

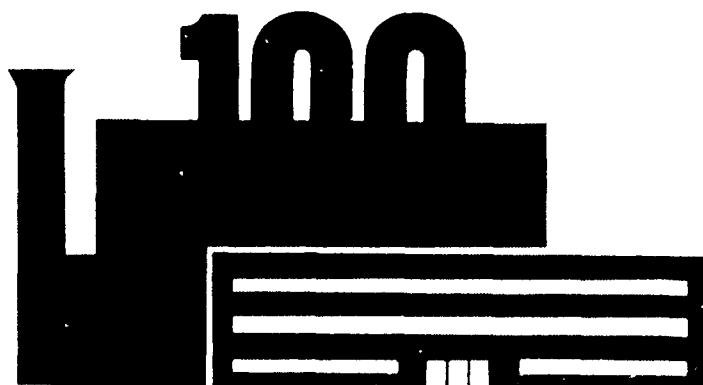
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100 COMPANIES

RECEIVING THE LARGEST DOLLAR VOLUME
OF PRIME CONTRACT AWARDS
Fiscal Year 1983

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Department of Defense

**100 COMPANIES
RECEIVING THE LARGEST DOLLAR VOLUME
OF PRIME CONTRACT AWARDS**

Fiscal Year 1983

Issued Annually by

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Washington Headquarters Services
Directorate for Information
Operations and Reports

FOREWORD

This report is published annually by the Office of the Secretary of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports. It contains summary data on the 100 companies and their subsidiaries which were awarded the largest total dollar volume of Department of Defense prime contract awards during Fiscal Year 1983.

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INTRODUCTION

This report presents summary data on the 100 companies and their subsidiaries receiving the largest dollar volume of Department of Defense (DOD) prime contract awards during Fiscal Year (FY) 1983. Table 1 (page 7) lists the 100 companies in alphabetical order and gives their associated rank. Table 2 (page 9) identifies the parent companies in rank order, with their subsidiaries, and gives the total net value of awards for both the parent company and its subsidiaries. In many cases the parent company receives no awards itself but appears on the list because of its subsidiaries. Table 2 also shows what percent of the total awards each company's awards represent as well as the cumulative percent represented by all companies.

NOTES ON COVERAGE

Data in this report reflect the net value of both debit and credit procurement actions over \$25,000, e.g., the value of a terminated contract or other downward adjustment to a contract is deducted from a firm's total award amount, while modifications and other positive adjustments are treated as increases. Procurement actions include definitive contracts, the obligated portions of letter contracts, job orders, task orders, delivery orders, and any other orders against existing contracts. Research and development, services, construction, and supply and equipment contracts, worldwide, are included.

The report does not include those parts of indefinite quantity contracts that have not been translated into specific orders to business firms, or those contracts that have not yet become mutually binding agreements between the government and the company. The company totals do not include contracts made by other U.S. Government agencies and financed with Department of Defense funds or contracts awarded in foreign nations through their respective governments.

The assignment of subsidiaries to parent companies is based on stock ownership of 50 percent or more by the parent company, as indicated by data published in standard industrial reference sources. The company names and corporate structures are those in effect as of September 30, 1983. For the purposes of this report company names have been retained unless specific knowledge was available that a company has been merged into the parent or absorbed as a division with loss of company identity. Only those subsidiaries are shown for which procurement actions have been reported.

HIGHLIGHTS OF FY 1983 DATA

Department of Defense prime contract awards over \$25,000 totaled \$128.2 billion during FY 1983, \$11.5 billion more than in FY 1982. The 100 firms and their subsidiaries receiving the largest amount of DOD contracts in FY 1983 received \$89.6 billion or 69.9 percent of this amount, primarily for aircraft, missile/space systems, ships, and electronics/communications equipment. In FY 1982, the top 100 companies received \$76.8 billion or 65.9 percent of all awards.

Table A below shows that the first five companies received 20.6 percent of the total received by all companies in FY 1983, compared with 19.6 percent during FY 1982. The company ranked as number one during FY 1983, General Dynamics Corporation, also ranked as number one last year, with awards of \$6.8 billion during FY 1983 as compared to \$5.9 billion last year. The smallest total amount received by a company in the FY 1983 list was \$126 million, compared with \$136 million in FY 1982.

TABLE A

<u>Company Position</u>	<u>Percent of Total</u>			
	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
1st	4.6%	4.5%	5.0%	5.3%
2nd	4.2	3.9	4.8	4.8
3rd	4.0	3.5	3.6	3.5
4th	3.1	3.0	3.2	3.5
5th	2.9	2.8	3.0	3.5
TOTAL 1-5	18.8	17.7	19.6	20.6
6-10	11.0	.4	11.5	13.7
11-25	15.4	15.6	14.8	16.3
TOTAL 1-25	45.2	43.8	45.9	50.6
26-50	11.6	12.4	10.8	10.7
51-75	5.8	6.4	5.7	5.3
76-100	3.3	3.8	3.5	3.3
TOTAL 1-100	65.9%	66.4%	65.9%	69.9%

Changes In the Top 100 Companies, FY 1982 to FY 1983

Sixteen contractors who did not appear on the list last year are among the top 100 companies this year. (See Table B, page 3.) Of these, one appears in position 28, one in position 49, and the balance between positions 58 and 100. The sixteen contractors who appeared on the FY 1982 list who do not appear on this year's list are also shown in Table B.

Of the 84 companies appearing on the list in both Fiscal Years 1982 and 1983, 42 advanced their position, 34 are in a lower position, and 8 showed no change. Companies are considered as appearing on the list in both years despite mergers, acquisitions, divestitures, and name changes if a major component of a newly constituted company or the newly constituted company itself made the list as a component of a company in the top 100 in the prior year.

TABLE B**Companies Listed in FY 1983
But not in FY 1982**

Ashland Oil, Inc.
Brunswick Corp.
Caterpillar Tractor Co.
Computer Sciences Corp.
Cubic Corp.
Digital Equipment Corp.
Harsco Corp.
Lear Siegler Inc.
Maersk Lines Ltd.
Ogden Corp.
Rolls Royce Ltd.
Sam Whan Corp.
Southern Union Co.
Sundstrand Corp.
Waterman Marine Corp.
Xerox Corp.

