight Launchers and the Navy/Air Force LAU 61 C/A, LAU 68 D/A and LAU 131/A Launchers. SOF units require the Hydra rockets because it enables them to fire 2.75 inch rockets from both low and high speed aircraft, and has the capability of being fired safely aboard boats.

3. Ranger, Anti-Armor Weapon System Ammunition (RAAWS) (FY 1991 - $6.5 Million) - FY 1991 funds will procure approximately 10,000 rounds of Ranger Anti-Armor/Anti-Personnel Ammunition that consists of several types of rounds of high explosive anti-tank (HEAT), high explosive (HE), high explosive dual purpose (HEDP), smoke, illumination, target practice, and sub-caliber training ammunition. The primary mission will be to

Special Operations Forces (Continued)

defeat light armored targets, personnel and fortifications. Secondary missions include marking, obscuring and illuminating threat weapons. Rangers require ammunition for practice and inventory for emergency deployments. The RAAWS will provide the Rangers with great improvements over the 90mm Recoilless Rifle because of its greater lethality and transportability.

4. Small Arms and Landing Party Ammunition (FY 1991 - $5.5 Million) - FY 1991 funds provide ammunition in support of the Navy's Special Operations Forces which includes Special Boat Units, Special Warfare Groups, Special Warfare Units, SEAL Teams, Special Boat Squadrons and SEAL delivery vehicles. Small Arms and Landing Party Ammunition are required to support training exercises, contingency operations and war reserve requirements. These items consist of various caliber ammunition cartridges, grenades/mines and rockets, and production engineering and product improvement funds to support ammunition quality assurance and to provide improved safety and design. FY 1991 funding procures seven different size ammunition cartridges. The total ammunition cost is $5.185 million, which includes $2.5 million for .50 caliber cartridges, $1.7 million for 7.62 MM cartridges, and $985 thousand for the remaining five types of cartridges. Additionally, $315 thousand procures ammunition support equipment.

5. Pyrotechnic and Demolition (FY 1991 - $17.9 Million) - FY 1991 funds provide Pyrotechnic and Demolition material in support of the Navy's Special Operations Forces which includes Special Boat Units, Special Warfare Groups, Special Warfare Units, SEAL Teams, Special Boat Squadrons and SEAL delivery vehicles (SDV). These funds procure $4.6 million of pyrotechnic signals and training devices and $10.1 million of demolition devices and accessories, which includes grenades, mines, detonators, fuses and cartridges. The remaining $3.2 million procures production engineering and product improvement of pyrotechnic and demolition equipment.

Other Procurement

1. Naval Special Warfare Equipment (FY 1991 - $20.5 Million) - FY 1991 funds procure specialized equipment which will provide SOF forces the capability to carry out critical underwater combat missions. These funds provide $9.8 million for the outfitting requirements of a classified program; $4.4 million for a combat craft; $1.5 million for laser markers; $1.05 million for SEAL delivery vehicles support equipment and $2.4 million for equipment to replace obsolete night vision communications and navigation equipment. The remaining $1.35 million procures test and evaluation of support equipment.

Special Operations Forces (Continued)

2. Communication Equipment Modifications (FY 1991 - $44.9 Million) - FY 1991 funds provide communication systems to support Special Operations Forces. It consists of numerous efforts to develop or improve command, control and communications (C3) capabilities. These efforts are: the upgrade of SOF command and communications equipment for Air Force SOF units ($4.511 million); improvements to the Secure Data Broadcast System Nodes, STU-III Secure Voice System and an on-going Tri-service classified program ($2.380 million); Improved Cryptographic Systems ($3.905 million); Radio Frequency Management System ($7.051 million); Lightweight Deployable Communications ($5.9 million); HF Multi-Channel Radio Systems ($ .527 million); Power Sources ($1.2 million); the Special Operations Forces Distributed Secure Communications Network ($1.698 million); Table Top Base Stations ($5.3 million); and Special Operations Communications Assembly ($2.119 million) and Planning and Rehearsal System ($1.300 million). SOF units require communications systems with extremely low probability of intercept and detection (LPI/LPD). Priority effort is to provide SOF detachments with LPI/LPD secure, lightweight, manpack state-of-the-art communications. Operating in denied areas, with great independence, requires extremely sophisticated, technologically superior communications-electronics equipment that will improve SOF units' warfighting capability without degrading their mobility.

3. Miscellaneous Equipment (FY 1991 - $3.1 Million) - FY 1991 funds are to be used to procure Special Operations Forces non-standard U.S. and foreign weapons. The weapons include rifles, assault rifles, submachineguns, automatic rifles, pistols, sniper weapons, machineguns, mortars, and anti-tank weapons. The weapons will consist of a variety of calibers and countries of origin for use by all Army Active and Reserve Component Special Forces Groups. Ranger anti-armor anti-personnel weapon system serves as a replacement for the M-67 recoilless rifle. Replacement candidates being reviewed include an improved M-67 or the M3 Carl Gustaf. Three Ranger battalions and regimental headquarters will be equipped.

4. Classified Programs (FY 1991 - $67.6 Million) - FY 1991 funds are required to support Classified SOF projects and modifications. Details of these projects are available as required.

5. 4th PSY Operations (FY 1991 - $10.7 Million) - FY 1991 funds will procure four each Modular Print Systems (MPS) and one each Mobile Audio-Visual Systems (AN MSQ-85B). The modular print systems will provide Psychological Operations (PSYOPS) units with the capability to process photography, layout negatives, prepare photolithographic plates, print, and trim, cut, roll, and package printing and reproduction in a tactical field environment. The PSYOPS units require this improved capability over the current medium weight print plant to produce leaflets and other PSYOPS type products. The AN/MSQ-85B is a vehicle mounted, audio-visual productions center for psychological media dissemination and is required to replace an outdated version to provide production quality audio-visual media products. PSYOPS units require this mobile media dissemination capability that is compatible with current media technology that cannot be met with the older AN/MSQ-85A.

