

April 2002

DEFENSE INVENTORY

Trends in Services' Spare Parts Purchased from the Defense Logistics Agency



Report Documentation Page

Report Date 00APR2002	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle DEFENSE INVENTORY: Trends in Services Spare Parts Purchased from the Defense Logistics Agency	Contract Number	
	Grant Number	
	Program Element Number	
Author(s)	Project Number	
	Task Number	
	Work Unit Number	
Performing Organization Name(s) and Address(es) U.S. General Accounting Office 441 G Street NW, Room LM Washington, D.C. 20548	Performing Organization Report Number GAO-02-452	
Sponsoring/Monitoring Agency Name(s) and Address(es)	Sponsor/Monitor's Acronym(s)	
	Sponsor/Monitor's Report Number(s)	
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes		
<p>Abstract</p> <p>In recent years, the Department of Defense has reported that a shortage of spare parts has caused a decline in the military services readiness, particularly in the area of aviation readiness. In response, the Congress provided at least \$1.1 billion in additional funding earmarked to purchase spare parts. However, as of September 2001, the department continued to report a shortage of spare parts. According to the department, shortages are a result of aging systems and high operational tempo,¹ which increase the total number of spare parts required. You asked us to provide information on the spare parts the military services buy from the Defense Logistics Agency, a defense organization that supplies some spare parts to the services. In response, we are issuing this report to present available trend information on the quantities, reported dollar value, and types of spare parts that each military service ordered and reported as shipped from the Defense Logistics Agency over the past 5 years. We are also issuing similar information specifically on aviation-related spare parts because the services have highlighted a shortage of these as a particular readiness concern. This report is one in a series that deals with concerns you have raised about shortages of spare parts.²</p>		
Subject Terms		
Report Classification unclassified	Classification of this page unclassified	

Classification of Abstract unclassified	Limitation of Abstract SAR
Number of Pages 23	

Contents

Letter		1
	Results in Brief	2
	Background	2
	Quantities of Spare Parts Purchased Declined, but Dollar Value of Sales Increased	4
	Agency Comments	14
	Scope and Methodology	15

Appendix I	Selected Aviation-Related Federal Stock Classes	16
-------------------	--	----

Appendix II	Comments from the Department of Defense	17
--------------------	--	----

Related GAO Products		18
-----------------------------	--	----

Tables		
	Table 1: Reported Dollar Value of Defense Logistics Agency Spare Parts Sales to the Services	10
	Table 2: Average Prices and Proportions of Transferred Spare Parts	10
	Table 3: Top 10 Groups of Spare Parts Sold by Defense Logistics Agency to Services	12
	Table 4: Spare Parts Supplied by Defense Logistics Agency's Lead Aviation Supply Center	13
	Table 5: Reported Dollar Value of Spare Parts Supplied by Defense Logistics Agency's Lead Aviation Supply Center	13

Figures		
	Figure 1: Total Number of Spare Parts the Defense Logistics Agency Sold to the Services	5
	Figure 2: Spare Parts Sold by the Defense Logistics Agency to the Air Force	6
	Figure 3: Spare Parts Sold by the Defense Logistics Agency to the Army	7
	Figure 4: Spare Parts Sold by the Defense Logistics Agency to the Navy	8

Figure 5: Spare Parts Sold by the Defense Logistics Agency to the Marine Corps



United States General Accounting Office
Washington, DC 20548

April 30, 2002

The Honorable Bill Young
Chairman, Committee on Appropriations
House of Representatives

The Honorable Jerry Lewis
Chairman, Subcommittee on Defense
Committee on Appropriations
House of Representatives

In recent years, the Department of Defense has reported that a shortage of spare parts has caused a decline in the military services' readiness, particularly in the area of aviation readiness. In response, the Congress provided at least \$1.1 billion in additional funding earmarked to purchase spare parts. However, as of September 2001, the department continued to report a shortage of spare parts. According to the department, shortages are a result of aging systems and high operational tempo,¹ which increase the total number of spare parts required.

You asked us to provide information on the spare parts the military services buy from the Defense Logistics Agency, a defense organization that supplies some spare parts to the services. In response, we are issuing this report to present available trend information on the quantities, reported dollar value, and types of spare parts that each military service ordered and reported as shipped from the Defense Logistics Agency over the past 5 years. We are also issuing similar information specifically on aviation-related spare parts because the services have highlighted a shortage of these as a particular readiness concern. This report is one in a series that deals with concerns you have raised about shortages of spare parts.²

It is important to note that the results presented in this report are based on unaudited data supplied by the Defense Logistics Agency and that our financial statement audit work has repeatedly shown that the Department of Defense's financial data and underlying inventory records are generally not reliable. However, it is the only data readily available. Also, because

¹ The number and length of deployments.

² A list of related GAO reports is at the end of this report.

millions of individual federal stock numbers are used to identify types of parts/stocks, we consolidated data for this report by year, service, agency supply center, federal stock group, or federal stock class. Lastly, in a separate recent report,³ we assessed the Defense Logistics Agency's efforts to control spare part price increases.