**Companies Listed in FY 1982
But Not in FY 1983**

Agip Petroli SPA
American Motors Corp.
First Colony Farms, Inc.
Getty Oil Co.
Hanil Dev. Co. Ltd & Al Mabani JV
Hospital Corp. of America
Mabco Prefabricated Bldg. Co.
Mi Ryung Construction Co., Ltd.
Peterson Builders Inc.
Phibro Salomon Inc.
Sun Chemical Corp.
Sun Co. Inc.
Texaco Inc.
Transamerica Corp.
United Industrial Corp.
You One Construction Co. Ltd.

Some of the major changes during FY 1983 were the acquisition of Bendix Corp. by Allied Corp.; acquisition of AM General Corp. and Sierra Research Corp. by LTV Corp.; acquisition of Itek Corp. by Litton Industries, Inc., and the name change of International Telephone & Telegraph Corp. to ITT Corp.

Primary Procurement Categories of the Top 100 Companies

Although the contract work of many companies on the list includes more than one procurement category, each company has been assigned in Table C (page 4) to the procurement category that accounts for its largest dollar volume of DOD awards; for example, ITT Corp. is a multi-industry company producing electronic and communications equipment and industrial and consumer products. For this table, it has been assigned to "Electronics", the procurement category accounting for its largest dollar volume of DOD contract awards.

TABLE C

<u>Procurement Category</u>	<u>Number of Companies</u>		
	<u>FY 1983</u>	<u>FY 1982</u>	<u>Change</u>
Aircraft	18	15	+3
Missiles	9	11	-2
Ships	7	7	0
Tank-Automotive	8	6	+2
Ammunition	7	8	-1
Electronics	21	20	+1
Services	10	9	+1
Construction	0	4	-4
Petroleum	16	19	-3
Weapons	1	1	0
Subsistence	0	0	0
All Other	3	0	+3

Companies With Prime Contract Awards Totaling Over \$2 Billion

During FY 1983, 13 companies received prime contract awards totaling over \$2 billion. Each company is listed in Table D by rank, along with its FY 1982 rank and the dollar value of the awards it received in both FY 1982 and FY 1983. Table E (page 5) describes the major products of these 13 companies.

TABLE D

<u>Rank</u>		<u>Company Name</u>	<u>Awards (In Billions)</u>	
<u>1983</u>	<u>1982</u>		<u>1983</u>	<u>1982</u>
1	1	General Dynamics Corp.	\$6.8	\$5.9
2	2	McDonnell Douglas Corp.	6.1	5.6
3	8	Rockwell International Corp.	4.5	2.7
4	4	General Electric Co.	4.5	3.7
5	6	Boeing Co.	4.4	3.2
6	5	Lockheed Corp.	4.0	3.5
7	3	United Technologies Corp.	3.9	4.2
8	22	Tenneco, Inc.	3.8	.8
9	7	Hughes, Howard Medical Institute	3.2	3.1
10	9	Raytheon Co.	2.7	2.3
11	11	Grumman Corp.	2.3	1.9
12	10	Martin Marietta Corp.	2.3	2.0
13	15	Litton Industries, Inc.	2.2	1.3

TABLE E

<u>Company</u>	<u>Major Products</u>
1. General Dynamics Corp.	F-16 and F-111 fighter aircraft. Nuclear submarines. TOMAHAWK and STINGER missile systems. MK-15 close-in weapon system. M1 tank.
2. McDonnell Douglas Corp.	F-18 HORNET, F-15 EAGLE, AV-8 HARRIER, and KC-10 aircraft. HARPOON missile system.
3. Rockwell International Corp.	B-1 bomber. RDT&E for aircraft, and missile and space systems. Space vehicles. Various electronics and communications equipment.
4. General Electric Co.	Nuclear reactors for submarines and aircraft carriers. J-79, J-85, TF-34, and F-101 turbofan and turbojet engines. Space vehicle components. Guided missile subsystems. Transmission components for M-2 infantry fighting vehicles. Armament training devices.
5. Boeing Co.	C-135 STRATOLIFTER, B-52 STRATO FORTRESS, and E-3A aircraft. Miscellaneous electronics for B-1 bomber. ZAGM-86 missile system. AWACS. RDT&E for electronics & communication equipment, aircraft, missile & space systems and space transportation systems.
6. Lockheed Corp.	C-5 GALAXY, C-130 HERCULES, and P-3 ORION aircraft. TRIDENT and POLARIS missile systems. Amphibious assault ships. RDT&E for missile & space systems, aircraft, and electronics & communication equipment.
7. United Technologies Corp.	F-100, TF-30, TF-33, and J-52 turbofan and turbojet aircraft engines. UH-60 UTTAS, CH-53 SEA STALLION, and SH-60 SEAHAWK helicopters.
8. Tenneco, Inc.	Aircraft carriers. Nuclear submarines.
9. Hughes, Howard Medical Institute	TOW, MAVERICK and PHOENIX missile systems. Radar equipment and guided missile systems for F-14, F-15, AH-1J, B-52 and SR-71 aircraft. RDT&E for electronics & communication equipment, missile & space systems, and ammunition. Equipment for M-1 combat tank and M-2 infantry fighting vehicle.

TABLE E (Continued)

<u>Company</u>	<u>Major Products</u>
10. Raytheon Co.	PATRIOT, HAWK, SPARROW, NATO SEA SPARROW, and SIDEWINDER missile systems. Various electronics & communication equipment.
11. Grumman Corp.	F-14 TOMCAT, A-6 INTRUDER, E-2 HAWKEYE, C-2 GREYHOUND, and EA-6B PROWLER aircraft. Electronics for F-16 FIGHTING FALCON. RDT&E for aircraft, electronics & communications equipment, and missile & space systems.
12. Martin Marietta Corp.	PERSHING and TITAN missile systems. AH-64 APACHE aircraft. Guided missile cruisers. Operation of Government ammunition facility. RDT&E for missile and space systems, and electronics and communication equipment.
13. Litton Industries, Inc.	Guided missile cruisers, battleships, and destroyers. Various electronics and communications equipment.