Special Operations Forces (Continued)

6. Swimmer Weapon System - SOF (FY 1991 - $2.0 Million) - FY 1991 funds provide unique weapons and equipment, such as equipment canisters, standoff weapon MK 31 and SW support equipment required by Naval Special Warfare Groups One and Two (SDV and SEAL Teams) to carry out beach clearance, underwater and direct action missions.

7. Small Arms and Weapons (FY 1991 - $1.3 Million) - FY 1991 funds provide small arms and weapons in support of the Navy's Special Operations Forces which includes Special Boat Units, Special Warfare Units, SEAL Teams, Special Boat Squadrons and SEAL Delivery Vehicles.

Classified Programs

	($ in Thousands)
FY 1991 Estimate	790,589
FY 1990 Estimate	866,593
FY 1989 Actual	885,589

Purpose and Scope of Work

These funds provide for classified equipment procured by the Defense Intelligence Agency, National Security Agency, Defense Reconnaissance Support Program and the Airborne Reconnaissance Support Program.

Justification of Funds

Justification for these programs is provided to the Congress in classified documents.

Justification for the Defense Intelligence Agency program is contained in the General Defense Intelligence Program and Foreign Counterintelligence Program sections of the National Foreign Intelligence Program Congressional Budget Justification book.

Justification for the National Security Agency Program is contained in the Consolidated Cryptologic Program, the Tactical Cryptologic Program and the Communications Security Congressional Budget Justification books.

Justification for the Defense Reconnaissance Support Program and the Airborne Reconnaissance Support Program is contained in the Tactical Intelligence and Related Activities (TIARA) Congressional Budget Justification book.

COMPARISON OF FY 1989 PROGRAM REQUIREMENTS AS REFLECTED IN THE FY 1990/91 REVISED BUDGET WITH FY 1989 PROGRAM REQUIREMENTS IN FY 1991 BUDGET
SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per FY 1990/91 Revised Budget	Total Program Rqmts per FY 1991 Budget	Increase (+) or Decrease (-)
Defense Communications Agency	42,072	102,006	+59,934
Defense Contract Audit Agency	3,517	3,490	-27
Defense Investigative Service	2,426	2,391	-35
Defense Logistics Agency	75,758	75,087	-671
Defense Mapping Agency	73,423	73,333	-90
Defense Nuclear Agency	3,430	3,395	-35
Office, Secretary of Defense	120,373	118,666	-1,707
Office, Inspector General	958	943	-15
Office, Joint Chiefs of Staff	26,397	26,500	+103
On-Site Inspection Agency	48	468	+420
Uniformed Services University of the Health Sciences	855	853	-2
Classified Programs	832,296	885,589	+53,293
Direct Program, Subtotal	1,181,553	1,292,721	+111,168
Reimbursable Program	402,130	295,178	-106,952
Total Fiscal Year Requirements	1,583,683	1,587,899	+4,216

EXPLANATION OF FY 1989 CHANGES

Defense Communications Agency - $+59,934 Thousand)
The net increase reflects a transfer for the Drug Interdiction effort and the Gramm-Rudman-Hollings sequestration.

Defense Contract Audit Agency - ($-27 Thousand)
The reduction is the result of the Gramm-Rudman-Hollings sequestration.

Defense Investigative Service - ($-35 Thousand)
The reduction is the result of the Gramm-Rudman-Hollings sequestration.

Defense Logistics Agency - ($-671 Thousand)
The reduction represents a transfer from DLA of $457 thousand for a Productivity Investment Fund project and the Gramm-Rudman-Hollings sequestration of $214 thousand.

Defense Mapping Agency - ($-90 Thousand)
The reduction is the result of the Gramm-Rudman-Hollings sequestration.

Defense Nuclear Agency - ($-35 Thousand)
The reduction is the result of the Gramm-Rudman-Hollings sequestration.

Office, Secretary of Defense - ($-1,707 Thousand)
The net reduction is the result of a transfer to the On-Site Inspection Agency for major equipment totalling $420 thousand, a transfer to the Office of the Joint Chiefs of Staff for major equipment totalling $103 thousand, and the Gramm-Rudman-Hollings sequestration of $1,184 thousand.

Office, Inspector General - ($-15 Thousand)
The reduction is the result of the Gramm-Rudman-Hollings sequestration.

Office, Joint Chiefs of Staff - ($+103 Thousand)
The increase reflects a transfer from the Office of the Secretary of Defense for major equipment.

On-Site Inspection Agency - ($+420 Thousand)
The increase reflects a transfer from the Office of the Secretary of Defense for major equipment.

Uniformed Services University of the Health Sciences - ($-2 Thousand)
The reduction is the result of the Gramm-Rudman-Hollings sequestration.

Classified Program - ($+53,293 Thousand)
the net increase reflects transfer for ADP equipment totalling $+48,574 thousand, transfer for classified programs of $+5,915 thousand, transfer for a Productivity Investment fund project of $457 thousand, and the Gramm-Rudman-Hollings sequestration for $1,653 thousand.

Reimbursable Program - ($-106,952 Thousand)
The decrease reflects FY 1989 actual reimbursable orders.

COMPARISON OF FY 1989 FINANCING AS REFLECTED IN THE FY 1990/91 REVISED BUDGET WITH FY 1989 FINANCING IN FY 1991 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Financing Per FY 1990/91 Revised Budget	Financing Per FY 1991 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)	1,583,683	1,587,899	+4,216
Program Requirements (Direct)	(1,181,553)	(1,292,721)	(+111,168)
Program Requirements (Reimbursable)	(402,130)	(295,178)	(-106,952)
Less:			
Anticipated Reimbursables	402,130	295,178	-106,952
Reprogramming From/To Prior Year Budgets	-	-12,342	-12,342
Add:			
Available to Finance Subsequent Year Budgets	-	5,247	+5,247
Unobligated Balance Lapsing	-	11,565	+11,565
Appropriation	1,181,553	1,297,192	+115,639

EXPLANATION OF CHANGES IN FY 1989 FINANCING

Program Requirements (Direct)

The net increase reflects transfers for Drug Interdiction and classified programs ($67,065 thousand), transfer for ADP equipment ($48,574 thousand), and the Gramm-Rudman-Hollings sequester ($-4,470 thousand).