Results in Brief

The number of spare parts that the military services ordered from the Defense Logistics Agency steadily declined from fiscal years 1996 through 2000; the reported dollar value of spare parts increased overall; and the types of spare parts purchased were drawn from 70 of 78 stock groups. Specifically, the total number of spare parts supplied annually by the Defense Logistics Agency to the services declined about 24 percent during fiscal years 1996-2000. Defense officials told us that military downsizing was the primary reason for the decline and that credit card usage and contractor maintenance support were also contributing factors. The total reported value of Defense Logistics Agency spare part sales to the services increased by about 18 percent from fiscal years 1996 through fiscal year 2000. The reasons cited for the dollar value increase were (1) Defense Logistics Agency's shift to a mix of more expensive spare parts and (2) price increases due to inaccurate initial price estimates, long periods between procurements, and/or substantial changes in the quantity of spare parts purchased. Individual services had different spare parts leading their lists of purchases in fiscal year 2000: The highest reported dollar value of sales to the Navy was for electrical and electronic equipment components; for the Air Force it was engines, turbines, and associated components; for the Army and the Marine Corps, it was vehicle equipment components.

Defense Logistics Agency data indicates similar trends for aviation-related spare parts. The number of these spare parts that the agency sold to the services declined 28 percent in fiscal years 1996-2000, while the total value of sales from the agency's lead aviation supply center to the services increased about 54 percent during the same period.

Background

Spare parts are defined as repair parts and components, including kits, assemblies, and subassemblies required for the maintenance of all

³ U.S. General Accounting Office, *Defense Acquisitions: Status of Defense Logistics Agency's Efforts to Address Spare Part Price Increases*, GAO-02-505 (Washington, D.C.: Apr. 8, 2002).

equipment. Repair parts and components can include (1) reparable items, which are returned to the supply system to be repaired when they are no longer in working condition, and (2) nonreparable items, also called consumables, which are often used in repairing the reparable items because they cannot be economically repaired themselves. For example, a screw (a consumable) may be used in repairing a landing gear component (a reparable).

The Defense Logistics Agency, headquartered at Fort Belvoir, Virginia, provides consumable supplies and spare parts to the military services, the Department of Defense, federal civilian agencies, and selected foreign governments. As part of its mission, the agency manages over 4.1 million consumable items. The vast majority of these items are considered consumable spare parts, and the remaining items include medicine, food, clothing, and fuel. Spare parts managed by the agency range from low-cost, commonly used items, such as fasteners and gaskets, to high-priced, sophisticated items, such as microswitches, miniature components, and precision valves vital to operating major weapon systems.

The agency's supply management operations are funded through the Defense-Wide Working Capital Fund, which operates as a revolving fund. The agency buys and sells spare parts to customers, who use appropriated funds to pay the agency. Sales receipts are then used to purchase additional items to meet new customer demand. In principle, the agency should recover the acquisition cost of the spare parts it sells, as well as its own operating costs, so that over the long term the fund breaks even financially.

The Defense Supply Center in Richmond, Virginia, is designated as the Defense Logistics Agency's lead center for air/aviation systems. The Defense Supply Center in Columbus, Ohio, is the designated lead center for land and sea/subsurface (maritime) systems. The Defense Supply Center in Philadelphia, Pennsylvania, is the lead center for troop support systems and general supply.

Quantities of Spare Parts Purchased Declined, but Dollar Value of Sales Increased

Over the past 5 years, the number of spare parts the services purchased from the Defense Logistics Agency declined by about 24 percent, from 353 million in fiscal year 1996 to about 270 million in fiscal year 2000. However, the dollar value⁴ of spare parts obtained during the same period increased from \$3.9 billion in fiscal year 1996 to \$4.6 billion in fiscal year 2000 (about 18 percent). Electrical and electronic equipment components accounted for the highest proportion of total dollar value. The services acquired spare parts from 70 of the 78 federal stock groups. In commenting on a draft of this report, the department attributed the increased dollar value of sales to the increased value of items managed by the Defense Logistics Agency. This is clearly a contributing factor. However, at the same time as we recently reported,⁵ the Defense Logistics Agency has a number of actions underway to control spare part prices.

Number of Spare Parts Supplied to Military Services Declined

Defense Logistics Agency data indicates that every year from 1996 to 2000, the agency supplied the services with smaller quantities of spare parts, from a total of about 353 million in fiscal year 1996 to about 270 million in fiscal year 2000, a decrease of about 24 percent (see fig. 1). The number of spare parts the services ordered also decreased about 19 percent during the period, from about 348 million to about 283 million.⁶

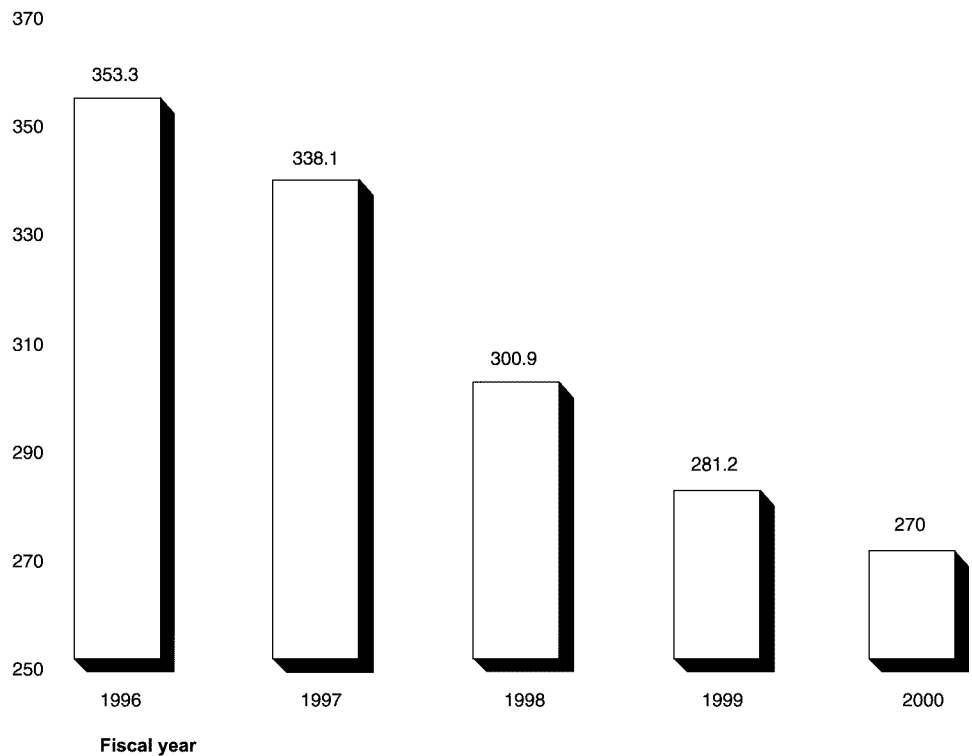
⁴ Dollar values for spare parts used in this report are based on standard prices.