INDEX OF 100 PARENT COMPANIES WHICH WITH THEIR SUBSIDIARIES RECEIVED THE
LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS IN FISCAL YEAR 1983

RANK	PARENT COMPANY	RANK	PARENT COMPANY
68.	AEROSPACE CORP (N)	96.	LEAR SIEGLER INC
27.	ALLIED CORP	13.	LITTON INDUSTRIES, INC
24.	AMERICAN TELEPHONE + TELEGRAPH CO	6.	LOCKHEED CORP
77.	ASHLAND OIL INC	28.	MAERSK LINE LTD
47.	ATLANTIC RICHFIELD CO	12.	MARTIN MARIETTA CORP
29.	AVCO CORP	71.	MASSACHUSETTS INSTITUTE TECHNOLOGY
5.	BOEING CO	2.	MCDONNELL DOUGLAS CORP
88.	BRUNSWICK CORP	78.	MITRE (THE) CORP (N)
72.	BURROUGHS CORP	57.	MOBIL CORP
62.	CATERPILLAR TRACTOR CO	56.	MORRISON KNUDSEN CO INC
66.	COASTAL CORP	59.	MORTON THIOKOL INC
86.	COMPUTER SCIENCES CORP	39.	MOTOR OIL HELLAS
61.	CONGOLEUM CORP	52.	MOTOROLA INC
64.	CONTROL DATA CORP	84.	NI INDUSTRIES
99.	CUBIC CORP	53.	NORTH AMERICAN PHILIPS CORP
100.	DIGITAL EQUIPMENT CORP	26.	NORTHROP CORP
83.	DUCHOSSOIS THRALL GROUP INC	58.	OGDEN CORP
80.	DUPONT E I DE NEMOURS + CO	75.	OSHKOSH TRUCK CORP
54.	E SYSTEMS, INC	73.	PACIFIC RESOURCES INC
44.	EATON CORP	41.	PAN AMERICAN WORLD AIRWAYS INC
63.	EMERSON ELECTRIC CO	67.	PENN CENTRAL CORP
25.	EXXON CORP	18.	R C A CORP
17.	F M C CORP	10.	RAYTHEON CO
69.	FAIRCHILD INDUSTRIES, INC	82.	REYNOLDS R J INDUSTRIES INC
22.	FORD MOTOR CO	3.	ROCKWELL INTERNATIONAL CORP
30.	G T E CORP	79.	ROLLS ROYCE LTD
1.	GENERAL DYNAMICS CORP	51.	ROYAL DUTCH SHELL GROUP
4.	GENERAL ELECTRIC CO	85.	SAM WHAN CORP
23.	GENERAL MOTORS CORP	48.	SANDERS ASSOCIATES INC
35.	GENERAL TIRE + RUBBER CO	91.	SCIENCE APPLICATIONS INTL INC
45.	GOODYEAR TIRE + RUBBER CO	50.	SIGNAL COMPANIES INC (THE)
60.	GOULD, INC	32.	SINGER CO
11.	GRUMMAN CORP	40.	SOBERBIO INC
46.	GUAM OIL + REFINING CO INC	98.	SOUTHERN UNION CO
76.	GULF OIL CORP	20.	SPERRY CORP
90.	GULF STATES OIL & REFINING CO	37.	STANDARD OIL CO OF CALIF
70.	H B H CO	65.	STANDARD OIL OF INDIANA
42.	HARRIS CORP	92.	SUNDSTRAND CORP
95.	HARSCO CORP	19.	T R W INC
55.	HERCULES, INC	59.	TELEDYNE INC
89.	HEWLETT PACKARD CO	8.	TENNECO INC
21.	HONEYWELL INC	33.	TEXAS INSTRUMENTS INC
34.	HUGHES HOWARD ESTATE OF	31.	TEXTRON INC
9.	HUGHES HOWARD MEDICAL INSTITUTE	43.	TODD SHIPYARDS CORP
36.	I T T CORP	7.	UNITED TECHNOLOGIES CORP
15.	INTERNATIONAL BUSINESS MACHINES CO	97.	VARIAN ASSOCIATES INC
74.	JOHNS HOPKINS UNIVERSITY (N)	49.	WATERMAN MARINE CORP
93.	KAMAN CORP	14.	WESTINGHOUSE ELECTRIC CORP
94.	KUWAIT PETROLEUM CORP	81.	WILLIAMS INTERNATIONAL CORP
16.	L T V CORP	87.	XEROX CORP

100 COMPANIES AND THEIR SUBSIDIARIES LISTED ACCORDING TO
NET VALUE OF PRIME CONTRACT AWARDS

FISCAL YEAR 1983
(1 OCT 1982 - 30 SEP 1983)