Program Requirements (Reimbursables)

The decrease in the FY 1989 reimbursable program reflects actual obligations incurred.

Anticipated Reimbursables

The decrease in the FY 1989 reimbursable program reflects actual obligations incurred.

Reprogrammed To/From Prior Year Budget Plan

The adjustment reflects the decrease in available funds for obligation due to lapsed authority and sequestration.

Available to Finance Subsequent Year Budgets

The increase represents funds reserved for sequestration in FY 1990.

Unobligated Balance Lapsing

The increase represents funds lapsing for new obligation.

COMPARISON OF FY 1990 PROGRAM REQUIREMENTS AS REFLECTED IN THE FY 1990/91 REVISED BUDGET WITH FY 1990 PROGRAM REQUIREMENTS IN FY 1991 BUDGET
SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per FY 1990/91 Revised Budget	Total Program Rqmts per FY 1991 Budget	Increase (+) or Decrease (-)
Defense Communications Agency	29,954	58,299	+28,345
Defense Contract Audit Agency	2,988	2,945	-43
Defense Investigative Service	3,193	3,147	-46
Defense Logistics Agency	87,087	66,806	-20,281
Defense Mapping Agency	129,447	127,575	-1,872
Defense Nuclear Agency	2,641	2,603	-38
Office, Secretary of Defense	98,616	107,736	+9,120
Office, Joint Chiefs of Staff	23,340	23,003	-337
On-Site Inspection Agency	952	938	-14
Uniformed Services University of the Health Sciences	881	868	-13
Classified Programs	942,701	866,593	-76,108
Direct Program, Subtotal	1,321,800	1,260,513	-61,287
Reimbursable Program	444,120	494,321	+50,201
Total Fiscal year Requirements	1,765,920	1,754,834	-11,086

EXPLANATION OF FY 1990 AGENCY CHANGES

Defense Communications Agency - $+28,345 Thousand)
The net increase reflects congressional action to fund the $29,200 thousand Asset Capitalization Program in a procurement account, and an $855 thousand reduction for the Gramm-Rudman-Hollings sequestration.

Defense Contract Audit Agency - $-43 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

Defense Investigative Service - $-46 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

Defense Logistics Agency - ($-20,281 Thousand)
The net decrease reflects a congressional reduction for ADP of $20,000 thousand, congressional increase of $700 thousand for the Asset Capitalization Program, and sequestration of $981 thousand.

Defense Mapping Agency - ($-1,872 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

Defense Nuclear Agency - $-38 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

Office, Secretary of Defense - ($+9,120 Thousand)
The net increase is the result of a congressional adjustment for ADP and a classified program of $10,700 thousand, and the Gramm-Rudman-Hollings sequestration of $1,580 thousand.

Office, Joint Chiefs and Staff - ($-337 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

On-Site Inspection Agency - $-14 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

Uniformed Services University of the Health Sciences - ($-13 Thousand)
The reduction reflects the Gramm-Rudman-Hollings sequestration.

EXPLANATION OF FY 1990 AGENCY CHANGES (Continued)

Classified Programs - ($-76,108 Thousand)

The reduction is the result of congressional reductions totalling $41,680 thousand, proposed transfers totalling a reduction of $-21,400 thousand, and the Gramm-Rudman-Hollings sequestration of $-13,028 thousand.

Reimbursable Program - $+50,201 Thousand)

The increase reflects an increase in reimbursable orders based on final congressional action.

COMPARISON OF FY 1990 FINANCING AS REFLECTED IN THE FY 1990/91 REVISED BUDGET WITH FY 1990 FINANCING IN FY 1991 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Financing Per FY 1990/91 Revised Budget	Financing Per FY 1991 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)	1,765,920	1,754,834	-11,086
Program Requirements (Direct)	(1,321,800)	(1,260,513)	(-61,287)
Program Requirements (Reimbursable)	(444,120)	(494,321)	(50,201)
Less:			
Anticipated Reimbursables	444,120	494,321	50,201
Appropriation	1,321,800	1,260,513	-61,287

EXPLANATION OF CHANGES IN FY 1990 FINANCING

Procurement requirements (Direct Program)

The decrease of $61.3 million reflects congressional action that reduced the program by $21.1 million, proposed reprogramings for $21.4 million, and the Gramm-Rudman-Hollings sequestration of $18.8 million.

Reimbursable Programs

The increase results from congressional program adjustments.

PASSENGER CARRYING VEHICLES
FY 1991
PROCUREMENT, DEFENSE AGENCIES

AGENCY	NUMBER OF VEHICLES	UNIT COST	REPLACE OR AUGMENT	LOCATION	$ IN THOUSANDS
ON-SITE INSPECTION AGENCY					
	1 SEDAN	$25,000	R	USSR	$25
	1 STATION WAGON	$25,000	R	USSR	$25
DEFENSE INVESTIGATIVE SERVICE					
	535 SEDANS	$7,918	R	NEW ENGLAND - 56 MID-ATLANTIC - 36 CAPITAL REGION - 81 MID-WESTERN - 83 SOUTHEAST - 82 SOUTHWEST - 87 NORTHWEST - 55 PACIFIC - 55	$4,236
DEFENSE NUCLEAR AGENCY					
	12 SEDANS	$11,167	R	HEADQUARTERS - 2 FIELD COMMAND - 3 NEVADA TEST SITE - 7	$134
NATIONAL SECURITY AGENCY					$376
	12 SEDANS	$12,000	R	OVERSEAS - 6 CONUS - 6	
	11 STATION WAGONS	$12,000	R - 9; A - 2	OVERSEAS - 4 CONUS - 7	
	1 BUS	$100,000	A	CONUS	

PASSENGER CARRYING VEHICLES
FY 1991 BUDGET SUBMISSION
PROCUREMENT, DEFENSE AGENCIES

AGENCY	NUMBER OF VEHICLES	UNIT COST	REPLACE OR AUGMENT	LOCATION	$ IN THOUSANDS
DEFENSE INTELLIGENCE AGENCY					$458
	80 SEDANS	$5,725	R	SOUTH/LATIN AMERICA - 26 SOUTH ASIA/MIDDLE EAST - 13 AFRICA - 18 PACIFIC AREA - 2 EASTERN EUROPE - 11 WESTERN EUROPE - 10	
TOTAL	653		653		$5,254
	640 SEDANS 12 STATION WAGONS 1 BUS		650 REPLACE 3 AUGMENT		

Note: Written justification for each request is provided within the agency backup material.

