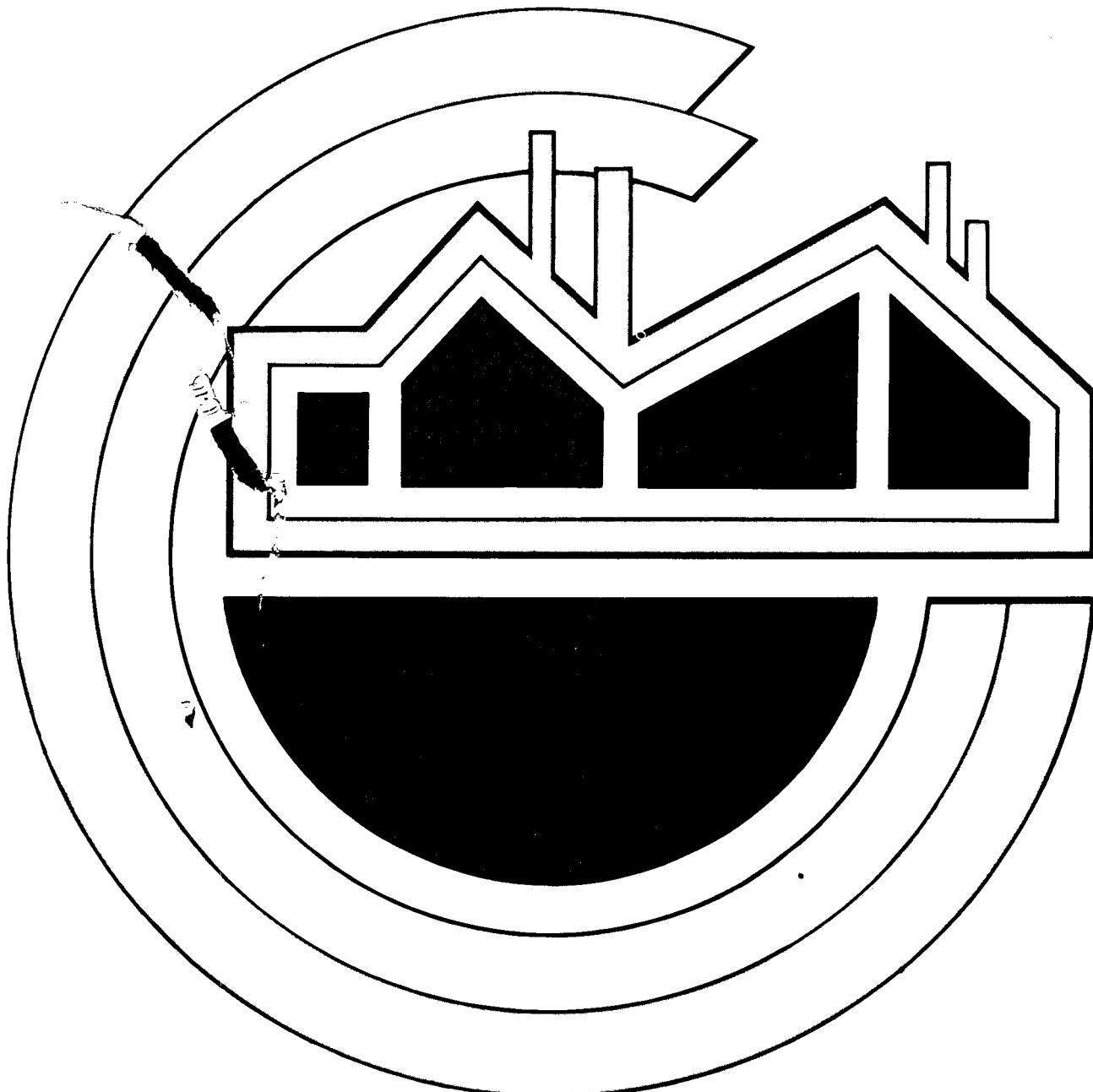


**Current
Industrial
Reports**

MA-175(77)-1

**Shipments of
Defense-Oriented
Industries, 1977**



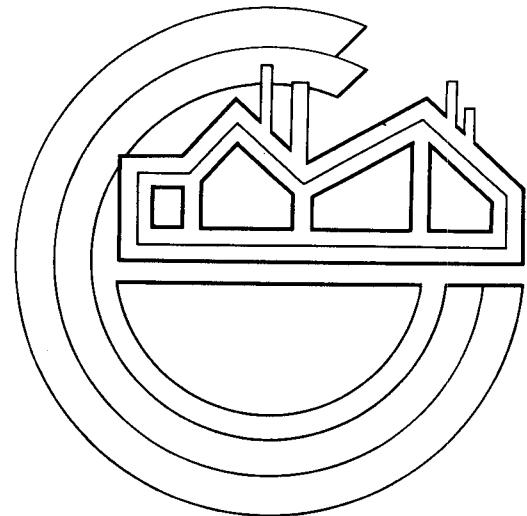
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U.S. Department of Commerce
Juanita M. Kreps, Secretary
Courtenay M. Slater,
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Introduction

The total value of all shipments by private manufacturing firms in 94 defense-oriented industries was estimated at \$345.4 billion in 1977, of which \$48.3 billion or 14 percent was accounted for by shipments to the Federal Government. The largest agency in Federal procurement was the Department of Defense (DOD) at \$36.9 billion, followed by the Energy Research and Development Administration (ERDA) (which was changed to the Department of Energy in 1977) and the National Aeronautics and Space Administration (NASA) at \$2.4 billion and \$2.3 billion, respectively. The "other agencies" category (which includes agencies other than DOD, NASA, and ERDA; situations where the specific agency is not known to the manufacturer; and plants which have less than \$1 million in Federal shipments) was estimated at \$6.6 billion in Federal shipments. (See chart A of the text for a distribution by agency.) Of the \$48.3 billion Federal total, \$36.3 billion were prime shipments and \$11.9 billion were done on indirect or subshipments.

Total employment in all defense-oriented industries was estimated to be 4.6 million of which 927,400, were engaged in work related to Government expenditures for manufactured products. Employment by agency was estimated to be 687,400 for DOD, 42,600 for NASA¹, 46,300 for ERDA, and 151,100 for "other agencies."

Eight industries shipped more than \$1 billion of their products to the Federal Government, led by SIC 3721, Aircraft, at \$7,698.3 million; followed by SIC 3662, Radio and TV Communication Equipment, \$7,442.8 million; and SIC 3761, Guided Missiles and Space Vehicles, \$5,849.1 million. Other major industries include SIC's 2819, 2911, 3724, 3728, and 3731 (see chart B of the text for their values and industry titles).

There were 14 States which produced more than \$1 billion in Federal Government shipments. California led at \$13,079.1 million, New York was second at \$3,368.1 million, followed by Connecticut, Texas, Missouri, Florida and Ohio at \$2,890.1, \$2,813.7, \$2,655.1, \$2,139.6 and \$2,108.2 million, respectively. Rounding out the remaining States were Massachusetts, Washington State, Pennsylvania, Virginia, Michigan, New Jersey, and Indiana in that sequence. (See chart C of the text.) The Los Angeles Standard Metropolitan Statistical Area (SMSA) was the largest SMSA in Federal Government shipments at \$7,601.2 million. Second was St. Louis, Mo.-Illinois at \$2,392.4 million, and third was Nassau-Suffolk with \$2,105.3 million. (Appendix A contains definitions of the SMSA's.)

Federal Government shipments showed an increase of approximately 10 percent from 1976, rising from \$44.0 billion in 1976 to \$48.3 billion in 1977; however, Government-related employment declined by 1 percent from 938,500 to 927,400.

These data are based on a survey conducted by the Bureau of the Census on Form MA-175, "Report on Shipments to or Receipts for Work Done for Federal Government Agencies and Their Contractors and Suppliers in 1977." See appendix D for a

reproduction of the report form and the instructions. Appendix B contains the qualifications to the data and an explanation of the terms, while appendix C describes the survey sample and estimating procedure. Note that the titles and headings of some tables have been changed slightly from past years; however, the content remains the same.

In addition to form MA-175 which collected information on the amounts private industry shipped to the Federal Government, tables 8 and 9 contain information on Department of Defense-owned and -operated facilities. In 1977, total revenue at these facilities amounted to \$8.3 billion, an increase of 4 percent from the 1976 level of \$8.0 billion. Total employment in 1977 was 234,200 which represented a decrease of 2 percent from the 239,700 which were employed in 1976. These data are based upon reports filed by the Department of Defense on Form MA-171, "Department of Defense-Owned and -Operated Establishments Primarily Engaged in Manufacturing and Assembly and/or Research and Development." For 1977, there were reports from 84 such installations, while in 1976 there were 85 installations.