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
	T O T A L	\$128,242,123 =====	100.00	100.00
	TOTAL, 100 COMPANIES + THEIR SUBSIDIARIES	89,578,443 =====	69.85	69.85
1.	GENERAL DYNAMICS CORP DATAGRAPHIX GMBH DATAGRAPHIX INC STROMBERG CARLSON CORP	6,804,679 47 8,253 5,328 -----		
	TOTAL	6,818,307	5.32	5.32
2.	MCDONNELL DOUGLAS CORP MCDONNELL DOUGLAS ELECTRONICS CO MCDONNELL DOUGLAS TECHNICAL SVS CO POLHEMUS NAVIGATION SCIENCES INC VITEK SYSTEMS INC	6,134,947 6,320 1,301 46 102 -----		
	TOTAL	6,142,716	4.79	10.11
3.	ROCKWELL INTERNATIONAL CORP COLLINS INTERNATIONAL SERVICE CO WESCOM INC	4,544,214 617 281 -----		
	TOTAL	4,545,112	3.54	13.65
4.	GENERAL ELECTRIC CO CANADIAN GENERAL ELECTRIC CO, LTD GENERAL ELECTRIC MEDICAL SYSTEMS MANAGEMENT + TECHNICAL SERVICES CO	4,453,547 1,105 895 62,368 -----		
	TOTAL	4,518,015	3.52	17.17
5.	BOEING CO B E & C ENGINEERS INC BOEING COMPUTER SERVICES INC BOEING OF CANADA LTD BOEING SERVICES INTERNATIONAL INC BOEING VERTOL CO HYDRAULIC UNITS INC	4,021,366 838 38,678 63 84,240 269,881 7,684 -----		
	TOTAL	4,422,750	3.45	20.62
6.	LOCKHEED CORP LOCKHEED CALIFORNIA CO LOCKHEED ELECTRONICS CO, INC LOCKHEED ENGINEERING & MGT SVC CO LOCKHEED MISSILES + SPACE CO INC LOCKHEED SHIPBUILDING CONSTRUCTION LOCKHEED SUPPORT SYSTEMS INC MURDOCK MACHINE + ENGR CO OF TEXAS	2,063,135 1,855 72,628 2,921 1,516,074 338,235 7,812 3,054 -----		
	TOTAL	4,005,714	3.12	23.74
7.	UNITED TECHNOLOGIES CORP AMERICAN COMPUTER & ELECTRONICS CO CARRIER INTERNATIONAL CORP	3,675,206 5,335 1,087		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
7.	UNITED TECHNOLOGIES CORP			
	ESSEX GROUP INC	3,173		
	INMONT CORP	25		
	NORDEN SYSTEMS INC	181,421		
	OTIS ELEVATOR CO	934		
	PRATT + WHITNEY AIRCRAFT OF WVA	46		
	UNITED TECHNOLOGIES RESEARCH CTR	218		
	TOTAL	3,867,445	3.02	26.76
8.	TENNECO INC			
	CASE (J1) CO	75,290		
	CASE POWER + EQUIPMENT LTD	237		
	MONROE AUTO EQUIPMENT CO	3,221		
	NEWPORT NEWS SHIPBLD + DRY DOCK CO	3,683,357		
	PACKAGING CORP OF AMERICA	30		
	TOTAL	3,762,135	2.93	29.69
9.	HUGHES HOWARD MEDICAL INSTITUTE			
	HUGHES AIRCRAFT CO	3,151,308		
	HUGHES COMMUNICATION SERVICES INC	55,000		
	SANTA BARBARA RESEARCH CENTER	33,312		
	SPECTROLAB INC	295		
	TOTAL	3,239,915	2.53	32.22
10.	RAYTHEON CO	2,501,521		
	BEECH AEROSPACE SERVICES	48,824		
	BEECH AIRCRAFT CORP	106,771		
	CALORIC CORP	60		
	DENVER BEECHCRAFT	242		
	ELECTRICAL INSTALLATIONS LTD	91		
	GLENWOOD RANGE CO	1,111		
	INDIANA BEECHCRAFT INC	304		
	IOWA MFG CO OF CEDAR RAPIDS IOWA	325		
	MACHLETT LABORATORIES INC	195		
	RAYTHEON DATA SYSTEMS CO	7,231		
	RAYTHEON INTERNATIONAL SYSTEMS	248		
	RAYTHEON MARINE CO	2,952		
	RAYTHEON OCEAN SYSTEMS CO	200		
	RAYTHEON PENINSULA SYSTEMS CO	5,614		
	RAYTHEON PROCUREMENT CO INC	2,718		
	RAYTHEON SERVICE CO	43,830		
	RAYTHEON TECHNICAL ASSISTANCE CO	1,150		
	SEDCO SYSTEMS INC	920		
	SWITCHCRAFT INC	37		
	UNITED BEECHCRAFT INC	94		
	UNITED ENGINEERS + CONSTRUCTORS	3,889		
	TOTAL	2,728,327	2.13	34.35
11.	GRUMMAN CORP	3,339		
	GRUMMAN AEROSPACE CORP	2,291,662		
	GRUMMAN DATA SYSTEMS CORP	2,694		
	TOTAL	2,297,695	1.79	36.14
12.	MARTIN MARIETTA CORP	2,178,223		
	MARTIN MARIETTA ALUMINUM INC	133		
	MARTIN MARIETTA ALUMINUM SALES INC	93,583		
	TOTAL	2,271,939	1.77	37.91