DEFENSE PRODUCTION ACT PURCHASES

DEFENSE PRODUCTION ACT PURCHASES
FOR FISCAL YEAR 1991

For purchases or commitments to purchase metals, minerals, or other materials by the Department of Defense pursuant to Section 303 of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2093); $1,800,000, to remain available until expended. (Department of Defense Appropriations Act, 1990).

Defense Production Act Purchases
Program and Financing (in thousands of dollars)

Identification code 97-0360-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1989 actual	1990 est.	1991 est.	1989 actual	1990 est.	1991 est.
Program by activities:						
10.0001 Total (object class 26.0)	26,821	49,479	1,800	42,954	11,465	30,670
Financing:						
Unobligated balance available, start of year:						
21.4002 For completion of prior year budget plans				-25,760	-9,613	-47,627
21.4003 Available to finance new budget plans		-6,688			-6,688	
21.4009 Reprograming from/to prior year budget pla	-14					
23.4090 Reduction pursuant to P.L. 99-177 in unob ba		688			688	
Unobligated balance available, end of year:						
24.4002 For completion of prior year budget plans				9,613	47,627	18,757
24.4003 Available to finance subsequent year budge	6,688			6,688		
25.0001 Unobligated balance lapsing	5			5		
39.0001 Budget authority	33,500	43,479	1,800	33,500	43,479	1,800
Budget authority:						
40.0001 Appropriation	33,500	50,000	1,800	33,500	50,000	1,800
40.0090 Reduction pursuant to P.L. 99-177		-521			-521	
41.2201 Transferred to other accounts (unob bals)		-6,000			-6,000	
43.0001 Appropriation (adjusted)	33,500	43,479	1,800	33,500	43,479	1,800
Relation of obligations to outlays:						
71.0001 Obligations incurred, net				42,954	11,465	30,670
72.4001 Obligated balance, start of year				38,262	77,283	79,248
74.4001 Obligated balance, end of year				-77,283	-79,248	-93,518
90.0001 Outlays				3,932	9,500	16,400

Defense Production Act Purchases
Object Classification (in Thousands of dollars)

Identification code 97-0360-0-1-051		1989 actual	1990 est.	1991 est.
	Direct obligations:			
126.001	Supplies and materials	42,954	11,465	30,670
199.001	Total Direct obligations	42,954	11,465	30,670
999.901	Total obligations	42,954	11,465	30,670

DEFENSE PRODUCTION ACT PURCHASES

($ IN THOUSANDS)

FY 1991 Estimate	1,800
FY 1990 Estimate	49,479
FY 1989 Actual	26,821

Purpose and Scope of Work

These funds will be used for the purchase or commitments to purchase metals, minerals, or other materials required by the Department of Defense (DoD). The resulting contracts will provide for the delivery of two products essential to the national security. First is acquisition of the specific commodity, metal, mineral or other materials, required as part of the military weapon system. The second, is the new or increased domestic industrial capacity established to produce the specific commodity. This new or expanded capacity adds to the viability of the defense industrial base, permits the implementation of the Five Year Defense Program and increases the deterrent capability represented by a responsive domestic industry.

The definition of products for Title III contracts is defined as individual or combinations of industrial commodities from the basic form to the completed material, item, assembly, or system including the industrial process and machinery required for the manufacturing and production process.

Background

As set forth in the President's National Security Decision Directive No.47, dated July 22, 1982, import and export controls and Defense Production Act (DPA) authorities should be used to increase the capability of industry and infrastructure systems in cases where the free-market cannot reasonably be expected to provide the required national security capability in a timely manner. It is DoD policy to rely primarily on the commercial marketplace for development and production of weapons systems and hardware. However, DoD is confronted with increasing imports from foreign sources of supply which have reduced the capability of the domestic industrial base to supply needed commodities. During periods when shortage of these commodities are experienced by the DoD, the priorities and allocations provisions (Title I), of the Defense Production Act are utilized. Title I allocates the available supply giving first preference to the National Security programs, primarily defense contracts. In situations where the available domestic supply is insufficient to meet the national security need, Title I is not adequate. As assurance for these situations, the U.S. maintains the Strategic and Critical Materials Stockpile, more commonly referred to as the National Defense Stockpile, to supply the military, industrial and essential civilian needs for the industrial materials.

The industrial materials in the Stockpile inventory are only basic commodities, primary metals and minerals which require further processing and are only available, in accordance with the Stockpile Law, for a national emergency. These commodities are not available to the DoD for peacetime production shortages, and even if they were to become available, they often are not readily usable for defense related production without additional time-consuming and energy intensive processing. Therefore, other tools must be found to increase the domestic supply of specific commodities needed to meet defense requirements.

Title III of the DPA is the existing authority which has a proven record of success in providing long-term, cost effective, economic incentives to encourage private sector investment. (During the Korean War, approximately $8.4 billion of industrial facilities were established

with a government outlay of less than $0.9 billion.) The DPA, under Title III, provides authority to incentivize industry to invest in new or expanded capacity through grants, loans, loan guarantees, purchases, or purchase commitments. Title III funds will be used solely for purchase or purchase commitment contracts. The rationale for using only purchase or purchase commitment contracts is to minimize Government risk with no outlay of funds until an acceptable product is delivered, while reducing private sector investment risk.

Title III is a cost effective alternative to increasing the size and scope of the Strategic and Critical Materials Stockpile. In most cases this approach provides greater flexibility, reduces material cost, requires lower inventory levels, increases the gross national product, provides a stable workforce and improves our deterrent capability through a responsible domestic industrial base.