⁵ See GAO-02-505.

⁶ The 283 million parts ordered in 2000 exceeded the 270 million supplied because orders were sometimes placed in one year but were backordered and not supplied until later, sometimes in another year.

Figure 1: Total Number of Spare Parts the Defense Logistics Agency Sold to the Services

Parts in millions



Source: Defense Logistics Agency data.

Defense Logistics Agency officials cited three main reasons for the decline: increased credit card usage, increased contractor maintenance support, and—primarily—military downsizing. The downsizing, which began in the early 1990s, continued through 2000. According to defense figures,⁷ the total number of active duty Navy fighter and attack aircraft declined from 504 in fiscal year 1996 to 432 in fiscal year 2000. Similarly, the number of ships (or ship battle forces) declined from 355 to 318.

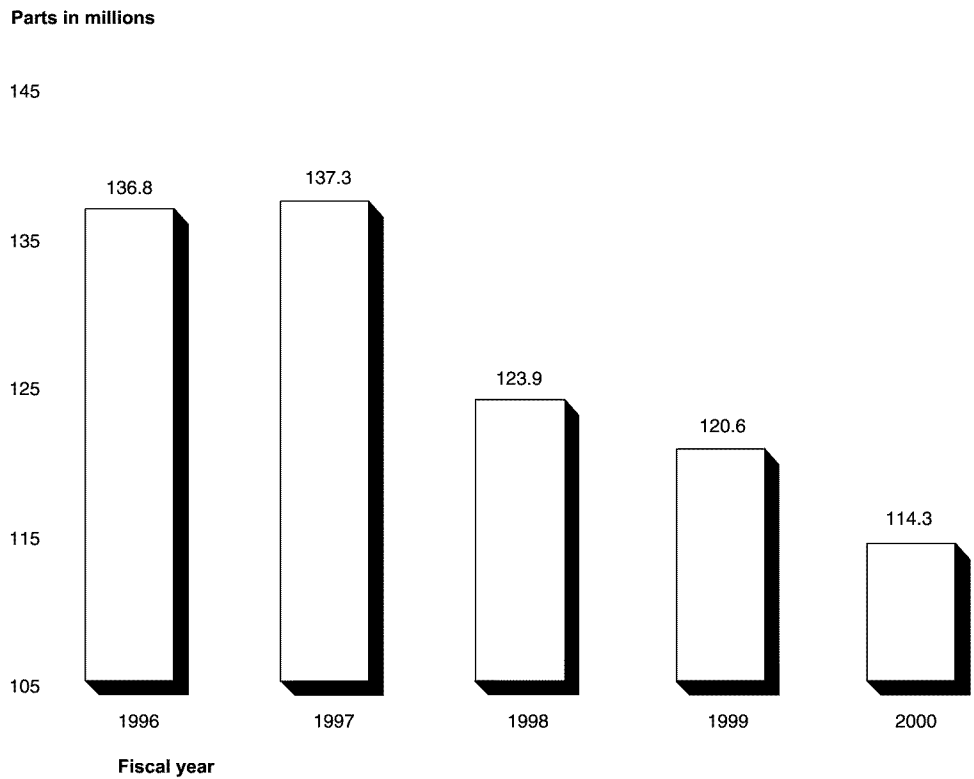
⁷ Department of Defense force structure tables are appended to the secretary of defense's annual report to the president and the Congress and provide summary trend analyses of various military weapon systems.

However, the number of Air Force fighter and attack aircraft remained steady at 936 during the period.

Air Force

As shown in figure 2, the number of spare parts sold by the Defense Logistics Agency to the Air Force dropped by about 23 million from about 137 million in fiscal year 1996 to about 114 million in fiscal year 2000, a 17 percent decrease. During this time, the Air Force increased the percentage of depot maintenance repair workload performed by the private sector. The other services also increased private sector depot maintenance performance, but to a lesser extent than the Air Force.