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
13.	LITTON INDUSTRIES, INC	29,433		
	BELOIT POWER SYSTEMS	1,037		
	DIEHL DATA SYSTEMS	3,119		
	INTERNATIONAL LASER SYSTEMS INC	3,632		
	ITEK CORP	95,047		
	LITTON INDUSTRIAL PRODUCTS INC	5,823		
	LITTON MICROWAVE COOKING PRODUCTS	258		
	LITTON PRECISION PRODS INTL INC	250		
	LITTON SYSTEMS INC	2,029,883		
	MONROE BUSINESS EQUIPMENT CO INC	284		
	MONROE CALCULATING CO	133		
	MONROE SYSTEMS FOR BUSINESS	33		
	TOTAL	2,168,932	1.69	39.60
14.	WESTINGHOUSE ELECTRIC CORP	1,774,727		
	T C O M CORP	2,235		
	UNIMATION INC	62		
	WESTINGHOUSE INFORMATION SERVICES	95		
	WESTINGHOUSE LEARNING CORP	95		
	WESTINGHOUSE OVERSEAS SERVICE CORP	1,121		
	TOTAL	1,778,335	1.39	40.99
15.	INTERNATIONAL BUSINESS MACHINES CO	1,419,243		
	I B M DEUTSCHLAND GMBH	1,969		
	I B M INSTRUMENTS INC	53		
	TOTAL	1,421,265	1.11	42.10
16.	L T V CORP			
	A M GENERAL CORP	569,552		
	JONES & LAUGHLIN STEEL INC	143		
	SIERRA RESEARCH CORP	60,690		
	VOUGHT CORP	712,487		
	TOTAL	1,342,872	1.05	43.15
17.	F M C CORP	1,235,589		
	F M C ASSOCIATES	181		
	TOTAL	1,235,770	0.96	44.11
18.	R C A CORP	1,159,391		
	HERTZ CORP	532		
	HERTZ EQUIPMENT RENTAL CORP	134		
	R C A AMERICAN COMMUNICATIONS INC	9,264		
	R C A GLOBAL COMMUNICATIONS, INC	11,803		
	TOTAL	1,181,124	0.92	45.03
19.	T R W INC	1,066,330		
	E S L INC	53,476		
	T R W COLORADO ELECTRONICS, INC	17,032		
	TOTAL	1,136,838	0.89	45.92
20.	SPERRY CORP	1,132,502	0.88	46.80
21.	HONEYWELL INC	945,956		
	ELECTRONICS FOR MEDICINE	173		
	HONEYWELL INFORMATION SYSTEMS, INC	154,803		
	HONEYWELL MARINE SYSTEMS CENTER	538		
	HYDRO PRODUCTS INC	841		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
21.	HONEYWELL INC			
	SKINNER PRECISION INDUSTRIES INC	67		
	SPECTRONICS INC	371		
	TETRA TECH INC	11,153		
	TOTAL	1,113,902	0.87	47.67
22.	FORD MOTOR CO	7,126		
	FORD AEROSPACE + COMMUNICATIONS	1,065,160		
	TOTAL	1,072,286	0.84	48.51
23.	GENERAL MOTORS CORP	893,440	0.70	49.21
24.	AMERICAN TELEPHONE + TELEGRAPH CO	382,566		
	AMERICAN BELL INC	5,382		
	AMERICAN BELL INTERNATIONAL INC	413		
	BELL TELEPHONE CO OF PA	4,130		
	CHESAPEAKE & POTOMAC TEL CO	54,440		
	CHESAPEAKE + POTOMAC TEL CO OF MD	4,099		
	CHESAPEAKE + POTOMAC TEL CO OF VA	13,214		
	DIAMOND STATE TEL CO	572		
	ILLINOIS BELL TEL CO	2,116		
	INDIANA BELL TEL CO, INC	2,510		
	MICHIGAN BELL TEL CO	3,801		
	MOUNTAIN STATES TEL & TEL	19,705		
	NEW ENGLAND TEL + TEL CO	6,636		
	NEW JERSEY BELL TELEPHONE CO	2,937		
	NEW YORK TELEPHONE CO	15,311		
	NORTHWESTERN BELL TELEPHONE CO	5,735		
	OHIO BELL TELEPHONE CO	2,796		
	PACIFIC NORTHWEST BELL TELEPHONE	4,329		
	PACIFIC TELEPHONE + TELEGRAPH CO	15,149		
	SOUTH CENTRAL BELL TEL CO	11,919		
	SOUTHERN BELL TELEPHONE + TELEGRPH	17,596		
	SOUTHERN NEW ENGLAND TELEPHONE CO	154		
	SOUTHWESTERN BELL TELEPHONE	30,351		
	TELETYPE CORP	18,374		
	WESTERN ELECTRIC CO INC	252,896		
	WISCONSIN TEL CO	486		
	TOTAL	877,617	0.68	49.89
25.	EXXON CORP	473,024		
	ESSO A O	50,577		
	ESSO ITALIANA S P A	808		
	ESSO OFFICE SYSTEMS INC	556		
	ESSO PETROL CO LTD	87		
	EXXON CO USA	347,290		
	EXXON ENTERPRISES INC	306		
	EXXON INFORMATION SYSTEM	43		
	EXXON RESEARCH + ENGINEERING CO	40		
	RELIANCE ELECTRIC CO	1,484		
	TOTAL	874,215	0.68	50.57
26.	NORTHROP CORP	729,741		
	NORTHROP SERVICES INC	8,086		
	NORTHROP WORLDWIDE ACFT SVCS INC	108,836		
	TOTAL	846,663	0.66	51.23

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
27.	ALLIED CORP	47,943		
	BENDIX AUTOLITE CORP	1,042		
	BENDIX CORP	642,494		
	BENDIX FIELD ENGINEERING CORP	44,440		
	COURTER INC	1,799		
	ELTRA CORP	16,387		
	ENGINEERING RESEARCH INC	22,096		
	FISHER SCIENTIFIC CO	460		
	FRAM CORP	468		
	INSTRUMENTATION LABORATORY INC	230		
	MERGENTHALER LINOTYPE CO	47		
	TEXGAS CORP	56		
	WARNER & SWASEY CO	786		
	TOTAL	778,248	0.61	51.84
28.	MAERSK LINE LTD	690,859	0.54	52.36
29.	AVCO CORP	657,614		
	AVCO EMBASSY PICTURES CORP	58		
	AVCO EVERETT RESEARCH LABORATORY	17,883		
	TOTAL	675,555	0.53	52.91
30.	G T E CORP	300		
	G T E AUTOMATIC ELECTRIC INC	1,908		
	G T E COMMUNICATION PRODUCTS	159		
	G T E INTERNATIONAL INC	96		
	G T E LABORATORIES, INC	1,565		
	G T E LENKURT, INC	758		
	G T E PRODUCTS CORP	616,610		
	G T E SERVICE CORP	1,845		
	GENERAL TELEPHONE CO OF CALIFORNIA	5,825		
	GENERAL TELEPHONE CO OF FLORIDA	5,126		
	GENERAL TELEPHONE CO OF INDIANA	639		
	GENERAL TELEPHONE CO OF KENTUCKY	129		
	GENERAL TELEPHONE CO OF NORTHWEST	998		
	GENERAL TELEPHONE CO OF OHIO	839		
	GENERAL TELEPHONE CO OF SOUTHEAST	3,226		
	GENERAL TELEPHONE CO OF SOUTHWEST	2,217		
	HAWAIIAN TELEPHONE CO	31,349		
	TOTAL	673,589	0.53	53.44
31.	TEXTRON INC	653,500		
	BELL HELICOPTER INTL INC	7,046		
	BELL TECHNICAL OPERATIONS CORP	10,534		
	JACOBSEN MFG CO	97		
	TOTAL	671,177	0.52	53.96
32.	SINGER CO	588,748		
	H R B SINGER INC	61,160		
	TOTAL	649,908	0.51	54.47
33.	TEXAS INSTRUMENTS INC	646,825	0.50	54.97
34.	HUGHES HOWARD ESTATE OF			
	HUGHES HELICOPTERS INC	614,708		
	SUMMA CORP	11,583		
	TOTAL	626,291	0.49	55.46