GENERAL

Confidentiality of Data for Individual Companies—The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, geographic region and division totals are given precedence over individual States, and States are given precedence over Standard Metropolitan Statistical Areas. In tables showing industry detail, major industry group (two-digit) totals take precedence over industry group (three-digit) totals which, in turn, take precedence over individual (four-digit) industries.

Abbreviations—The following abbreviations and symbols occur frequently in the tables and footnotes.

- Represents zero.
- (X) Not applicable.
- (NA) Not available.
- (D) Withheld to avoid disclosing figures for individual companies.
- n.e.c. Not elsewhere classified.
- DOD Department of Defense.
- NASA National Aeronautics and Space Administration
- SMSA Standard Metropolitan Statistical Area
- SIC Standard Industrial Classification
- ERDA Energy Research and Development Administration

Rounding of Data—For all tables (except tables 6 and 7) the sum of the detailed figures may not add to the total because of independent rounding of the figures comprising the totals.

Industry Classification—Establishments in these surveys are coded into industries and geographical areas based upon the 1972 Standard Industrial Classification (SIC) system and the 1972 Geographical Reference Manual.

Dollar Adjustment—All dollar figures included in this publication are in current dollars, i.e., they have not been adjusted for price change.

Related Reports—The Bureau of the Census also publishes other reports on related products as follows:

Series	Frequency	Title
MQ-37D	Quarterly	Backlog of Orders for Aerospace Companies

M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
------	---------	---

CONTACTS FOR DATA USERS:

Subject Area	Contact	Telephone Number
Current Industrial Report MQ-37D	Odelle Thomas	(301) 763-2824
M3-1 Report	Ruth Runyan	(301) 763-2502
To order Census Bureau publications	Daisy Williams	(301) 763-7472