Figure 2: Spare Parts Sold by the Defense Logistics Agency to the Air Force

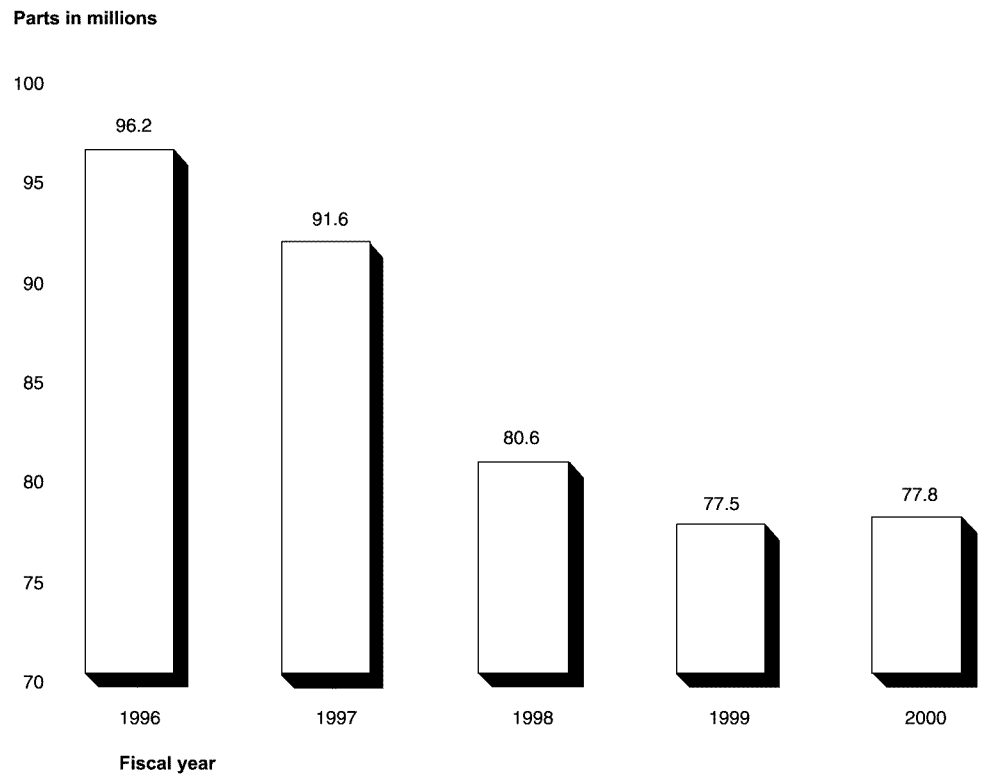


Source: Defense Logistics Agency data.

Army

Figure 3 shows that in fiscal year 1996, the Defense Logistics Agency sold the Army about 96 million spare parts, but by fiscal year 2000, that number had dropped to about 78 million, a decline of 18 million, or 19 percent.

Figure 3: Spare Parts Sold by the Defense Logistics Agency to the Army

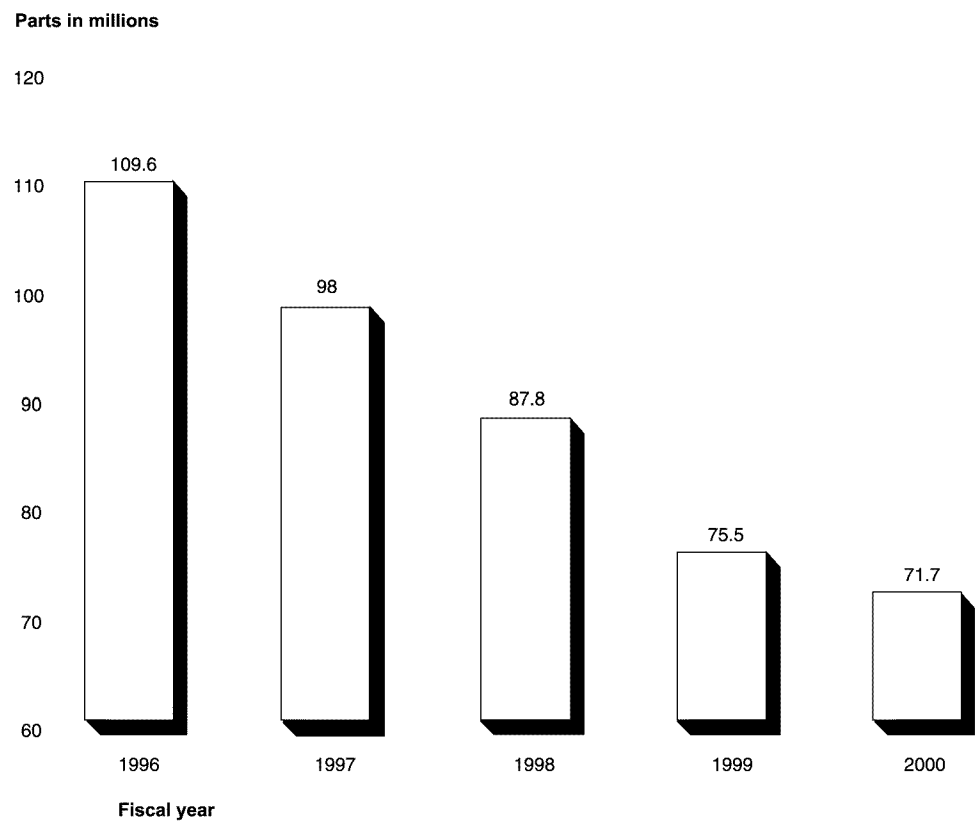


Source: Defense Logistics Agency data.

Navy

Figure 4 indicates that in fiscal year 1996, the Navy obtained about 110 million spare parts from the Defense Logistics Agency, but in fiscal year 2000 it bought only about 72 million spare parts, a decrease of about 38 million, or 35 percent.