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
35.	GENERAL TIRE + RUBBER CO	2,328		
	AEROJET ELECTRO SYSTEMS CO	50,066		
	AEROJET GENERAL CORP	312,671		
	AEROJET LIQUID ROCKET CO	21,722		
	AEROJET ORDNANCE & MFG CO	26,259		
	AEROJET STRATEGIC PROPULSION CO	155,420		
	AEROJET TACTICAL SYSTEMS	38,258		
	JOHNSTON PUMP CO	59		
	TOTAL	606,783	0.47	55.93
36.	I T T CORP	295,496		
	FEDERAL ELECTRIC CORP	81,887		
	FELEC SERVICES INC	118,924		
	I T T ARCTIC SERVICES	30		
	I T T BARTON	713		
	I T T BLACKBURN CORP	227		
	I T T CONTINENTAL BAKING CO	1,741		
	I T T COURIER TERMINAL SYSTEMS INC	1,252		
	I T T ELECTRO OPTIC PRODUCTS	13,890		
	I T T GENERAL CONTROLS, INC	1,078		
	I T T GILFILLAN INC	70,244		
	I T T GRINNELL CORP	34		
	I T T GWALTNEY INC	4,753		
	I T T HAMMEL DAHL CONOFLOW	397		
	I T T HARPER, INC	136		
	I T T HENZE SERVICE	25		
	I T T JENNINGS	758		
	I T T MACKAY MARINE	40		
	I T T MARLOW PUMPS	146		
	I T T TELECOMMUNICATIONS CORP	1,380		
	I T T WORLD COMMUNICATIONS, INC	9,493		
	J C C PUMP CO INC	534		
	U S TRANSMISSION SYSTEMS	187		
	TOTAL	603,365	0.47	56.40
37.	STANDARD OIL CO OF CALIF			
	CALTEX ASIA LTD	34		
	CALTEX NEW ZEALAND, INC	56		
	CALTEX OIL PRODUCTS CO	76,932		
	CHEVRON CHEMICAL CO	66		
	CHEVRON INTERNATIONAL OIL CO, INC	33		
	CHEVRON U S A INC	513,746		
	TOTAL	590,867	0.46	56.86
38.	TELEDYNE INC	77,903		
	MICRONETICS INC	35		
	TELEDYNE ADCOM	32		
	TELEDYNE AEROSPACE SYSTEMS	464		
	TELEDYNE AVIONICS	1,877		
	TELEDYNE BROWN ENGINEERING	58,780		
	TELEDYNE C A E	27,691		
	TELEDYNE CAMERA SYSTEMS	2,029		
	TELEDYNE CAST PRODUCTS	72		
	TELEDYNE CONTINENTAL MOTORS	154,319		
	TELEDYNE CONTROLS	5,424		
	TELEDYNE CRYSTALONICS	79		
	TELEDYNE ELECTRO MECHANISMS	120		
	TELEDYNE ELECTRONICS	31,336		
	TELEDYNE FARRIS ENGINEERING	511		
	TELEDYNE FIRTH STERLING INC	2,340		
	TELEDYNE GEOTECH	3,622		
	TELEDYNE GEOTRONICS	118		
	TELEDYNE GURLEY	39		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
38.	TELEDYNE INC			
	TELEDYNE HASTINGS RAYDIST	859		
	TELEDYNE HYDRA POWER	1,967		
	TELEDYNE INDUSTRIES, INC	157,740		
	TELEDYNE INET INC	1,594		
	TELEDYNE LANDIS MACHINE CO	806		
	TELEDYNE LEWISBURG	163		
	TELEDYNE M E C	44,654		
	TELEDYNE MCCORMICK SELPH	6,995		
	TELEDYNE MCKAY	231		
	TELEDYNE MICROELECTRONICS	348		
	TELEDYNE MONARCH RUBBER	912		
	TELEDYNE NECSHO	230		
	TELEDYNE PHILBRICK	37		
	TELEDYNE PINES	337		
	TELEDYNE RELAYS	40		
	TELEDYNE REPUBLIC MFG	1,925		
	TELEDYNE SPRAGUE ENGINEERING	765		
	TELEDYNE THERMATICS	807		
	TELEDYNE VASCO	90		
	TELEDYNE WALTERBORO	1,041		
	TELEDYNE WESTERN WIRE & CABLE	47		
	TELEDYNE WISCONSIN MOTOR	394		
	TOTAL	588,773	0.46	57.32
39.	MOTOR OIL HELLAS	587,159	0.46	57.78
40.	SOBERBIO INC			
	PRIDE REFINING INC	456,888		
	TOTAL	456,888	0.36	58.14
41.	PAN AMERICAN WORLD AIRWAYS INC	90,605		
	PAN AMERICAN WORLD SERVICES INC	359,317		
	TOTAL	449,922	0.35	58.49
42.	HARRIS CORP	446,122	0.35	58.84
43.	TODD SHIPYARDS CORP	444,284	0.35	59.19
44.	EATON CORP	441,778	0.34	59.53
45.	GOODYEAR TIRE + RUBBER CO	75,371		
	DEUTSCHE GOODYEAR GMBH	85		
	GOODYEAR AEROSPACE CORP	361,444		
	MOTOR WHEEL CORP	3,762		
	TOTAL	440,662	0.34	59.87
46.	GUAM OIL + REFINING CO INC	379,283	0.30	60.17