CHART A. FEDERAL SHIPMENTS BY GOVERNMENT AGENCY: 1977

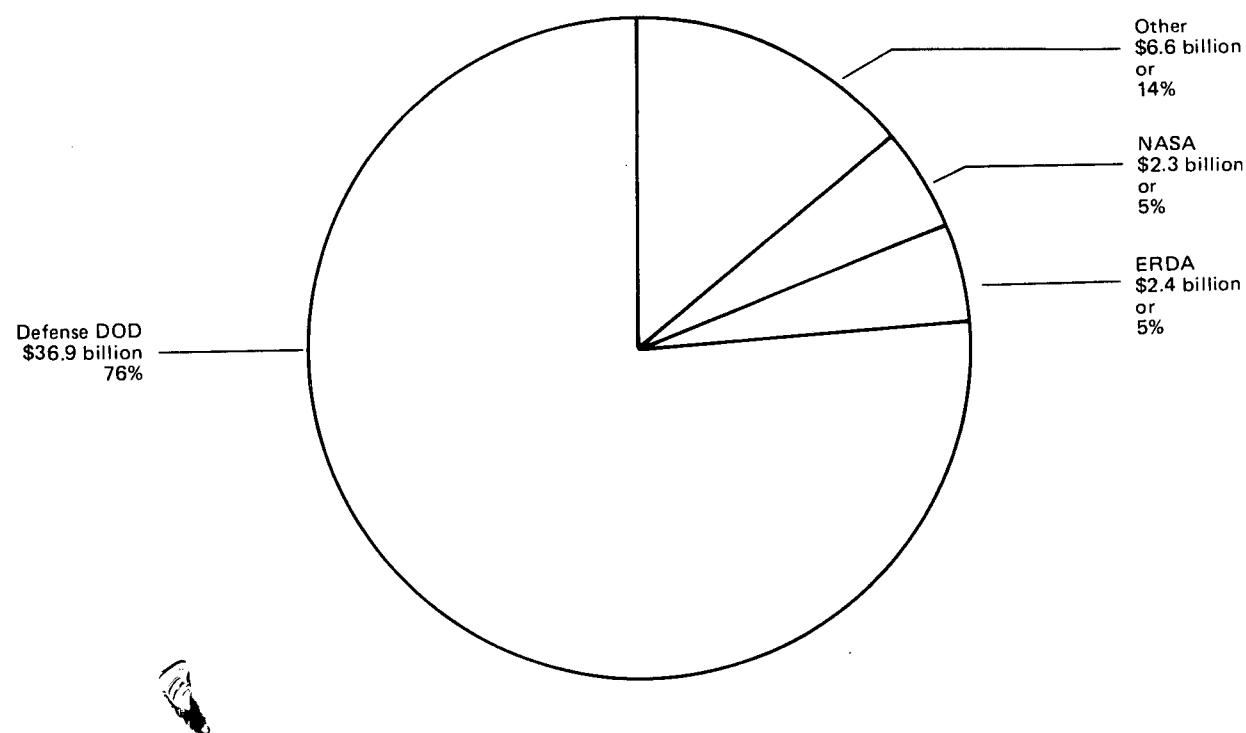


CHART B. EIGHT LEADING INDUSTRIES IN FEDERAL GOVERNMENT SHIPMENTS: 1977 AND 1976

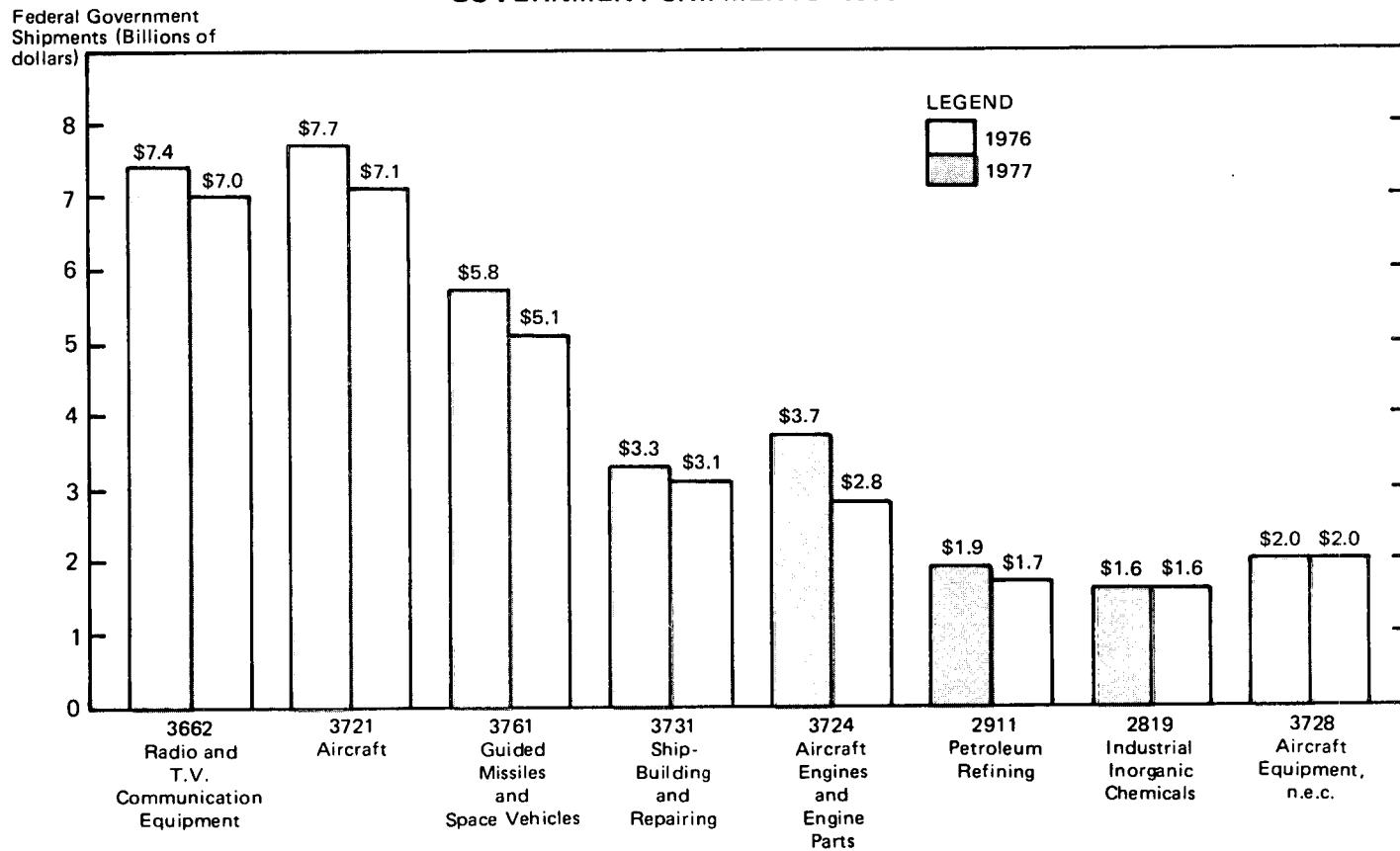


Chart C. Federal Government Shipments, by State: 1977

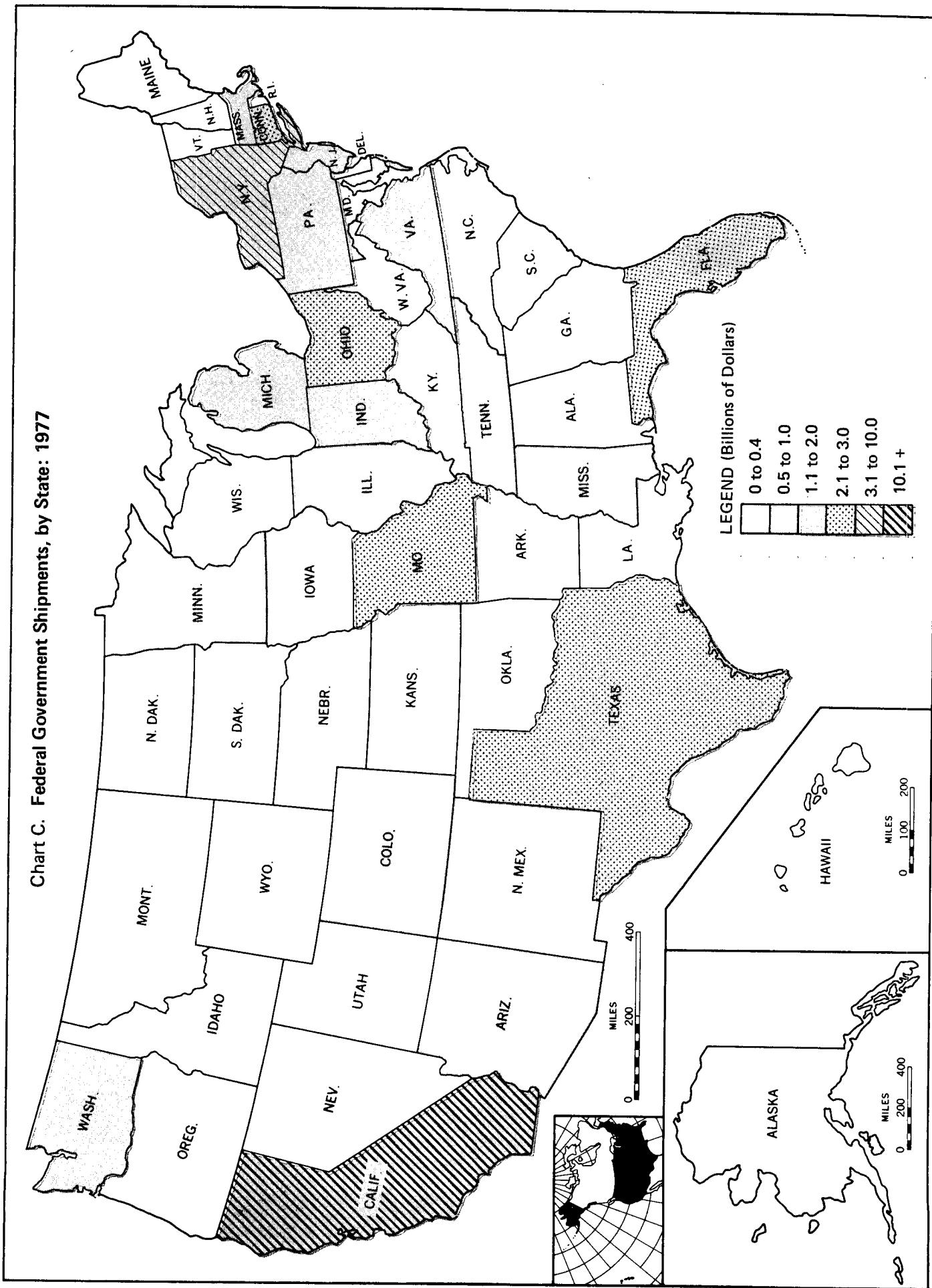


Table 1. VALUE OF SHIPMENTS OF DEFENSE-ORIENTED INDUSTRIES--SUMMARY STATISTICS BY AGENCY: 1977, 1976, 1975

(Millions of dollars)

Item	1977	1976	1975
MA-175, total ¹	345,384.0	319,277.6	287,219.6
Government shipments, total.....	48,258.1	44,008.8	39,725.7
Prime contracts, total.....	36,337.1	32,764.9	29,346.5
Department of Defense (DOD).....	30,282.8	26,807.4	23,770.7
National Aeronautics and Space Agency (NASA).....	1,835.2	1,790.3	1,819.5
Energy Research and Development Administration (ERDA) (now DOE).....	2,030.7	2,023.7	1,936.9
Other agencies.....	2,188.4	2,143.5	1,819.5
Subcontracts, total.....	11,921.0	11,243.8	10,378.6
Agency known, total.....	8,086.3	7,283.7	6,360.1
DOD.....	6,778.3	6,132.2	5,652.1
NASA.....	509.6	494.8	174.9
ERDA (now DOE).....	405.4	370.4	281.2
Other agencies.....	393.0	286.3	251.9
Agency not known, total.....	3,834.7	3,960.1	4,018.5
DOD, NASA, or ERDA (now DOE).....	1,397.1	1,219.5	1,157.3
Other agencies.....	400.2	454.6	590.7
Data from plants with less than \$1 million federal shipments.....	2,037.4	2,286.0	2,270.5
Other than government shipments.....	297,125.9	275,269.0	247,493.9

¹Represents value of shipments (Federal Government and private) of all establishments included on the mailing panel for the industries covered.

Table 2. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS AND GOVERNMENT SHIPMENTS, BY INDUSTRY GROUPS FOR MA-175 PLANTS: 1977, 1976, AND 1975

(Employment figures in thousands; value and government shipments in million dollars)

Industry group	SIC industries included	Number of employees						Value added by manufacturers			Value of shipments			Government shipments	
		1977	1976	1975	1977	1976	1975	1977	1976	1975	1977	1976	1975		
Total.....	4,612.3	4,593.5	4,643.4	153,805.5	143,007.6	129,502.2	345,384.0	319,277.6	287,219.6	48,258.1	44,008.8	44,008.8	39,725.7		
Turbines, construction machinery, machine tools, computers and related products.....	460.5	465.5	469.4	15,774.5	15,746.5	13,724.4	30,243.3	30,273.5	26,674.7	1,649.8	1,458.3	1,458.3	1,409.0		
Communication equipment.....	410.4	426.2	12,372.6	11,572.7	11,243.1	20,357.5	19,184.6	19,305.3	7,501.1	7,098.0	6,066.7	6,066.7			
Electronic components and accessories.....	3671,3672,3673,3674, 3675,3676,3677,3678, 3679.....	357.0	358.2	358.4	9,166.9	9,173.5	7,917.1	14,432.4	13,944.8	11,841.4	1,454.4	1,348.0	1,348.0	1,125.2	
Aerospace industries.....	3721,3724,3728,3761, 3764,3769.....	532.9	541.4	579.8	18,786.5	18,071.9	16,446.3	32,773.3	30,299.0	28,668.5	20,991.8	18,676.4	18,676.4	16,520.4	
Shipbuilding, repairing and ordnance.....	3482,3483,3484,3489, 3731,3795.....	255.5	244.8	268.4	5,818.7	5,349.3	4,883.0	10,444.7	9,748.8	9,344.7	5,752.4	5,189.5	5,189.5	4,730.2	
Scientific instruments, mechanical measuring devices, optical instruments, and photographic equipment.....	3811,3823,3824,3825, 3829,3832,3861.....	315.0	309.5	313.2	12,001.4	10,710.9	9,991.2	18,066.3	16,104.1	14,865.9	1,356.1	1,433.3	1,433.3	1,322.3	
Surgical and dental equipment, ophthalmic goods, and watches and watchcases.....	3842,3843,3851,3873.....	105.9	108.3	111.2	2,777.6	2,608.4	2,543.5	5,007.4	4,535.7	4,418.8	200.2	199.8	199.8	195.1	
Other machinery.....	3510,3536,3537,3561 3562,3563,3566,3568 3569,3592,3599.....	519.3	502.5	523.6	14,484.3	13,294.7	12,505.7	27,504.9	24,119.1	22,780.8	1,397.1	1,273.0	1,273.0	1,244.8	
Electric transmission and industrial apparatus, and miscellaneous electrical equipment.....	3612,3613,3621,3622, 3643,3644,3691,3692, 3693,3694,3699.....	433.3	432.2	417.9	12,957.8	11,168.2	11,668.3	22,569.0	20,262.8	19,296.3	853.9	802.8	802.8	691.4	
Selected fabricated metal products.....	3441,3443,3451,3452 3462,3463,3494,3499.....	470.5	450.8	470.9	12,797.8	12,351.0	11,770.3	24,785.1	23,956.8	23,427.3	1,772.4	1,590.7	1,590.7	1,411.7	
Truck bodies and truck trailers.....	3713,3715.....	53.0	46.3	45.0	1,044.4	1,064.5	802.4	3,181.2	2,725.0	2,082.3	72.1	58.9	58.9	51.6	
Selected chemicals and allied products.....	2813,2819,2873,2874, 2892.....	123.9	130.6	129.3	7,021.6	6,595.3	6,098.4	16,247.1	15,005.8	13,650.7	1,853.3	1,820.8	1,820.8	1,999.2	
Petroleum refineries.....	2911,2992.....	108.7	107.1	87.7	15,360.3	12,276.0	9,168.3	86,058.6	77,647.3	65,660.0	1,888.1	1,695.6	1,695.6	1,542.3	
Fabricated rubber products, n.e.c.....	3041,3069,3393.....	146.5	142.5	3,669.3	3,285.9	2,753.9	6,792.2	6,027.0	5,179.7	262.1	220.7	220.7	220.7	250.2	
Selected primary metal industries.....	3324,3325,3339,3351, 3353,3354,3355,3356, 3357,3361,3369.....	283.3	309.5	281.9	8,393.7	8,597.9	7,395.4	25,510.6	24,273.0	19,406.7	781.6	802.9	780.9	738.0	
Miscellaneous industries.....	(*)	36.6	29.3	18.0	1,378.1	1,140.9	590.8	1,411.0	1,170.3	616.4	471.7	340.0	340.0	427.9	