Figure 4: Spare Parts Sold by the Defense Logistics Agency to the Navy

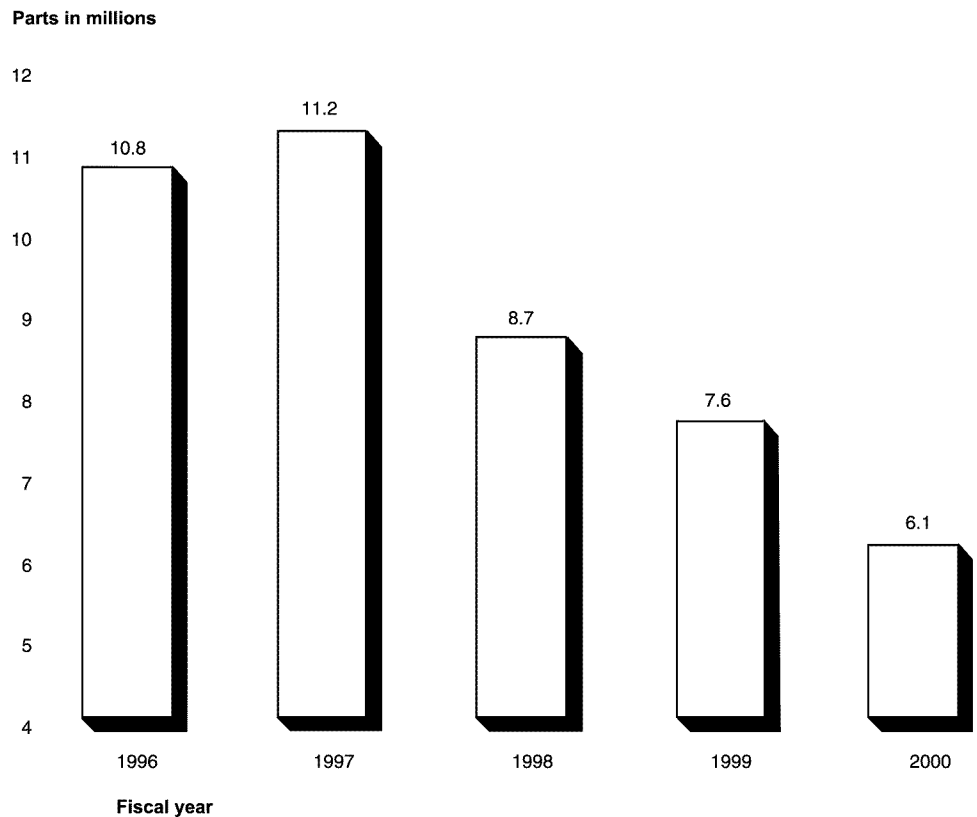


Source: Defense Logistics Agency data.

Marine Corps

As shown in figure 5, the Marine Corps purchased about 6 million spare parts from the agency in fiscal year 2000, about 45 percent less than the approximately 11 million it had purchased in fiscal year 1996.

Figure 5: Spare Parts Sold by the Defense Logistics Agency to the Marine Corps



Source: Defense Logistics Agency data.

Reported Dollar Value of Defense Logistics Agency Part Sales Increased

The reported dollar value of the Defense Logistics Agency's annual sale of spare parts to the services rose about 18 percent over the past 5 years, increasing from about \$3.9 billion in fiscal year 1996 to about \$4.6 billion in fiscal year 2000. The dollar value of ordered spare parts increased from about \$3.9 billion to about \$5.2 billion (about 25 percent). The reasons cited for the dollar value increase were (1) Defense Logistics Agency's shift to a mix of more expensive spare parts and (2) price increases due to inaccurate initial price estimates, long periods between procurements, and/or substantial changes in the quantity of spare parts purchased. When disaggregated by service, the agency's data indicates some variation in this

trend. The dollar value of sales to the Air Force increased every year, while the annual sale value of spare parts to the Army, the Navy, and the Marine Corps fluctuated. Table 1 shows the overall increase as well as the annual fluctuations.

Table 1: Reported Dollar Value of Defense Logistics Agency Spare Parts Sales to the Services

Dollars in millions					
Fiscal year	Air Force	Army	Navy	Marine Corps	Total
1996	\$1.331	\$0.930	\$1.551	\$0.110	\$3.923
1997	1.427	1.014	1.534	0.121	4.096
1998	1.601	0.964	1.658	0.105	4.329
1999	1.713	0.990	1.638	0.109	4.451
2000	1.811	1.052	1.682	0.092	4.637

Source: Defense Logistics Agency data.

During the 1996-2000 period, the Department of Defense transferred the management of more costly, complex, and sophisticated spare parts to the Defense Logistics Agency. Department officials indicated that the dollar value of the items transferred was significantly higher than the items being managed by the Defense Logistics Agency until that time. The items transferred from the services represented a higher percentage of the total inventory held by the agency, therefore contributing to the higher dollar value of spare parts sold to the services. Table 2 shows the average prices of the spare parts transferred as compared to those for spare parts not transferred and the prices for all spare parts sold to the services. The table also indicates the percentages of the total inventory that consisted of transferred spare parts during the 1996-2000 period.

Table 2: Average Prices and Proportions of Transferred Spare Parts

	1996	1997	1998	1999	2000
Average prices of parts not transferred	\$7.87	\$8.29	\$9.04	\$9.64	\$10.46
Average prices of parts transferred	59.59	56.82	63.97	67.51	69.17
Average prices of all parts sold to the services	11.10	12.11	14.39	15.83	17.18
Transferred parts as a percentage of total inventory	34	37	43	46	46

Source: Defense Logistics Agency data.

Although the price of some spare parts has increased significantly, for most spare parts it has not. In November 2000, we reported that prices of

about 70 percent of spare parts requisitioned by the agency's customers increased less than 5 percent a year during the 1989-98 period.⁸ This trend applied to all requisitioned spare parts, including those in frequent demand and aircraft-related spare parts. However, the prices of a relatively small number of spare parts did increase significantly—by 50 percent or more.