To increase domestic capabilities, the private sector must see the advantages of additional investments and have reasonable assurance of the success of the new or expanded industrial capability. In order to achieve this, incentives are needed. In industries where capital formation is not difficult and the investment is minimal and short term, tax incentives may be sufficient. However, industries requiring large initial investment and which are subject to market competition from large, world producers require additional encouragement.

A Title III purchase or purchase commitment is a supply contract which is designed to establish a secure source for products critical to the national defense. Under these contracts, the Department of Defense through competitive contracting procedures, agrees to purchase a specified quantity of materials over a particular period of time at a prenegotiated price. The purchaser and seller both understand there is the risk that at any given time the market price may either be more or less than the negotiated contract price. However, the seller is willing to take the risk for assurance that the output will be procured. The purchaser, in this case the U.S. Government, is willing to take the risk

for assurance of a viable industrial capability and a stable supply of critical products needed for national security.

FY 1991 Projects

1. TITLE: RHENIUM METAL

This is a follow-on to the project approved in FY 1990 and FY 1991 funding will complete phase II, expanding capacity of rhenium metal by 6,000 pounds per year.

TOTAL $1.8 million

NATIONAL GUARD AND RESERVE EQUIPMENT, DEFENSE

NATIONAL GUARD AND RESERVE EQUIPMENT, DEFENSE
FOR FISCAL YEAR 1991

For procurement of aircraft, ammunition, other weapons, and other procurement for the reserve components of the Armed Forces; $455,400,000, to remain available for obligation until September 30, 1993. (Department of Defense Appropriations Act, 1990)

National Guard and Reserve Equipment, Defense
Program and Financing (in Thousands of dollars)

Identification code 97-0350-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1989 actual	1990 est.	1991 est.	1989 actual	1990 est.	1991 est.
Program by activities:						
Direct program:						
00.0101 Reserve Equipment	483,400	379,370	192,100	385,095	428,175	341,804
00.0201 National Guard Equipment	655,401	528,450	263,300	667,695	575,027	290,305
10.0001 Total	1,138,801	907,820	455,400	1,052,790	1,003,202	632,109
Financing:						
17.0001 Recovery of prior year obligations				-34,152		
Unobligated balance available, start of year:						
21.4002 For completion of prior year budget plans				-414,289	-531,312	-435,930
21.4003 Available to finance new budget plans	-193,000		-40,900	-193,000		-40,900
21.4009 Reprograming from/to prior year budget pla	-3,140					
22.4001 Unobligated balance transferred to other acc	193,000			193,000		
Unobligated balance available, end of year:						
24.4002 For completion of prior year budget plans				531,312	435,930	259,221
24.4003 Available to finance subsequent year budge		40,900			40,900	
25.0001 Unobligated balance lapsing	3,140			3,140		
39.0001 Budget authority	1,138,801	948,720	414,500	1,138,801	948,720	414,500
Budget authority:						
40.0001 Appropriation	1,138,900	973,720	455,400	1,138,900	973,720	455,400
40.0004 Reduction pursuant to P.L. 100-463	-99			-99		
41.0001 Transferred to other accounts(-)		-25,000			-25,000	
41.2201 Transferred to other accounts (unob bals)			-40,900			-40,900
43.0001 Appropriation (adjusted)	1,138,801	948,720	414,500	1,138,801	948,720	414,500
Relation of obligations to outlays:						
71.0001 Obligations incurred, net				1,052,790	1,003,202	632,109
72.4001 Obligated balance, start of year				2,064,338	2,112,583	2,252,785
74.4001 Obligated balance, end of year				-2,112,583	-2,252,785	-1,975,194
77.0001 Adjustments in expired accounts (net)				-13,198		
78.0001 Adjustments in unexpired accounts				-34,152		
90.0001 Outlays				957,197	863,000	909,700

National Guard and Reserve Equipment, Defense
Object Classification (in Thousands of dollars)

Identification code 97-0350-0-1-051		1989 actual	1990 est.	1991 est.
	Direct obligations:			
	Other services:			
125.004	Other	642		
131.001	Equipment	1,052,148	1,003,202	632,109
199.001	Total Direct obligations	1,052,790	1,003,202	632,109
999.901	Total obligations	1,052,790	1,003,202	632,109

NATIONAL GUARD AND RESERVE EQUIPMENT, DEFENSE

ALL COMPONENTS

$ IN THOUSANDS

See justification by component.

FY 1991 Estimate	$455,500
FY 1990 Estimate	$907,820
FY 1989 Estimate	$1,138,801

NATIONAL GUARD AND RESERVE EQUIPMENT, DEFENSE

Army Reserve

($ In Thousands)

FY 1991 Estimate	61,100
FY 1990 Actual	88,900
FY 1989 Actual	30,000

Purpose and Scope of Work

These funds provide for procurement of mission essential equipment for the Army Reserve (USAR). The mission of the USAR is to provide trained units and qualified personnel for active duty when needed in time of war, national emergency, or when required to maintain national security. It also performs peacetime missions compatible with training and mobilization readiness requirements. The USAR is a major component of the Army under the Total Army concept. In implementing this policy, the Congress, OSD, and the Department of the Army have assigned additional missions to the USAR and contributed to a more highly trained and better-equipped force.

1. Shop Equipment Sets (FY 1991, $0.6 million). When the Army modernized its active divisions in the eighties, the requirement for non-divisional maintenance units, which become second echelon maintenance DS units on the battlefield, failed to be funded for the necessary equipment due to priority given combat systems. Based on inadequate quantities of Shop Equipment Sets, the USAR's divisional light and heavy maintenance companies, as well as non-divisional Direct and General Support Maintenance units, experience difficulty in carrying out their training missions for combat deployment. Provisioning the force with this specialized, critical equipment will fix this problem, for units which mobilize with III Corps, and allow the USAR to sustain the Total Army or any specified command on the battlefield.