N.e.c. Not elsewhere classified

¹Value of production rather than value of shipments data collected for industry 3731.²Represents nonmanufacturing facilities of the manufacturing companies canvassed, in addition to selected nonprofit research corporations working on defense contracts.

TABLE 3. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS, AND
(EMPLOYMENT FIGURES IN THOUSANDS)

CODE	INDUSTRY	NUMBER OF EMPLOYEES	VALUE ADDED BY MANUFACTURE	TOTAL VALUE OF SHIPMENTS	TOTAL		PRIME SHIPMENTS	
					EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS
	ALL INDUSTRIES, TOTAL.....	4,612.3	153,805.5	345,384.0	927.4	48,258.1	653.0	36,337.1
28	CHEMICALS AND ALLIED PRODUCTS.....	123.9	7,021.6	16,247.1	33.7	1,853.3	28.1	1,638.1
2813	INDUSTRIAL GASES.....	6.4	540.0	1,043.4	0.3	23.8	(B)	1.6
2819	INDUSTRIAL INORGANIC CHEMICALS, N.E.C.	79.3	3,969.2	8,866.6	25.3	1,571.2	21.8	1,435.3
2873	NITROGENOUS FERTILIZERS.....	10.7	1,469.2	3,193.5	(B)	12.1	(A)	7.4
2874	PHOSPHATIC FERTILIZERS.....	13.1	665.8	2,495.4	(A)	3.8	-	-
2892	EXPLOSIVES.....	14.4	377.4	648.2	8.0	242.4	6.2	193.8
29	PETROLEUM AND COAL PRODUCTS.....	108.7	15,360.3	86,058.6	1.9	1,888.1	1.4	1,700.9
2911	PETROLEUM REFINING.....	97.4	14,486.3	83,609.7	1.9	1,881.0	1.4	1,700.9
2992	LUBRICATING OILS AND GREASES.....	11.4	874.0	2,448.9	(A)	7.1	-	-
30	RUBBER AND MISCELLANEOUS PLASTICS PRODUCT	121.4	3,118.7	5,839.7	4.7	231.9	2.1	117.4
3041	RUBBER AND PLASTIC HOSE AND BELTING....	31.0	805.9	1,527.7	0.8	34.3	0.5	22.7
3069	FABRICATED RUBBER PRODUCTS, N.E.C.....	90.4	2,312.8	4,312.0	3.9	197.6	1.6	94.7
3293	GASKETS, PACKETS, AND SEALING DEVICES....	25.0	550.6	952.5	0.9	30.2	(A)	4.0
33	PRIMARY METAL INDUSTRIES.....	283.3	8,393.7	25,510.9	12.9	781.6	1.0	81.4
3324	STEEL INVESTMENT FOUNDRIES.....	9.4	238.7	370.5	0.9	38.0	(A)	(A)
3325	STEEL FOUNDRIES, N.E.C.....	48.5	1,300.5	2,108.2	3.7	158.3	0.2	9.6
3339	PRIMARY NONFERROUS METALS, N.E.C.....	5.5	194.2	438.3	0.6	40.3	(A)	(A)
3351	COPPER ROLLING AND DRAWING.....	29.5	882.4	3,132.1	0.7	58.3	0.2	15.2
3353	ALUMINUM SHEET, PLATE, AND FOIL.....	32.7	1,075.8	6,434.3	0.4	80.9	(A)	9.3
3354	ALUMINUM EXTRUDED PRODUCTS.....	19.7	500.6	1,552.2	0.6	42.9	(A)	2.0
3355	ALUMINUM ROLLING AND DRAWING, N.E.C....	3.9	206.3	784.7	(A)	11.2	(A)	0.3
3356	NONFERROUS ROLLING AND DRAWING, N.E.C....	15.1	544.1	1,804.3	1.6	144.9	(A)	3.0
3357	NONFERROUS WIRE DRAWING AND INSULATING.....	56.4	1,983.6	6,023.4	1.4	93.4	0.4	36.6
3361	ALUMINUM FOUNDRIES.....	50.7	1,167.7	2,272.8	2.5	98.9	0.1	3.9
3369	NONFERROUS FOUNDRIES, N.E.C.....	11.9	319.8	590.1	0.3	14.6	(A)	1.5
34	FABRICATED METAL PRODUCTS.....	540.8	14,549.0	27,756.9	75.5	3,232.2	40.4	1,606.4
3441	FABRICATED STRUCTURAL METAL.....	82.9	1,480.6	4,103.7	3.4	169.8	0.9	61.8
3443	FABRICATED PLATE WORK (BOILER SHOPS)....	96.8	3,179.8	5,962.3	6.2	379.3	2.3	136.3
3451	SCREW MACHINE PRODUCTS.....	30.7	737.2	1,306.0	2.1	75.2	(A)	2.7
3452	BOLTS, NUTS, PIVETS, AND WASHERS.....	49.2	1,486.6	2,721.9	2.3	95.8	0.4	17.1
3462	IRON AND STEEL FORGINGS.....	29.5	868.0	2,001.2	2.8	163.3	0.1	5.7
3463	NONFERROUS FORGINGS.....	7.7	297.1	553.6	3.2	197.9	(A)	0.8
3482	SMALL ARMS AMMUNITION.....	9.7	219.2	417.9	2.8	124.2	2.7	120.9
3483	AMMUNITION, EXCEPT FOR SMALL ARMS, N.E.C....	21.7	518.4	1,120.2	16.1	668.9	13.1	521.5
3484	SMALL ARMS.....	17.2	535.5	758.0	3.1	159.8	2.2	121.1
3489	ORDNANCE AND ACCESSORIES, N.E.C.....	21.7	478.1	675.7	16.5	506.9	14.4	445.8
3494	VALVES AND PIPE FITTINGS.....	106.8	3,217.1	5,229.6	11.6	500.9	2.3	107.0
3499	FABRICATED METAL PRODUCTS, N.E.C.....	66.9	1,331.4	2,906.8	5.6	190.2	2.0	65.7
35	MACHINERY, EXCEPT ELECTRICAL.....	979.7	30,258.8	57,747.3	66.3	3,046.9	28.1	1,575.0
3511	TURBINES AND TURBINE GENERATOR SETS....	35.8	1,228.9	2,282.3	3.7	197.8	2.0	112.7
3519	INTERNAL COMBUSTION ENGINES, N.E.C.....	76.8	2,926.3	6,886.9	3.1	285.8	2.0	207.7
3531	CONSTRUCTION MACHINERY.....	128.4	4,912.6	10,714.1	2.2	168.4	1.2	105.8
3536	HOISTS, CRANES, AND MONORAILS.....	15.8	478.4	960.4	0.3	30.1	0.1	15.9
3537	INDUSTRIAL TRUCKS AND TRACTORS.....	23.1	747.7	1,477.2	0.6	34.8	0.3	23.2
3541	MACHINE TOOLS, METAL CUTTING TYPES.....	53.9	1,462.7	2,418.4	4.8	165.3	2.9	85.8
3542	MACHINES TOOLS, METAL FORMING TYPES.....	25.6	767.9	1,266.4	0.6	23.6	0.2	4.0
3561	PUMPS AND PUMPING EQUIPMENT.....	62.2	2,039.9	3,645.7	2.5	131.5	0.7	36.6
3562	BALL AND ROLLER BEARINGS.....	49.0	1,391.9	2,433.5	2.3	89.0	0.5	20.2
3563	AIR AND GAS COMPRESSORS.....	24.9	947.4	1,663.2	0.6	43.0	0.2	14.5
3566	SPEED CHANGERS, DRIVES, AND GEARS.....	21.8	631.8	979.6	1.1	28.0	-	-
3568	POWER TRANSMISSION EQUIPMENT, N.E.C....	25.9	803.4	1,380.2	0.6	26.1	0.2	9.1
3569	GENERAL INDUSTRIAL MACHINERY, N.E.C....	38.1	1,256.5	2,127.3	1.9	77.7	0.3	13.0
3573	ELECTRONIC COMPUTING EQUIPMENT.....	155.7	5,160.0	9,717.5	16.1	786.0	10.9	618.2
3574	CALCULATING AND ACCOUNTING MACHINES.....	27.6	1,053.4	1,895.8	4.6	211.1	4.4	198.9
3579	OFFICE MACHINES, N.E.C.....	33.4	1,189.0	1,948.8	2.1	97.6	1.3	64.4
3592	CARBURETORS, PISTONS, RINGS, VALVES.....	29.0	793.3	1,259.0	0.3	12.8	(A)	1.5
3599	MACHINERY, EXCEPT ELECTRICAL, N.E.C.....	152.7	2,447.7	4,691.0	18.7	638.3	1.0	43.5
36	ELECTRICAL AND ELECTRONIC EQUIPMENT.....	1,200.7	34,497.3	57,358.9	233.4	9,809.4	142.5	6,321.6
3612	TRANSFORMERS.....	41.2	1,104.6	2,049.6	3.1	121.0	1.3	60.9
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS.....	59.0	1,752.7	2,866.8	2.3	81.6	0.5	21.1
3621	MOTORS AND GENERATORS.....	80.6	2,131.5	3,760.6	7.0	300.9	3.4	162.4
3622	INDUSTRIAL CONTROLS.....	61.4	1,859.2	2,919.1	2.1	73.4	0.2	7.2
3643	CURRENT-CARRYING WIRING DEVICES.....	43.6	1,057.4	1,781.3	1.1	35.0	(A)	1.3
3644	NONCURRENT-CARRYING WIRING DEVICES.....	29.8	812.9	1,919.4	0.2	10.2	-	-
3661	TELEPHONE AND TELEGRAPH APPARATUS.....	116.5	3,801.8	7,415.6	1.3	58.3	0.9	42.2
3662	RADIO AND TV COMMUNICATION EQUIPMENT.....	293.9	8,570.8	12,941.9	170.9	7,442.8	122.0	5,368.2
3671	ELECTRON TUBES, RECEIVING TYPE.....	3.9	106.0	161.3	0.7	24.6	0.5	17.6
3672	CATHODE RAY TELEVISION PICTURE TUBES.....	72.2	1,971.4	2,854.7	0.3	11.2	0.1	5.2
3673	ELECTRON TUBES, TRANSMITTING.....	22.8	633.5	945.0	8.7	309.2	4.1	156.6
3674	SEMICONDUCTORS AND RELATED DEVICES.....	101.1	3,068.9	4,582.8	12.7	536.0	3.5	208.2
3675	ELECTRONIC CAPACITORS.....	26.1	434.0	686.9	1.8	48.5	0.1	3.4
3676	ELECTRONIC RESISTORS.....	18.3	348.1	501.9	1.4	36.8	0.1	2.8
3677	ELECTRONIC COILS AND TRANSFORMERS.....	16.7	283.7	483.8	2.2	88.1	0.6	52.1