The spare part prices increased for a number of reasons. The majority of the agency's weapon system spare parts experienced a relatively low annual price change—less than 5 percent—from fiscal years 1989 through 1998. Most of the extreme price increases were due to inaccurate price estimates, outdated prices, or changes in quantities purchased. In other cases, prices increased significantly when long time periods—sometimes decades—passed between procurements. Agency purchasing officials cited other factors that can lead to price increases, including retooling of production lines between purchases, emergency procurements, and increases in the costs of raw materials. An Air Force official said that new technology also increased the cost as older aircraft were retrofitted with a new mix of more expensive spare parts to add capability.

Types of Spare Parts the Services Acquired from Defense Logistics Agency

The services obtained spare parts from 70 of 78 federal stock groups over the past 5 years. In fiscal year 2000, electrical and electronic equipment components were the spare parts with the highest sales (in dollar value). However, different groups of spare parts led sales within each service during fiscal year 2000: Electrical and electronic equipment components led Defense Logistics Agency sales to the Navy; engine and turbine components led sales to the Air Force; and vehicular equipment components led sales to the Army and the Marine Corps.

Although the same groups of spare parts remained among the top 10 (in terms of reported dollar value) over the 5-year period, the rankings of some groups and the amounts of money spent on each one varied. For example, engines, turbines, and components ranked fifth for the Air Force in fiscal year 1996 but moved to first place in fiscal year 2000. Table 3 shows the top 10 groups for fiscal years 1996 and 2000.

⁸ U.S. General Accounting Office, *Defense Acquisitions: Price Trends for Defense Logistics Agency's Weapon System Parts*, GAO-01-22 (Washington, D.C.: Nov. 3, 2000).

Table 3: Top 10 Groups of Spare Parts Sold by Defense Logistics Agency to Services

Dollars in millions

Part group	Air Force		Army		Navy		Marine Corps	
	Rank	Price	Rank	Price	Rank	Price	Rank	Price
Engines, turbines, and components	1 (5)	\$274.6			2	\$175.9	(9)	
Electrical and electronic equipment components	2 (1)	234.7	3 (3)	\$124.8	1 (1)	270.6	3 (2)	\$11.4
Hardware and abrasives	3 (2)	231.7	2 (1)	136.9	3 (2)	166.4	2 (3)	12.7
Aircraft and airframe structural components	4 (3)	174.8	10 (10)	32.8	7 (8)	76.0		
Aircraft components and accessories	5 (4)	161.4	7 (6)	41.8	4 (3)	143.9		
Vehicular equipment components			1 (2)	157.3			1 (1)	15.5
Valves					5 (6)	91.8		
Instruments and laboratory equipment	6 (6)	83.7	9 (8)	36.1	6 (4)	87.1	(10)	
Engine accessories	7 (9)	82.1	5 (4)	58.6			5 (5)	5.2
Electric wire and power and distribution equipment	8 (7)	80.3	4 (5)	59.7	8 (5)	75.5	4 (4)	5.7
Pipe, tubing, hose, and fittings	9 (8)	78.6	8 (7)	38.9	9 (7)	73.4	6 (7)	5.1
Pumps and compressors					10 (9)	70.2		
Bearings	10 (10)	64.3			(10)			
Textiles, leather, furs, apparel and shoe findings, tents, and flags ^a			6 (9)	44.8			10 (8)	2.7
Mechanical power transmission equipment							7 (6)	3.5
Chemicals and chemical products							8	3.5
Weapons							9	3.2

Note: Numbers in parentheses represent fiscal year 1996 ranking.

^aThe majority of the funds were used for tents and tarpaulins, which include tent pegs, tent poles, and multiple purpose covers, not for permanent installation.

Source: Defense Logistics Agency data.

Number of Aviation Spare Parts Declined, but Dollar Value Increased

The trends for aviation spare parts were consistent with those for the total spare parts supplied to the services. The Defense Logistics Agency’s lead supply center⁹ for aviation reported that the dollar value of annual sales to the services increased about 54 percent from fiscal year 1996 to fiscal year 2000, even though the center sold 28 percent fewer spare parts. Officials stated that the increases were caused in part by the Defense Logistics Agency’s shift to a mix of more expensive spare parts and increases in the price of aviation spare parts. Because our review covered only classes of

⁹ The Defense Logistics Agency realigned its centers following a “Lead Center Concept” in fiscal years 1996-99. A lead center now provides a single weapon or troop support system point of contact at the system program level within the Defense Logistics Agency.

spare parts, not individual items, we did not determine the extent to which the agency had changed the prices of individual spare parts. However, we recently reported on the Defense Logistics Agency's efforts to identify and address price increases of spare parts and their causes.¹⁰ Tables 4 and 5, respectively, show the number of spare parts supplied and the reported dollar value of sales by the agency's lead aviation supply center to each of the services from fiscal years 1996 through 2000.

Table 4: Spare Parts Supplied by Defense Logistics Agency's Lead Aviation Supply Center

Fiscal year	Air Force	Army	Marine Corps	Navy	Total
1996	14,046,321	13,383,051	1,598,506	16,158,692	45,186,570
1997	15,716,582	11,971,084	1,669,372	15,314,262	44,671,300
1998	14,215,374	8,448,734	951,173	11,141,055	34,756,336
1999	15,545,724	8,010,190	762,538	9,212,745	33,531,197
2000	15,292,605	7,964,165	586,483	8,731,192	32,574,445

Source: Defense Logistics Agency data.