2. Test Set Common Core (FY 1991, $0.5 million). Critial to mission accomplishment in USAR divisional and non-divisional maintenance companies is adequate test, measurement, and diagnostic equipment to diagnose properly the maintenance required on assigned equipment. This diagnostic equipment will enable maintenance units to train, gain experience, and prepare for mobilization of the force. Additionally, these test sets will enhance equipment and training readiness by improving the deployment capability of receiving units. Procurement of these test sets will allow USAR maintenance and supported units to sustain themselves on the battlefield in a number of combat scenarios. The FY91 buy will equip the non-divisional maintenance units which have a mobilization mission to support III Corps, and I Corps.

3. Medium Tactical Trucks (FY 1991, $60.0 million). Due to current shortages in rolling stocks, the USAR is not 100% mobile with assigned transportation assets to complete assigned missions. As the Active Army ramps down and the USAR assumes former active missions including increased deployment taskings, adequate transport must be on-hand permitting USAR troop commanders the proper tools to accomplish the combat service support mission of transporting ammunition, engineer barrier materiels, petroleum products, food, and water to the soldier in the field or on the battle ground. Also, the Army Reserve continues its transition from old H-series to the new L-series modified Table of Organization and Equipment (MTOE). The new MTOE provides efficiency by providing/authorizing equipment while reducing personnel assigned or required. FY 91 Medium Tactical Truck funding will provide 915 critically required 5 ton trucks/tractors for distribution throughout the USAR. This equipment will appreciably improve the overall inventory of USAR tactical truck fleet and make USAR units mission capable within this area. Additionally, and most importantly, it will fix the readiness at the appropriate levels to support priority units with the 18th Airborne Corps, III Corps, and I Corps, respectively. Accordingly, in current fluid situations, the truck remains the essential combat vehicle for the USAR.

Naval Reserve

($ In Thousands)	
FY 1991 Estimate	60,400
FY 1990 Estimate	117,800
FY 1989 Actual	144,600

Purpose and Scope of Work

These funds provide for procurement of mission essential equipment for the U.S. Naval Reserve, an integral part of the Navy Total Force. The mission of the Naval Reserve is to provide trained units and qualified persons available for active duty in the Armed Forces in time of war, or national emergency, and at such other times as the national security requires.

Justification of Funds

1. C-130H Aircraft: (FY 1990, $48.0 million; FY 1991, $48.0 million)

The C-130T Navy configured aircraft provides a Heavy Lift Transport capability for intra-theater operations in a wartime environment that are beyond the capability of the C-9. The C-130 aircraft is specifically designed for transporting bulky/heavy freight such as engines, propellers, helicopter blades, large items of support equipment, etc.; and operations from short austere fields. The FY 1991 procurement will provide, along with existing Navy (and Coast Guard) aircraft, sufficient heavy airlift to accomplish assigned wartime missions.

2. HH-60H Upgrade Kits: (FY 1991, $8.4 million)

These funds complete the buy-out of this upgrade, which includes the AAR-47 Missile Plume Detector, the ALE-47 Chaff/Flare Dispenser, AVR-2 Lasar Detector, Heads Up Display (HUD), KG-10 Moving Map, and ARS-6 Downed Aviator Locating System. The mission of the HH-60H, the Navy's only Combat Search and Rescue/Special Warfare Support helicopter, requires penetration of enemy coastal defenses and then operations in proximity of inland forces for precise ingress/egress to a pick up zone for the most rapid extraction of SEAL elements or rescuees. The threat/missile detection and evasion systems are critical upgrades required for successful operations in a high threat environment. The AAR-47 will detect missile attack regardless of the fire control method used - infrared, radio frequency, or electro-optical, provides sector direction finding, and interfaces directly for automatic activation of the ALE-47 countermeasures dispenser.

Naval Reserve (continued)

3. P-3C Aircraft Support Equipment: (FY 1991, $4.0 million)

The Defense Resources Board has directed Naval Reserve transition to the P-3C aircraft. The P-3C aircraft is an ASW capable aircraft performing air antisubmarine warfare and air surface surveillance warfare activities. This funding will facilitate coordinated transition planning with procurement action for acquisition of a portion of the required Intermediate and Organizational level maintenance support equipment. Specifically, this funding will procure organizational and intermediate level airborne Maintenance Assist Modules (MAM) required for support of the various avionics systems on the aircraft, and thirteen pieces of static discharge diagnostic support equipment.

Marine Corps Reserve

($ IN THOUSANDS)

FY 1991	ESTIMATE	25,000
FY 1990	ESTIMATE	108,600
FY 1989	ACTUAL	45,000

Purpose and Scope of Work

These funds provide for the purchase of the KC-130T Tanker Aircraft. The KC-130T is doubly effective as a long-range fighter aircraft refueler, as well as a low-level, low-speed helicopter refueler. The KC-130T is capable of and has performed other missions, such as tactical airlift, airdrop of men and material, and as forward-area air evacuation.

Justification of Funds

1. KC-130T Aircraft (FY 1991, $25.0 million): The Marine Corps has a continuing requirement for tactical, non-strategic, land-based tankers. FY 1991 funding will provide for one KC-130T. This will provide the 20th aircraft out of a requirement of 28 to eventually fill two Reserve refueler squadrons. This aircraft will be used to conduct refueler and logistics missions for VMGR 452 in Newburg, NY.

NATIONAL GUARD AND RESERVE EQUIPMENT, DEFENSE

Air Force Reserve

($ In Thousands)

FY 1991 Estimate	45,612
FY 1990 Estimate	64,000
FY 1989 Actual	227,000

Purpose and Scope of Work

These funds provide for procurement of mission essential equipment for the Air Force Reserve (AFR). The mission of the AFR is to provide trained units and qualified personnel for active duty when needed in time of war, national emergency, or when required to maintain national security. It also performs peacetime missions compatible with training and mobilization readiness requirements. The AFR is a major component of the Air Force under the Total Force Policy adopted in 1973. In implementing this policy, the Congress, OSD, and the Air Force have assigned additional missions to the AFR and contributed to a more highly trained and better-equipped force.