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
47.	ATLANTIC RICHFIELD CO	284,867		
	ANACONDA CO	53		
	ARCO PETROLEUM CO	74,957		
	ARCO PIPE LINE CO	226		
	ERICSSON INC	1,784		
	TOTAL	361,887	0.28	60.45
48.	SANDERS ASSOCIATES INC	352,363		
	CALIFORNIA COMPUTER PRODUCTS INC	1,378		
	TOTAL	353,741	0.28	60.73
49.	WATERMAN MARINE CORP	345,474		
	WATERMAN STEAMSHIP CORP			
	TOTAL	345,474	0.27	61.00
50.	SIGNAL COMPANIES INC (THE)			
	AERO HYDRAULICS INC	44		
	AIRSUPPLY CO	542		
	AMPEX CORP	18,238		
	AMPEX EUROPA GMBH	116		
	DUNHAM BUSH INC	717		
	GARRETT CORP (THE)	300,591		
	GARRETT MFG LTD	259		
	GARRETT PNEUMATICS CO	11,791		
	GARRETT TURBINE	5,155		
	MACK TRUCKS INC	629		
	U O P INC	1,052		
	UNIVERSAL OIL PRODUCTS CO	1,913		
	WHEELABRATOR FRYE	1,263		
	TOTAL	342,310	0.27	61.27
51.	ROYAL DUTCH SHELL GROUP			
	SHELL CHEMICAL INC	363		
	SHELL EASTERN PETROLEUM PTE LTD	120,140		
	SHELL INTERNATIONAL	15,911		
	SHELL OIL CO	198,887		
	SHELL UK LTD	244		
	TOTAL	335,545	0.26	61.53
52.	MOTOROLA INC	294,142		
	CODEX CORP	11,294		
	FOUR PHASE SYSTEMS INC	15,222		
	MOTOROLA SEMICONDUCTOR PRODUCTS	132		
	UNIVERSAL DATA SYSTEMS INC	488		
	TOTAL	321,278	0.25	61.78
53.	NORTH AMERICAN PHILIPS CORP	1,565		
	AIRPAX ELECTRONICS INC	425		
	AIRPAX PRODUCTS	1,085		
	AMPEREX ELECTRONIC CORP	3,821		
	ANCHOR BRUSH CO INC	77		
	GENERAL ATRONICS CORP	10,132		
	MAGNAVOX ADVANCED PROD & SYS CO	12,740		
	MAGNAVOX CO	104,006		
	MAGNAVOX DATA SYSTEMS INC	253		
	MAGNAVOX GOVT + INDUSTRIAL ELEC CO	168,738		
	MEPCO ELECTRA INC	576		
	NORTH AMERICAN PHILIPS CONTROLS CO	103		
	NORTH AMERICAN PHILIPS LTG CORP	2,096		
	PHILIPS ELECTRONIC INSTRUMENTS INC	842		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
53.	NORTH AMERICAN PHILIPS CORP PHILIPS ELMET CORP PHILIPS MEDICAL SYSTEMS INC S & H X RAY CO THE	26 5,253 107 -----		
	TOTAL	311,845	0.24	62.02
54.	E SYSTEMS, INC SERV AIR INC	304,697 4,844 -----		
	TOTAL	309,541	0.24	62.26
55.	HERCULES, INC ADRIA LABORATORIES INC	307,408 605 -----		
	TOTAL	308,013	0.24	62.50
56.	MORRISON KNUDSEN CO INC FERGUSON H K CO NATIONAL STEEL & SHIPBUILDING CO	8,662 1,376 297,836 -----		
	TOTAL	307,874	0.24	62.74
57.	MOBIL CORP CONTAINER CORP OF AMERICA HOME OIL CO THE HYDRO CONDUIT CORP MOBIL OIL CORP MOBIL SHIPPING & TRANSPORTATION CO	69 132 1,951 293,283 122 -----		
	TOTAL	295,557	0.23	62.97
58.	OGDEN CORP AVONDALE SHIPYARDS INC OGDEN FOOD PRODUCTS CORP	292,300 272 -----		
	TOTAL	292,572	0.23	63.20
59.	MORTON THICKOL INC	281,167	0.22	63.42
60.	GOULD, INC DEVICES & COMPONENTS CO I T E IMPERIAL CORP SYSTEMS ENGINEERING LABS INC	260,234 43 7,720 10,339 -----		
	TOTAL	278,336	0.22	63.64
61.	CONGOLEUM CORP BATH IRON WORKS CORP	277,815 -----		
	TOTAL	277,815	0.22	63.86
62.	CATERPILLAR TRACTOR CO SOLAR TURBINES INTERNATIONAL SOLAR TURBINES OVERSEAS LTD TOWMOTOR CORP	196,386 74,858 44 2,839 -----		
	TOTAL	274,127	0.21	64.07
63.	EMERSON ELECTRIC CO APPLETON ELECTRIC CO ATWOOD & MORRILL CO INC FLOW TECHNOLOGY INC	238,741 419 138 245 -----		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
63.	EMERSON ELECTRIC CO ROSEMOUNT INC SOUTHWEST TRUCK BODY CO TOTAL	8,108 25,869 ----- 273,520	0.21	64.28
64.	CONTROL DATA CORP SERVICE BUREAU CORP THE TOTAL	273,360 48 ----- 273,408	0.21	64.49
65.	STANDARD OIL OF INDIANA AMOCO OIL CO AMOCO UNITED KINGDOM TOTAL	256,736 12,990 ----- 269,726	0.21	64.70
66.	COASTAL CORP BELCHER NEW ENGLAND INC BELCHER OIL CO BELCHER TERMINALS INC COASTAL STATES MARKETING INC PACIFIC REFINING CO TOTAL	5,973 44,745 827 212,843 3,988 ----- 268,376	0.21	64.91
67.	PENN CENTRAL CORP AUTOMATION INDUSTRIES INC G & H TECHNOLOGIES INC G K TECHNOLOGIES INC MARATHON BATTERY CO MARATHON LE TOURNEAU CO SPRAGUE ELECTRIC CO TOTAL	250,123 399 3,776 8,427 772 987 ----- 264,484	0.21	65.12
68.	AEROSPACE CORP (N)	260,474	0.20	65.32
69.	FAIRCHILD INDUSTRIES, INC AMERICAN SATELLITE CORP GREER HYDRAULICS INC V S I CORP TOTAL	252,267 5,129 381 2,213 ----- 259,990	0.20	65.52
70.	H B H CO	251,001	0.20	65.72
71.	MASSACHUSETTS INSTITUTE TECHNOLOGY	250,151	0.20	65.92
72.	BURROUGHS CORP BURROUGHS CONTROL CORP MEMOREX CORP SYSTEM DEVELOPMENT CORP TOTAL	124,659 1,783 11,994 90,590 ----- 229,026	0.18	66.10
73.	PACIFIC RESOURCES INC GASCO INC HAWAIIAN INDEPENDENT REFINERY INC	3,963 223,542		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
73.	PACIFIC RESOURCES INC P R I NORTHWEST INC	1,148		
	TOTAL	228,653	0.18	66.28
74.	JOHNS HOPKINS UNIVERSITY (N)	227,175	0.18	66.46
75.	OSHKOSH TRUCK CORP	224,454	0.18	66.64
76.	GULF OIL CORP	49,838		
	G A TECHNOLOGIES	8,339		
	GULF PETROLEUM SA	132		
	GULF REFINING & MARKETING CO	258		
	HARSHAW CHEMICALS CO	392		
	TRANSOCEAN GULF OIL CO	152,760		
	TOTAL	211,719	0.17	66.81
77.	ASHLAND OIL INC	174,998		
	ALLIED OIL CO	1,681		
	ASHLAND CHEMICAL CO	1,165		
	ASHLAND CONSTRUCTION CO	2,566		
	ASHLAND PETROLEUM CO	320		
	DREW CHEMICAL CORP	29		
	EASTERN SEABOARD PETROLEUM CO, INC	4,629		
	FILTROL CORP	274		
	HOLMES & NARVER INC	5,870		
	RILEY BEAIRD INC	841		
	RILEY STOCKER CORP	13,937		
	TOTAL	206,310	0.16	66.97
78.	MITRE (THE) CORP (N)	206,007	0.16	67.13
79.	ROLLS ROYCE LTD	201,558	0.16	67.29
80.	DUPONT E I DE NEMOURS + CO	10,095		
	CONOCO INC	39,052		
	CONOCO LTD	5,644		
	ENDO LABORATORIES, INC	1,020		
	REMINGTON ARMS CO, INC	145,179		
	TOTAL	200,990	0.16	67.45
81.	WILLIAMS INTERNATIONAL CORP	200,595	0.16	67.61
82.	REYNOLDS R J INDUSTRIES INC	1,192		
	DEL MONTE CORP	24,862		
	DEL MONTE SALES CO	2,181		
	HEUBLEIN SPIRITS & WINE CO	1,004		
	REYNOLDS R J TOBACCO CO	31,490		
	SEA LAND INDUSTRIES USA INC	42		
	SEA LAND SERVICE INC	129,856		
	TOTAL	190,627	0.15	67.76