See footnotes at end of table.

GOVERNMENT SHIPMENTS, BY INDUSTRY AND AGENCY FOR MA-175 PLANTS: 1977--CONTINUED

VALUE FIGURES IN MILLIONS OF DOLLARS

GOVERNMENT SHIPMENTS											CODE	
SUBSHIPMENTS		TO DOD		TO NASA		TO ERDA		TO OTHER AGENCIES		STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	CODE	
EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS			
274.4	11,921.0	687.4	36,852.0	42.6	2,338.6	46.3	2,418.8	151.1	6,648.5	1		
5.6	215.1	7.3	236.6	0.1	3.1	24.3	1,509.2	2.0	104.3	6	28	
0.2	22.2	-	-	(A)	(E)	-	-	(B)	(H)	43	2813	
3.5	135.8	0.2	12.3	(A)	(A)	24.3	1,509.0	0.8	49.8	1	2819	
(A)	4.7	(A)	7.4	-	-	-	-	(A)	4.7	29	2873	
(A)	3.8	-	-	-	-	-	-	(A)	3.8	52	2874	
1.8	48.6	7.0	216.9	(A)	(E)	(A)	(B)	(C)	(H)	11	2892	
0.5	187.2	1.4	1,393.4	(A)	(H)	(A)	(E)	0.5	481.9	15	29	
0.5	180.1	1.4	1,393.4	(A)	(H)	(A)	(E)	0.5	474.8	15	2911	
(A)	7.1	-	-	-	-	-	-	(A)	7.1	44	2992	
2.6	114.5	2.6	150.4	(A)	(B)	-	-	2.1	81.1	7	30	
0.3	11.6	0.5	23.3	-	-	-	-	0.2	11.0	5	3041	
2.4	102.9	2.1	127.1	(A)	(B)	-	-	1.8	70.2	9	3069	
0.8	26.2	0.2	7.2	(A)	(B)	(A)	(B)	0.7	22.8	34	3293	
11.9	700.2	4.5	242.3	(A)	2.7	0.6	40.3	7.8	496.3	4	33	
0.9	38.0	0.1	6.6	(A)	(A)	-	-	0.8	31.4	11	3324	
3.4	148.7	1.5	69.5	(A)	(A)	(A)	(A)	2.2	88.7	12	3325	
0.6	40.2	(A)	3.3	(A)	(B)	0.5	36.2	(A)	0.6	1	3339	
0.5	43.1	0.1	9.5	(A)	(B)	(A)	(E)	0.5	47.5	4	3351	
0.4	71.6	0.2	36.4	(A)	(A)	-	-	0.2	44.5	2	3353	
0.6	40.9	0.4	27.0	(A)	(A)	0.1	-	-	0.2	15.8	5	3354
(A)	10.9	(A)	5.3	(A)	(A)	-	-	(A)	5.8	1	3355	
1.6	141.9	(A)	0.1	(A)	(A)	-	-	(A)	144.8	3	3356	
1.1	56.7	0.8	41.0	(A)	(E)	-	-	(A)	50.5	13	3357	
2.4	95.0	0.9	31.9	(A)	0.1	(A)	(E)	1.6	65.9	17	3361	
0.3	13.1	0.3	11.6	(A)	0.6	(A)	1.5	(A)	0.9	3	3369	
35.3	1,625.8	41.1	1,818.4	1.7	80.5	11.2	400.0	21.9	933.3	7	34	
2.5	108.0	0.9	46.3	-	-	(A)	(A)	(F)	(K)	14	3441	
3.9	243.0	1.7	127.5	0.2	10.9	2.3	134.0	2.0	106.9	6	3443	
2.1	72.5	0.3	9.3	-	-	-	-	1.8	65.9	25	3451	
1.9	78.7	0.9	34.4	(A)	0.2	-	-	1.4	61.2	5	3452	
2.7	157.6	0.7	50.3	-	-	-	(A)	(F)	(K)	7	3462	
3.2	197.1	1.9	144.7	0.1	6.8	(A)	1.6	1.1	44.8	6	3463	
0.1	3.3	2.6	119.3	-	-	-	-	0.2	4.9	1	3482	
3.0	147.4	14.8	60.1	0.9	44.3	(A)	0.7	0.4	22.8	2	3483	
0.9	38.7	2.8	150.3	-	-	-	-	0.4	9.5	5	3484	
2.1	61.2	7.5	242.0	(A)	(A)	8.5	251.4	(B)	(F)	6	3489	
9.3	393.8	5.0	223.2	0.4	17.3	(A)	2.0	6.2	258.2	46	3494	
3.6	124.5	2.0	70.0	(A)	0.9	0.2	10.2	3.4	109.1	14	3499	
38.1	1,471.7	30.4	1,611.6	0.9	57.5	1.8	103.4	33.0	1,274.3	2	35	
1.8	85.1	2.4	130.9	(A)	(B)	(B)	(H)	1.1	53.3	1	3511	
1.1	78.1	2.6	257.8	-	-	(B)	(G)	(B)	(H)	1	3519	
1.0	62.6	1.3	114.7	-	-	-	-	0.9	53.7	9	3531	
0.2	14.2	0.1	15.9	-	-	-	-	(B)	(H)	56	3536	
0.3	11.6	0.3	23.5	-	-	-	-	0.3	11.3	16	3537	
1.9	79.5	3.1	91.4	-	-	0.1	9.2	1.6	64.7	16	3541	
0.4	19.6	0.4	15.4	-	-	-	-	0.2	8.2	10	3542	
1.9	94.9	1.5	85.8	(A)	(A)	(A)	(G)	0.9	40.0	12	3561	
1.8	68.8	0.7	24.3	(A)	(B)	(A)	(A)	1.6	64.4	7	3562	
0.4	28.5	0.4	25.8	(A)	(A)	(A)	(B)	0.2	16.9	16	3563	
1.1	28.0	-	-	-	-	-	-	1.1	28.0	19	3566	
0.4	18.9	0.4	14.9	(A)	(A)	-	-	0.2	11.2	8	3568	
1.6	64.6	0.6	29.8	(A)	0.5	-	-	1.3	47.4	21	3569	
5.2	167.8	9.1	444.7	0.6	37.3	0.3	18.1	6.1	285.8	3	3573	
0.2	12.2	4.5	201.2	(A)	0.5	(A)	0.2	0.1	9.2	1	3574	
0.8	33.2	0.4	19.9	(A)	0.2	(A)	(B)	1.7	77.3	21	3579	
0.3	11.3	0.1	5.1	(A)	(A)	-	-	0.2	7.7	12	3592	
17.7	594.8	2.5	110.5	0.3	18.3	0.9	49.4	15.1	460.1	12	3599	
90.9	3,487.9	181.2	7,857.8	7.9	309.0	2.3	72.5	41.9	1,570.0	1	36	
1.8	60.1	1.7	51.0	(A)	(B)	(A)	3.5	1.3	66.4	17	3612	
1.8	60.5	0.7	21.2	(A)	(A)	(B)	1.6	60.0	13	3613		
3.6	138.5	5.7	240.0	(A)	(B)	(A)	(E)	1.2	59.4	9	3621	
1.9	66.1	1.3	39.7	(A)	(A)	(A)	(E)	0.7	32.2	8	3622	
1.1	33.7	0.2	7.0	(A)	(A)	-	-	0.9	28.0	12	3643	
0.2	10.2	-	-	-	-	-	-	0.2	10.2	19	3644	
0.4	16.1	0.9	41.1	(A)	(A)	-	-	0.4	17.1	1	3661	
48.9	2,074.6	147.4	6,495.3	7.1	277.7	0.3	13.0	16.1	656.8	1	3662	
0.2	7.0	0.6	22.5	-	-	-	-	(A)	2.1	1	3671	
0.2	6.0	0.1	5.1	(A)	(A)	-	-	0.2	6.1	1	3672	
4.6	152.6	7.4	267.6	0.3	7.6	0.1	2.1	0.9	32.0	12	3673	
9.2	327.9	5.8	283.9	0.2	5.2	0.2	4.5	6.5	242.4	7	3674	
1.7	45.2	0.1	4.0	(A)	(A)	-	-	1.7	44.5	10	3675	
1.3	34.0	0.3	7.3	(A)	(C)	(A)	(A)	1.1	28.6	11	3676	
1.6	36.0	0.9	63.6	-	-	-	-	1.3	24.4	67	3677	