Justification of Funds

1. Miscellaneous Equipment (FY 1991, $5.0 million):

a. Spectrometers. Spectrometers are needed for the Spectrometric Oil Analysis Program (SOAP) Sample Systems, because of the rugged, portable computer-based oil analysis capability needed to support tactical fighter units during deployed and wartime conditions. The FY 1991 procurement will buy nine units for a total cost of $650 thousand.

b. Expansion Disk Drives. Eleven of the Air Force Reserve units which receive mainframe computer support through the Remote Job Entry Terminal System (RJETS) need expansion disk drives in order to upload the standard base release three (SB3) software. This is a major upgrade to the basic software supporting the RJETS sites and has an approved Communications Systems Requirement Document number with full justification. The FY 1991 funding will procure eleven units for a total cost of $285 thousand.

c. Minicomputer Upgrade. AFRES/AC currently uses the UNISYS 2200/204 type minicomputer to provide management of the Personnel Budget and Accounting System (PBAS) and the Air Reserve Pay and Allowance System (ARPAS) data. An upgrade is necessary to this minicomputer configuration to support all transactions in the accounting data base, civilian pay for AFRES bases, fuels accounting, and the Life Cycle management system. The FY 1991 funding will procure one unit for a total cost of $610 thousand.

d. C-300 Ground Refuelers. These represent modernization and upgrade of required aircraft refueling vehicle capability at AFRES-owned bases. The FY 1991 funding of $75 thousand will modify five vehicles.

e. URC-110 Radios. $100 thousand in FY 1991 funding is required for five radios to communicate with gaining command posts when functioning as a mobilized/deployed MAC Airlift Division. These radios are currently authorized only for non-mobility use.

f. Vehicle Procurement. 176 vehicles to include tow tractors, ambulances, law enforcement vehicles, dump trucks, road scrapers, forklifts, truck-tractor & trailer, buses and pickups. These vehicles are needed to reduce vehicle downtime in the existing fleet and to reduce shortfalls in some vehicle categories required by units for wartime mission accomplishment. The FY 1991 funding level is $3.3 million.

2. C-130H Aircraft (FY 1991, $24 million):

Funds provide for the purchase of one C-130H aircraft and the required peculiar spares and support equipment needed to allow continued modernization, enhanced mission readiness, improved training, and wartime capability. Estimate is based on recent contractual experience with C-130H procurement. $24 million is required for FY 1991 for the aircraft, its spare parts and support equipment based on this most recent information.

3. F-16 Phased Improvement Program (FY 1991, $10.0 million):

a. F-100PW-220E Engine. The F-100PW-220E engine is a reliability and maintainability upgrade which incorporates a digital fuel control capability which eliminates manhour consuming tasks like engine trim runs. FY 1991 funding of $5.0 million will insure engineering and production is initiated to incorporate this capability in units equipped with block 10 aircraft.

b. Improved Computer. The improved computer is being developed to insure aircraft computer reliability will increase from a few hours between failure to a few hundred hours between failure. An ancillary gain will be increased computer capacity to store data. The estimated cost is $200 thousand per aircraft with procurement to begin in late FY 1991.

4. C-130 Mods/Defensive Systems (FY 1991, $6.6 million):

a. Self Contained Navigation System (SCNS). C-130 SCNS capability is required on 40 newly procured C-130H aircraft. Aircraft were procured utilizing Congressionally appropriated funds before SCNS was ready and available for installation. This capability standardizes the entire C-130 fleet to SCNS configuration and incorporated a 1553 data bus which will be foundational to all avionics upgrades to the C-130 in the future. $4.6 million will be used in FY 1991 to continue the upgrade.

b. Defensive Systems. The C-130 defensive systems are one of the highest priorities in the Reserve program due to the threat from shoulder launched heat seeking missiles used in the drug infested Latin American theater of operations. $2.0 million in FY 1991 funding will be utilized to complete installation of a C-130 defensive suite to include missile warning receiver and chaff/flare system and to begin the development and installation of a radar warning receiver system.

ARMY NATIONAL GUARD

($ IN THOUSANDS)

FY 1991 ESTIMATE	133,000
FY 1990 ESTIMATE	314,900
FY 1989 ACTUAL	256,000

Purpose and Scope of Work

The funds provide for the procurement and modernization of mission essential equipment for the Army National Guard. Each category is specifically selected in order to provide the greatest improvement in Equipment On Hand readiness over the shortest period of time. The equipment procured provides the Army National Guard capabilities not otherwise achieveable and improves readiness of Army National Guard units.

Justification of Funds

1. Miscellaneous Equipment - (FY 1991, $15.0 million) These funds provide for the purchase of small quantities of equipment with a purchase price of normally under $100,000 each. An essential part of improving the Equipment On Hand readiness of Army National Guard units and the supportability of units in combat is the procurement of support equipment items. The readiness of supply, maintenance and service units lags behind the combat units that have been involved in the Army's force modernization effort. Support units for major combat elements are particularly difficult to equip. Requirements for this miscellaneous equipment such as fuel support equipment, electronic shop facilities, power supplies, tools and test equipment, materiel handling equipment, missile maintenance equipment and communications equipment provide for readiness and capability improvement as most items are less expensive and required in smaller quantities.

2. Medium Tactical Vehicles - (FY 1991, $25.0 million) These funds provide for the purchase of medium tactical vehicles. These vehicles, which provide the major transportation for fuel, ammunition, and supplies for combat support, combat service support, and non-mechanized combat units. Although the 5 ton truck has traditionally filled this role, the Army is developing a new Family of Medium Tactical Vehicles to support the requirements. The Army National Guard is critically short 5 ton cargo trucks, the mainstay of the medium tactical wheeled vehicle fleet. This procurement would provide quantities of medium vehicles (cargo) to equip 29 engineer battalions.

ARMY NATIONAL GUARD (continued)

3. Heavy Tactical Vehicles - (FY 1991, $16.3 million) These funds provide for the purchase of heavy tactical vehicles to satisfy the organic resupply requirements for Army National Guard artillery and heavy combat units. Fuel and ammunition support are provided by the Heavy Expanded Mobility Tactical Truck (HEMTT) currently. The ammunition transport requirement will be satisfied by the Palletized Load System (PLS) in the future. The procurement 87 HEMTT tankers will address major fuel and wrecker requirements, would be issued to support the refuel requirements in 1/ mechanized infantry battalions.