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
83.	DUCHOSSOIS THRALL GROUP INC CHAMBERLAIN MFG CORP THRALL CAR MFG CO	186,033 94		
	TOTAL	186,127	0.15	67.91
84.	NI INDUSTRIES NORRIS INDUSTRIES INC NORRIS NI INDUSTRIES	5,174 175,846 1,324		
	TOTAL	182,344	0.14	68.05
85.	SAM WHAM CORP	178,881	0.14	68.19
86.	COMPUTER SCIENCES CORP	173,700	0.14	68.33
87.	XEROX CORP FUJI-XEROX CO, LTD KOREA XEROX CO LTD RANK XEROX ESPANOLA S A RANK XEROX LTD XEROX COLLEGE PUBLISHING XEROX LEARNING SYSTEMS	162,382 1,825 796 87 2,776 72 537		
	TOTAL	168,475	0.13	68.46
88.	BRUNSWICK CORP DEVILS LAKE SIOUX MFG CO LANGLEY CORP ROYAL MFG CO SHERWOOD MEDICAL INDUSTRIES, INC	112,434 48,460 262 53 1,766		
	TOTAL	162,975	0.13	68.59
89.	HEWLETT PACKARD CO	160,472	0.13	68.72
90.	GULF STATES OIL & REFINING CO	155,767	0.12	68.84
91.	SCIENCE APPLICATIONS INTL INC SCIENCE APPLICATIONS INC	152,508		
	TOTAL	152,508	0.12	68.96
92.	SUNDSTRAND CORP FALK CORP SUNDSTRAND AIRCRAFT SERVICE SUNDSTRAND DATA CONTROL INC SUNDSTRAND HYDRAULICS	136,665 104 606 12,237 391		
	TOTAL	150,003	0.12	69.08
93.	KAMAN CORP BRUNO C & SON INC KAMAN AEROSPACE CORP KAMAN SCIENCES CORP KAMAN TEMPO KAMATICS CORP	50,710 70 63,040 17,850 2,370 4,067		
	TOTAL	138,107	0.11	69.19

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
94.	KUWAIT PETROLEUM CORP KUWAIT NATIONAL PETROLEUM CO	137,980		
	TOTAL	137,980	0.11	69.30
95.	HARSCO CORP	136,074		
	BRODERICK CO	27		
	PATTERSON KELLEY CO	34		
	TOTAL	136,135	0.11	69.41
96.	LEAR SIEGLER INC	134,681	0.11	69.52
97.	VARIAN ASSOCIATES INC	128,007		
	PULSE ENGINEERING INC	4,583		
	SEMICON ASSOCIATES INC	74		
	VARIAN GRAPHICS	47		
	VARIAN INSTRUMENTS	42		
	TOTAL	132,753	0.10	69.62
98.	SOUTHERN UNION CO			
	SOUTHERN UNION GAS CO	12,675		
	SOUTHERN UNION REFINING CO	119,685		
	TOTAL	132,360	0.10	69.72
99.	CUBIC CORP	128,472		
	CUBIC WESTERN DATA	653		
	UNITED STATES ELEVATOR CORP	538		
	TOTAL	129,663	0.10	69.82
100.	DIGITAL EQUIPMENT CORP	126,017	0.10	69.92