Table 5: Reported Dollar Value of Spare Parts Supplied by Defense Logistics Agency's Lead Aviation Supply Center

Dollars in millions

Fiscal year	Air Force	Army	Marine Corps	Navy	Total
1996	\$519.7	\$253.4	\$24.6	\$481.8	\$1,279.5
1997	605.3	269.4	24.7	490.5	1,389.9
1998	732.3	248.8	19.0	587.8	1,587.9
1999	912.5	261.4	23.4	674.5	1,871.8
2000	982.7	262.9	17.4	711.3	1,974.3

Source: Defense Logistics Agency data.

¹⁰ See GAO-02-505.

We judgmentally selected 10 aviation-related federal stock classes¹¹ and found mixed purchasing trends during the study period:

- The Navy purchased substantially more spare parts in 3 of the 10 classes—components for jet engines, airframes, and wheel and brake systems. Engine parts accounted for over 60 percent of total spare parts purchased in the 10 classes. The Navy purchased fewer parts in the other seven classes of which three decreased by one-third or more.
- Over one-third of the spare parts the Army purchased in the 10 classes were for aircraft structural components. Overall, the quantities purchased increased for seven classes and declined for the other three. Annual purchases fluctuated in all classes.
- Similarly to the Navy, the Air Force purchased over 64 percent of spare parts in the 10 selected classes for engine parts. Overall, the Air Force increased its purchases in eight classes and decreased purchases in the others. Spare parts purchased for wheel and brake systems increased by over 703 percent from fiscal year 1996 to fiscal year 2000. Spare parts for engines and fuel systems increased by about 95 percent. Yearly purchases fluctuated in all classes.
- The Marine Corps purchased fewer than 1,600 spare parts a year from the 10 classes. The total number of spare parts purchased fluctuated from a low of 612 in fiscal year 1999 to a high of 1,574 in fiscal year 2000. Over half of spare parts purchased in all 10 classes were for airframe structural components.

The total amounts charged by the agency for spare parts generally increased, even in those classes where the number of spare parts purchased decreased.

Agency Comments

In written comments on a draft of this report, the Department of Defense generally concurred with its contents. The department also provided technical comments, which we have incorporated where appropriate. The department's written comments appear in appendix II.

¹¹ The 10 classes were airframe structural components; helicopter rotor blades, drive mechanisms, and components; aircraft landing gear components; aircraft wheel and brake systems; aircraft gas turbine and jet engines; aircraft and missile engine fuel system components; aircraft engine electrical system components; airborne radio navigation equipment; airborne radar equipment; and flight instruments. A description of what is included in each of the 10 selected classes is provided in appendix I.

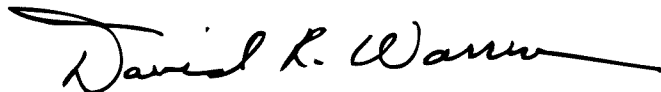
Scope and Methodology

To obtain information on trends in the quantity, reported dollar value, demand, and kinds of spare parts, including aviation-related spare parts, which the services bought from the Defense Logistics Agency, we asked agency officials to supply the relevant data. The officials determined which items to include in the spare part category and developed the information for us by year, service, service center, and federal stock class. The officials provided data on the aggregate numbers of spare parts. We did not attempt to independently verify the agency's information, nor did we verify the reasons for changes in trends. Defense Logistics Agency officials told us that in compiling their data, they used how spare parts were defined in the Integrated Consumable Item Support Model and by the Army in purchasing parts. For sales data, they used the standard unit price, which includes the cost recovery rate (the Defense Logistics Agency surcharge) at the time of sale.

We performed our review from July 2001 through April 2002 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the appropriate congressional committees, the secretary of defense, the secretary of the army, the secretary of the air force, the secretary of the navy, the commandant of the Marine Corps, the director of the Defense Logistics Agency, and the director of the Office of Management and Budget.

Please contact me on (202) 512-8412 if you or your staff have any questions regarding this report. Key contributors to this report were Jeanett H. Reid, George Morse, and Lawson Gist, Jr.



David R. Warren
Director, Defense Capabilities
and Management

Appendix I: Selected Aviation-Related Federal Stock Classes

Name	Description
Airframe structural components	Includes fabricated system parts that are permanently attached or peculiar to the integral airframe of an aircraft, such as support structural components, spars, ribs, ailerons, stabilizers, and bulkheads
Helicopter rotor blades, drive mechanisms, and components	Includes miscellaneous components specifically designed for, and used exclusively in, helicopter drive mechanisms and rotor blades when not classified elsewhere in the federal supply class index
Aircraft landing gear components	Includes shock struts and components; installation elements such as torsion bars, vibration links, and drag struts; landing gear trunions; axles and shimmy dampeners; and specially designed hydraulic power steering system components
Aircraft wheel and brake systems	Includes skis, floats, tracks, landing wheel skid detectors, valves designed specifically for use with hydraulic or pneumatic wheel and brake systems, and helicopter rotor brake system components
Aircraft gas turbines and jet engines	Engines and components intended for use on aircraft and /or guided missile prime movers; includes compressor and turbine rotor blades, combustion chamber, accessory gearbox, afterburner, exhaust cone, hydraulic reservoirs, and oil tanks
Aircraft and missile engine fuel system components	Fuel components specially designed for aircraft and missile propulsion; includes carburetors, fuel pumps, engine fuel filters, jet engine fuel controls, water injection controls and valves, fuel flow regulators, and components of smoke abatement systems
Aircraft engine electrical system components	Items designed for specific use on aircraft and guided missile prime movers; includes magnetos, spark plugs, ignition coils, ignition distributors, engine voltage regulators, ignition harness assemblies, starting motors for engines, and engine accessory generators
Airborne radio navigation equipment	Includes Loran equipment, Shoran equipment, and direction finding equipment
Airborne radar equipment	Includes airborne radar assemblies and subassemblies except those designed specifically for use with fire control equipment or guided missiles
Flight instruments	Includes air speed indicators, rate of climb indicators, bank and turn indicators, and horizon and altitude indicators

Source: Defense Logistics Agency.