TABLE 3. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS, AND
(EMPLOYMENT FIGURES IN THOUSANDS)

CODE	INDUSTRY	NUMBER OF EMPLOYEES	VALUE ADDED BY MANUFACTURE	TOTAL VALUE OF SHIPMENTS	TOTAL		PRIME SHIPMENTS	
					EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS
36	ELECTRICAL AND ELECTRONIC EQUIPMENT..CON.							
3678	ELECTRONIC CONNECTORS.....	15.4	406.6	615.9	2.8	96.6	0.6	19.4
3679	ELECTRONIC COMPONENTS, N.E.C.....	80.5	1,914.7	3,600.1	9.5	303.4	2.4	88.9
3691	STORAGE BATTERIES.....	25.8	1,336.9	1,948.6	1.6	80.0	0.9	38.8
3692	PRIMARY BATTERIES, DRY AND WET.....	11.3	383.2	729.7	0.7	32.6	0.3	16.1
3693	X-RAY APPARATUS AND TUBES.....	13.7	467.4	764.8	1.0	44.4	0.8	37.5
3694	ENGINE ELECTRICAL EQUIPMENT.....	51.1	1,757.2	3,245.7	1.1	56.3	0.2	9.7
3699	ELECTRICAL EQUIPMENT AND SUPPLIES N.E.C	15.8	294.8	583.4	0.9	18.5	(A)	2.0
37	TRANSPORTATION EQUIPMENT.....	771.2	23,898.4	43,427.4	447.7	25,356.5	378.4	21,977.8
3713	TRUCK AND BUS BODIES.....	35.3	692.4	1,905.0	1.3	66.5	0.6	36.3
3715	TRUCK TRAILERS.....	17.7	352.0	1,276.2	(A)	5.6	(A)	(A)
3721	AIRCRAFT.....	203.8	7,390.6	13,725.2	115.5	7,698.3	107.7	7,237.0
3724	AIRCRAFT ENGINES AND ENGINE PARTS.....	98.9	3,429.8	6,785.4	47.7	3,690.2	34.5	3,029.6
3728	AIRCRAFT EQUIPMENT, N.E.C.....	87.7	2,536.0	4,262.5	43.6	2,000.1	19.6	932.7
3731	SHIPBUILDING AND REPAIRING.....	173.7	3,669.0	6,345.0	96.3	3,323.5	91.9	3,147.9
3761	GUIDED MISSILES AND SPACE VEHICLES.....	105.3	4,125.8	6,054.2	100.5	5,849.1	90.1	5,354.1
3764	SPACE PROPULSION UNITS AND PARTS.....	18.8	613.3	920.0	17.6	866.4	13.3	651.4
3769	SPACE VEHICLE EQUIPMENT, N.E.C.....	16.3	691.0	1,046.0	15.2	887.7	11.6	688.8
3795	TANKS AND TANK COMPONENTS.....	11.5	398.5	1,127.9	9.8	969.1	9.1	899.9
38	INSTRUMENTS AND RELATED PRODUCTS.....	420.9	14,779.0	23,073.7	38.3	1,556.3	19.6	871.4
3811	ENGINEERING AND SCIENTIFIC INSTRUMENTS.....	45.5	1,167.2	1,827.7	11.5	425.0	5.5	211.1
3823	PROCESS CONTROL INSTRUMENTS.....	41.2	1,029.0	1,600.2	1.1	42.5	0.6	21.3
3824	FLUID METERS AND COUNTING DEVICES.....	9.7	299.0	493.1	(A)	3.1	-	-
3825	INSTRUMENTS TO MEASURE ELECTRICITY.....	67.1	1,763.8	2,828.7	9.7	371.7	5.3	222.3
3829	MEASURING AND CONTROLLING DEVICES, N.E.C	22.8	622.7	932.3	3.9	133.5	1.7	63.9
3832	OPTICAL INSTRUMENTS AND LENSES.....	38.0	1,164.3	1,672.4	4.2	202.6	2.1	126.4
3842	SURGICAL APPLIANCES AND SUPPLIES.....	42.7	1,280.6	2,127.8	3.1	119.1	1.3	53.1
3843	DENTAL EQUIPMENT AND SUPPLIES.....	14.1	382.6	729.5	0.5	20.7	0.2	10.3
3851	OPHTHALMIC GOODS.....	21.9	487.3	736.7	0.5	10.3	0.3	6.0
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.....	90.8	5,955.4	8,711.8	2.6	177.6	1.9	134.0
3873	WATCHES, CLOCKS, AND WATCHCASES.....	27.1	627.1	1,413.3	1.2	50.1	0.7	23.0
88	MISCELLANEOUS INDUSTRIES ¹	36.6	1,378.1	1,411.0	11.9	471.7	11.2	443.0

Note: In some instances, data are withheld to avoid disclosing the operations of individual companies. The data withheld are expressed in terms of the symbols and ranges shown below. In all instances, where the data are less than .1, the symbol (A) is used.

Symbol	Range	Symbol	Range	Symbol	Range
(A).....	Less than .1	(G).....	5.0 to 9.9	(K).....	100.0 to 249.9
(B).....	.1 to .4	(H).....	10.0 to 24.9	(L).....	250.0 to 499.9
(C).....	.5 to .9	(I).....	25.0 to 49.9	(M).....	500.0 to 999.9
(E).....	1.0 to 1.9	(J).....	50.0 to 99.9	(N).....	1,000.0 and over
(F).....	2.0 to 4.9				

- Represents zero. N.e.c. Not elsewhere classified.