4. M916 Truck Tractors - (FY 1991, $13.0 million) These funds provide for the purchase of M916A1 Truck Tractors to provide transport capability for medium equipment such as bulldozers. The readiness of many Army National Guard engineer units is contingent on medium equipment transport capability. The truck tractor currently issued to most units is the M123. Replacement of M123 Truck Tractors with new M916A1 Truck Tractors would allow the retirement of the M123 from the Army National Guard fleet and improve equipment readiness rating. FY 1991 procurement of 100 Truck Tractors would complete replacement of approximately half of the 600 M123 Truck Tractors considering quantities procured in the past.

5. Reengine Program 5 Tons - (FY 1991, $ 8.8 million) These funds provide for the replacement of engine, cooling system, fuel system and associated truck components and labor costs to convert Army National Guard gasoline 5 ton trucks to diesel powered, reliable vehicles. The age of a significant portion of the existing fleet has caused considerable maintenance and support problems. Approximately 2,400 gasoline powered 5 ton trucks are unsatisfactory in operating cost, readiness rates, and parts availability. Rather than remove these vehicles from the inventory, a reengine project is proposed to restore useful life to these older vehicles. Reengining 98 gasoline powered 5 ton trucks will reduce operating costs for the fleet and improve readiness by raising the Fully Mission Capable rate and increasing operational capability.

6. M577 Command Post Carriers - (FY 1991, $24.9 million) These funds provide for the purchase of M577 Command Post Carriers. Command Post Carriers provide mobility, facilities, communications and survivability for commanders and their staffs in combat units. The importance of command and control functions dictate that the maneuver forces be supported above minimum levels for facilities. The procurement will bring 45 units to an acceptable level for the M577 based on their relative priority.

ARMY NATIONAL GUARD (continued)

7. Battery Computer System - (FY 1991, $30.0 million) These funds provide for the purchase of Battery Computer System (BCS) units. The BCS provides improved fire control and ballistics computational capability for field artillery batteries. The BCS greatly assists the artillery batteries in bringing fast, accurate and highly responsive fire on enemy targets. The system consists of a computer located at battery headquarters and data display unit at each weapon. In a matter of seconds, BCS accepts digital fire requests from the forward observer, automatically computes firing data and sends the firing data to each howitzer. The system improves effectiveness on the target by using individual positions and firing parameters to compute unique firing data for each weapon. This procurement will fulfill the Army National Guard requirements for BCS by completing issue to all Field Artillery units.

Air National Guard

(In Thousands of Dollars)	
Fy 1991 Estimate	$130,300
Fy 1990 Estimate	213,550
FY 1989 Actual	399,401

PURPOSE AND SCOPE

This funding provides for the procurement of new aircraft and support items to continue improvement of the Air National Guard. This includes procurement of organizational and base investment equipment used in direct support of aircraft procurement; modification and modernization of in-service aircraft; and support equipment.

JUSTIFICATION OF FUNDS REQUESTED

1. C-130H (FY 1991 - $48.0 Million): The FY 1991 program provides for procurement of 2 C-130H aircraft to serve as Backup Aircraft Inventory (BAI) for the total Air National Guard FY 92 fleet of 98 C-130H aircraft. The current 3 BAI represents only 3% of the Air National Guard fleet total. The desired backup inventory requirement level is 5%.

2. C-130 MODIFICATIONS (FY 1991 - $34.5 Million): The FY 1991 program continues necessary funding to complete Self-Contained Navigation System (SCNS) modifications on 54 recent production Air National Guard C-130H aircraft and to complete the Enhanced Station Keeping Equipment modifications on 32 remaining Air National Guard C-130E/H aircraft. The SCNS will enable C-130s to operate without external navigation aids and improve the C-130 mission success likelihood. The ESKE will improve system reliability and maintainability and increase formation integrity and airdrop accuracy during mass airdrop operations under adverse weather conditions in a combat environment. Funding in FY 1991 completes funding requirements for the Air National Guard for these C-130 modifications.

3. F-16 MODIFICATIONS (FY 1991 - $6.0 Million): The FY 1991 program continues the F-16A/B HAVE GLASS survivability enhancement modification program. These funds provide improved aircraft survivability in a hostile environment by upgrading the electronic capabilities on the F-16A/B aircraft as part of a phased approach across a spectrum of threats.

4. F-16 SUPPORT EQUIPMENT (FY 1991 - $2.8 Million): The FY 1991 program provides for the organizational and base investment equipment used in direct support of aircraft requirements for items peculiar to F-16 out-of-production aircraft. Specific items include F-16 boresight equipment, engine slings, and test equipment, plus Jet Engine Intermediate Maintenance tooling and adapters for F-15/16 aircraft.

5. F-15 MULTI-STAGE IMPROVEMENT PROGRAM (FY 1991 - $39.0 Million). The FY 1991 program continues the Multi-Stage Improvement Program to the F-15A/Bs to provide continued combat effectiveness, various safety, reliability and maintainability improvements. The latter includes improvements to the Radar Receiver System, provides HF communications, Programmable signal processor system, new central computer, AMRAAM, programmable armament control system and split screen cockpit TV sensor.

ADP EQUIPMENT MANAGEMENT FUND

ADP Management Fund
Program and Financing (in Thousands of dollars)

Identification code 97-3910-0-4-051		1989 actual	1990 est.	1991 est.
	Financing:			
	Unobligated balance available, start of year:			
21.9001	Unobligated balance, SOY: Fund balance	-61,552	-120	-120
22.9801	Unobligated balance transferred to other accounts	61,432		
	Unobligated balance available, end of year:			
24.9001	Unobligated balance, EOY: Fund balance	120	120	120
39.0001	Budget authority			
	Budget authority:			
41.0001	Transferred to other accounts(-)	-61,309		
42.0001	Transferred from other accounts	61,309		
43.0001	Appropriation (adjusted)			
	Relation of obligations to outlays:			
71.0001	Obligations incurred, net			
90.0001	Outlays			