Appendix II: Comments from the Department of Defense



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

APR 9 2002

Mr. David R. Warren
Director, Defense Capabilities
and Management
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE INVENTORY: Trends in Services' Spare Parts from the Defense Logistics Agency," dated March 8, 2002 (GAO Code 350099/GAO-02-452). The DoD generally concurs with the draft report.

We wish to emphasize the impact of the transfer of more complex spare parts to the Defense Logistics Agency (DLA) for management. In the 1996 through 2000 time frame examined by GAO, quantities of those items involved in that transfer that were sold by DLA to the Services increased each year, as the transfer reached completion. Conversely, quantities of those items not involved in that transfer that were sold by DLA to the Services decreased each year.

The average selling price of an item involved in the transfer was about \$70 in 2000, compared to an average selling price of about \$10 for an item not involved in the transfer. Therefore, it is clear that the trend noted by the GAO--the dollar value of DLA sales increasing even as quantities of spare parts purchased declined--is due to the impact of the transfer of more complex spare parts to DLA.

The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "Allen W. Beckett".

Allen W. Beckett
Principal Assistant
DUSD (Logistics & Materiel Readiness)



Related GAO Products

Army Inventory: Parts Shortages Are Impacting Operations and Maintenance Effectiveness. GAO-01-772. Washington, D.C.: July 31, 2001.

Navy Inventory: Parts Shortages Are Impacting Operations and Maintenance Effectiveness. GAO-01-771. Washington, D.C.: July 31, 2001.

Air Force Inventory: Parts Shortages Are Impacting Operations and Maintenance Effectiveness. GAO-01-587. Washington, D.C.: June 27, 2001.

Defense Inventory: Information on the Use of Spare Parts Funding Is Lacking. GAO-01-472. Washington, D.C.: June 11, 2001.

Defense Inventory: Army War Reserve Spare Parts Requirements Are Uncertain. GAO-01-425. Washington, D.C.: May 10, 2001.

Major Management Challenges and Program Risks: Departments of Defense, State, and Veterans Affairs. GAO-01-492T. Washington, D.C.: March 7, 2001.

Major Management Challenges and Program Risks: A Government-wide Perspective. GAO-01-241. Washington, D.C.: January 2001.

High-Risk Series: An Update. GAO-01-263. Washington, D.C.: January 2001.

Defense Acquisitions: Prices of Navy Aviation Spare Parts Have Increased. GAO-01-23. Washington, D.C.: November 6, 2000.

Defense Acquisitions: Price Trends for Defense Logistics Agency's Weapon System Parts. GAO-01-22. Washington, D.C.: November 3, 2000.

Contingency Operations: Providing Critical Capabilities Poses Challenges. GAO/NSIAD-00-164. Washington, D.C.: July 6, 2000.

Defense Inventory: Process for Canceling Inventory Orders Needs Improvement. GAO/NSIAD-00-160. Washington, D.C.: June 30, 2000.

Defense Inventory: Opportunities Exist to Expand the Use of Defense Logistics Agency Best Practices. GAO/NSIAD-00-30. Washington, D.C.: January 26, 2000.

Defense Inventory: Improvements Needed to Prevent Excess Purchases by the Air Force. NSIAD-00-5. Washington, D.C.: November 10, 1999.

Defense Inventory: Management of Repair Parts Common to More Than One Military Service Can Be Improved. GAO/NSIAD-00-21. Washington, D.C.: October 20, 1999.

Military Operations: Some Funds for Fiscal Year 1999 Contingency Operations Will Be Available for Future Needs. GAO/NSIAD-99-244BR. Washington, D.C.: September 21, 1999.

Department of Defense: Status of Financial Management Weaknesses and Actions Needed to Correct Continuing Challenges. GAO/T-AIMD/NSIAD-99-171. Washington, D.C.: May 4, 1999.

Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework. GAO/NSIAD-99-40. Washington, D.C.: April 12, 1999.

Defense Reform Initiative: Organization, Status, and Challenges. GAO/NSIAD-99-87. Washington, D.C.: April 21, 1999.

Defense Inventory: Status of Inventory and Purchases and Their Relationship to Current Needs. GAO/NSIAD-99-60. Washington, D.C.: April 16, 1999.

Defense Inventory: Continuing Challenges in Managing Inventories and Avoiding Adverse Operational Effects. GAO/T-NSIAD-99-83. Washington, D.C.: February 25, 1999.

High-Risk Series: An Update. GAO/HR-99-1. Washington, D.C.: January 1999.

Major Management Challenges and Program Risks: Department of Defense. GAO/OCG-99-4. Washington, D.C.: January 1999.

GAO's Mission

The General Accounting Office, the investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to daily E-mail alert for newly released products" under the GAO Reports heading.

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
 TDD: (202) 512-2537
 Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Public Affairs

Jeff Nelligan, managing director, NelliganJ@gao.gov (202) 512-4800
U.S. General Accounting Office, 441 G Street NW, Room 7149
Washington, D.C. 20548