¹Represents nonmanufacturing facilities of the manufacturing companies canvassed, in addition to selected nonprofit research corporations working on defense contracts.

GOVERNMENT SHIPMENTS, BY INDUSTRY AND AGENCY FOR MA-175 PLANTS: 1977--CONTINUED

VALUE FIGURES IN MILLIONS OF DOLLARS)

GOVERNMENT SHIPMENTS										STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	CODE		
SUBSHIPMENTS		TO DOD		TO NASA		TO ERDA		TO OTHER AGENCIES					
EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS				
2.2	77.2	1.4	42.9	(A)	(E)	(A)	(F)	1.3	49.3	13	3678		
7.0	214.5	4.0	147.2	0.3	10.9	1.3	39.5	3.9	105.9	13	3679		
0.7	41.2	1.1	46.0	(A)	(C)	(A)	(B)	0.5	32.6	26	3691		
0.4	16.6	0.4	20.1	-	-	(A)	(F)	(B)	(H)	28	3692		
0.2	6.8	0.5	18.6	(A)	(B)	-	-	(C)	(I)	15	3693		
0.9	46.6	0.7	33.7	(A)	(E)	(A)	(E)	0.4	17.8	7	3694		
0.9	16.5	-	-	-	-	-	-	0.9	18.5	42	3699		
69.2	3,378.8	388.5	22,298.9	30.5	1,814.3	5.0	247.2	23.7	996.2	1	37		
0.7	30.2	0.7	40.8	-	-	-	-	0.6	25.7	11	3713		
(A)	5.6	(A)	4.3	-	-	-	-	(A)	1.4	1	3715		
7.8	461.3	112.1	7,501.9	2.1	114.7	0.1	9.5	1.1	72.2	1	3721		
13.2	660.7	45.0	3,578.2	0.5	33.8	0.3	15.8	2.0	62.5	1	3724		
23.9	1,067.4	36.1	1,688.2	2.0	94.7	0.8	40.2	4.6	177.1	3	3728		
4.4	175.6	85.3	2,899.2	(A)	(A)	0.9	30.5	10.1	393.8	3	3731		
10.4	495.0	76.3	4,372.7	19.2	1,225.1	0.2	8.2	4.8	243.1	1	3761		
4.3	215.0	12.4	598.2	5.0	255.9	0.2	7.8	0.1	4.6	2	3764		
3.7	198.9	10.7	646.5	1.7	90.1	2.6	135.3	0.3	15.8	1	3769		
0.7	69.2	9.8	969.1	-	-	-	-	(A)	(A)	2	3795		
18.7	684.9	23.1	943.2	1.4	55.4	0.7	28.9	13.1	528.7	6	38		
6.0	213.9	9.0	319.2	0.4	17.9	0.4	18.2	1.6	69.7	8	3811		
0.5	21.2	0.3	11.7	(A)	(E)	(A)	(E)	0.8	28.2	10	3823		
(A)	3.1	-	-	-	-	-	-	(A)	3.1	31	3824		
4.4	149.4	5.5	233.7	0.2	9.1	(A)	2.1	4.0	126.9	16	3825		
2.2	69.7	2.1	73.2	0.6	22.6	0.2	5.4	0.9	32.4	6	3829		
2.0	76.1	2.4	110.2	(A)	(E)	(A)	(E)	1.7	89.6	26	3832		
1.8	66.0	1.2	47.0	(A)	(F)	(A)	(B)	1.8	69.3	22	3842		
0.3	10.4	(A)	1.8	-	-	-	-	0.5	18.8	19	3843		
0.2	4.3	0.3	5.9	-	-	-	-	0.2	4.4	11	3851		
0.7	43.7	1.4	98.7	(A)	0.4	(A)	0.4	1.2	78.2	4	3861		
0.5	27.1	0.9	41.9	(A)	(A)	(A)	0.1	0.4	8.1	3	3873		
0.7	28.7	7.1	292.2	0.1	(F)	(B)	(H)	4.3	159.5	1	88		

TABLE 4. VALUE OF SHIPMENTS, TOTAL EMPLOYMENT AND GOVERNMENT SHIPMENTS BY GEOGRAPHIC AREA, INDUSTRY GROUP AND CUSTOMER CLASS FOR MA-175 PLANTS: 1977

(EMPLOYMENT FIGURES IN THOUSANDS; VALUE FIGURES IN MILLIONS OF DOLLARS)

GEOGRAPHICAL AREA AND INDUSTRIAL GROUP	NUMBER OF EMPLOYEES	TOTAL VALUE OF SHIPMENTS	GOVERNMENT SHIPMENTS						STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
			TOTAL		PRIME SHIPMENTS		SUBSHIPMENTS			
			EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	SHIPMENTS	EMPLOYEES	SHIPMENTS		
UNITED STATES, TOTAL.....	4,612.3	345,384.0	927.4	48,258.1	653.0	36,337.1	274.4	11,921.0	1	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	460.5	30,243.3	34.2	1,649.8	22.9	1,189.8	11.3	460.0	6	
COMMUNICATION EQUIPMENT.....	410.4	20,357.5	172.2	7,501.1	122.9	5,410.4	49.3	2,090.7	1	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	357.0	14,432.4	40.1	1,454.4	12.0	554.2	28.0	900.4	5	
AEROSPACE INDUSTRIES.....	532.9	32,773.3	340.2	20,991.8	276.8	17,893.6	63.3	3,098.3	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	255.5	10,444.7	144.6	5,752.4	133.4	5,257.1	11.2	495.4	2	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	315.0	18,066.3	33.0	1,356.1	17.1	779.0	15.9	577.1	7	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	105.9	5,007.4	5.3	200.2	2.5	92.4	2.8	107.8	7	
OTHER MACHINERY.....	519.3	27,504.0	32.1	1,397.1	5.3	385.2	26.9	1,011.7	10	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	433.3	22,569.0	21.1	853.9	7.6	357.0	13.5	496.8	3	
SELECTED FABRICATED METAL PRODUCTS.....	470.5	24,785.1	37.2	1,772.4	8.0	397.1	29.2	1,375.2	7	
TRUCK BODIES AND TRUCK TRAILERS.....	53.0	3,181.2	1.4	72.1	0.6	36.4	0.8	35.8	10	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	123.9	16,247.1	33.7	1,853.3	28.1	1,638.1	5.6	215.0	6	
PETROLEUM REFINERIES.....	108.7	86,058.6	1.9	1,888.1	1.4	1,700.9	0.5	187.2	15	
FABRICATED RUBBER PRODUCTS, N.E.C.....	146.5	6,792.2	5.6	262.1	2.2	121.4	3.5	140.7	12	
SELECTED PRIMARY METAL INDUSTRIES.....	283.3	25,510.9	12.9	781.6	1.0	81.4	11.9	700.2	4	
MISCELLANEOUS INDUSTRIES ¹	36.6	1,411.0	11.9	471.7	11.2	443.0	0.7	28.7	1	
NEW ENGLAND, TOTAL.....	457.7	22,797.8	119.1	5,328.3	84.2	3,945.9	35.0	1,382.4	1	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	52.6	2,775.2	4.0	130.0	1.3	74.2	2.8	55.8	10	
COMMUNICATION EQUIPMENT.....	36.4	1,708.8	19.0	837.2	15.4	668.7	3.5	168.5	1	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	36.1	1,325.1	7.8	228.6	2.2	69.4	5.6	159.2	12	
AEROSPACE INDUSTRIES.....	63.3	3,557.9	35.1	2,007.3	26.3	1,614.0	8.8	393.3	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	51.8	2,063.4	34.1	1,268.8	30.6	1,139.9	3.6	128.9	1	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	42.3	2,385.4	5.2	232.2	2.7	132.2	2.5	100.0	7	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	18.7	957.8	0.8	41.7	0.4	16.3	0.3	25.4	5	
OTHER MACHINERY.....	42.7	1,762.9	3.8	134.3	0.7	27.4	3.1	106.9	11	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	39.2	1,854.7	3.0	145.3	1.5	90.7	1.5	56.4	15	
SELECTED FABRICATED METAL PRODUCTS.....	30.7	1,471.5	2.1	125.1	0.2	9.4	2.0	115.7	14	
TRUCK BODIES AND TRUCK TRAILERS.....	1.1	57.9	(A)	0.5	-	-	(A)	0.5	95	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	(E)	(I)	(B)	(G)	(B)	(G)	(B)	(F)	21	
PETROLEUM REFINERIES.....	(C)	(K)	(A)	(B)	-	-	(A)	(B)	93	
FABRICATED RUBBER PRODUCTS, N.E.C.....	14.2	691.2	0.4	21.5	(A)	0.9	0.4	20.6	54	
SELECTED PRIMARY METAL INDUSTRIES.....	24.2	1,894.6	1.0	59.3	0.2	10.7	0.9	48.6	6	
MISCELLANEOUS INDUSTRIES ¹	(F)	(J)	(F)	(J)	(F)	(J)	(A)	(C)	1	
MIDDLE ATLANTIC, TOTAL.....	777.7	53,621.9	129.2	6,123.2	80.6	4,188.9	48.6	1,934.3	2	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	65.4	4,028.8	4.2	200.7	2.0	97.4	2.2	103.3	13	
COMMUNICATION EQUIPMENT.....	79.8	3,600.5	43.4	1,926.7	30.4	1,374.0	13.0	552.7	2	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	80.9	4,029.5	10.2	331.0	2.3	106.9	7.9	224.2	21	
AEROSPACE INDUSTRIES.....	45.6	2,547.1	35.6	2,015.9	30.9	1,792.6	4.7	223.3	2	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	26.0	1,105.7	6.5	317.8	5.5	274.3	1.0	43.5	12	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	109.5	8,210.9	6.4	308.8	4.0	212.5	2.3	96.3	7	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	31.7	1,437.4	1.2	44.2	0.5	19.3	0.8	24.9	6	
OTHER MACHINERY.....	(J)	(N)	(G)	(K)	(E)	(J)	(F)	(K)	15	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	79.3	4,061.5	5.5	200.8	2.2	100.1	3.3	100.7	9	
SELECTED FABRICATED METAL PRODUCTS.....	63.0	3,250.3	6.1	293.6	1.3	71.0	4.9	222.6	15	
TRUCK BODIES AND TRUCK TRAILERS.....	7.2	472.1	(A)	(F)	-	-	(A)	(F)	5	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	19.4	2,191.1	1.5	56.6	0.2	13.7	1.3	42.8	28	
PETROLEUM REFINERIES.....	15.1	8,632.4	0.4	63.6	0.1	59.8	0.3	3.9	6	
FABRICATED RUBBER PRODUCTS, N.E.C.....	16.7	708.9	1.2	39.0	0.2	4.9	1.0	34.0	27	
SELECTED PRIMARY METAL INDUSTRIES.....	49.8	4,868.9	1.2	71.5	(A)	4.7	1.2	66.8	7	
MISCELLANEOUS INDUSTRIES ¹	(G)	(K)	(C)	(H)	(A)	(F)	(C)	(H)	1	

See footnotes at end of table.

TABLE 4. VALUE OF SHIPMENTS, TOTAL EMPLOYMENT AND GOVERNMENT SHIPMENTS BY GEOGRAPHIC AREA, INDUSTRY GROUP AND CUSTOMER CLASS FOR MA-175 PLANTS: 1977--CONTINUED

(EMPLOYMENT FIGURES IN THOUSANDS; VALUE FIGURES IN MILLIONS OF DOLLARS)

GEOGRAPHICAL AREA AND INDUSTRIAL GROUP	NUMBER OF EMPLOYEES	TOTAL VALUE OF SHIPMENTS	GOVERNMENT SHIPMENTS						STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
			TOTAL		PRIME SHIPMENTS		SUBSHIPMENTS			
			EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	SHIPMENTS	EMPLOYEES	SHIPMENTS		
EAST NORTH CENTRAL, TOTAL.....	1,181.0	84,282.3	90.1	5,373.3	50.5	3,380.7	39.6	1,992.6	1	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	141.3	10,356.1	6.4	303.8	4.6	206.3	1.8	97.6	5	
COMMUNICATION EQUIPMENT.....	61.6	3,725.2	6.6	287.1	5.7	249.9	0.9	37.2	8	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	104.5	3,945.9	1.0	51.0	0.3	30.5	0.7	20.5	49	
AEROSPACE INDUSTRIES.....	53.0	3,012.2	27.4	1,478.3	16.0	902.6	11.4	575.7	2	
SHIPBUILDING AND REPAIRING AND ORDNANCE.	18.2	1,227.1	7.5	646.0	6.9	584.2	0.6	61.9	1	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	63.6	2,483.9	5.8	205.6	3.2	127.4	2.6	78.2	7	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	17.8	844.3	1.0	36.3	0.7	27.9	0.3	8.3	9	
OTHER MACHINERY.....	218.0	14,068.8	7.6	482.3	2.3	233.7	5.3	248.6	7	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	154.7	8,062.2	5.1	199.3	1.6	74.4	3.5	124.9	2	
SELECTED FABRICATED METAL PRODUCTS.....	(K)	(N)	(G)	(L)	(E)	(J)	(G)	(L)	6	
TRUCK BODIES AND TRUCK TRAILERS.....	(H)	(M)	(C)	(I)	(C)	(I)	(B)	(G)	6	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	(H)	(N)	(G)	(M)	(G)	(M)	(B)	(H)	1	
PETROLEUM REFINERIES.....	16.8	14,685.1	0.1	138.6	(A)	76.1	(A)	62.5	1	
FABRICATED RUBBER PRODUCTS, N.E.C.....	58.6	2,788.3	2.6	147.9	1.5	95.2	1.1	54.7	5	
SELECTED PRIMARY METAL INDUSTRIES.....	93.7	7,482.8	5.0	285.6	0.5	28.1	4.5	257.5	1	
MISCELLANEOUS INDUSTRIES'.....	(B)	(H)	(A)	-	-	(A)	(A)	-	1	
WEST NORTH CENTRAL, TOTAL.....	319.6	22,669.7	66.9	3,845.0	51.0	3,219.6	15.9	625.4	1	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	52.8	3,527.0	7.0	324.4	5.3	256.6	1.7	67.8	1	
COMMUNICATION EQUIPMENT.....	29.8	1,320.6	6.9	297.7	4.0	182.2	2.9	115.5	3	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	(H)	(L)	(E)	(H)	(B)	(F)	(C)	(H)	11	
AEROSPACE INDUSTRIES.....	55.3	3,611.7	29.5	2,353.0	28.4	2,287.9	1.1	65.1	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.	19.6	678.3	14.8	488.9	12.2	406.3	2.6	82.6	1	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	9.5	468.7	0.6	24.0	0.5	17.8	0.2	6.2	8	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	3.1	94.6	1.1	32.1	-	-	1.1	32.1	79	
OTHER MACHINERY.....	36.3	1,498.9	2.2	62.1	0.2	8.5	2.0	53.6	36	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	24.1	1,472.1	0.8	36.7	0.2	13.4	0.6	23.3	13	
SELECTED FABRICATED METAL PRODUCTS.....	29.5	1,638.3	1.3	59.8	(A)	2.0	1.5	57.8	19	
TRUCK BODIES AND TRUCK TRAILERS.....	(G)	(L)	(B)	(G)	(A)	(A)	(B)	(G)	1	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	(F)	(M)	(A)	(F)	-	-	(A)	(F)	63	
PETROLEUM REFINERIES.....	7.3	4,997.4	(A)	61.8	(A)	38.4	(A)	23.4	29	
FABRICATED RUBBER PRODUCTS, N.E.C.....	10.2	468.8	0.3	8.4	(J)	(B)	(F)	8.4	86	
SELECTED PRIMARY METAL INDUSTRIES.....	(H)	(N)	(E)	(J)	(B)	(F)	(E)	(J)	5	
SOUTH ATLANTIC, TOTAL.....	418.5	26,319.9	105.8	5,258.4	84.9	4,452.1	20.9	806.3	2	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	25.4	1,558.4	1.4	63.6	0.9	44.7	0.5	18.9	5	
COMMUNICATION EQUIPMENT.....	60.0	2,792.8	24.0	943.8	15.0	603.1	9.0	340.7	2	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	23.9	872.0	6.5	296.8	4.6	238.0	1.9	58.8	12	
AEROSPACE INDUSTRIES.....	33.2	2,878.5	19.9	1,982.2	17.8	1,854.7	2.2	127.6	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.	42.1	1,351.1	28.4	897.8	28.1	887.4	0.3	10.4	2	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	12.7	730.6	1.8	49.7	0.4	24.2	1.4	25.5	25	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	10.6	393.2	0.9	28.9	0.7	18.0	0.3	10.9	24	
OTHER MACHINERY.....	24.8	1,318.1	1.7	50.7	0.3	11.1	1.5	39.6	20	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	55.7	2,866.0	2.3	80.5	0.7	26.5	1.6	54.0	16	
SELECTED FABRICATED METAL PRODUCTS.....	32.5	1,891.8	3.8	182.3	2.3	132.8	1.5	49.5	10	
TRUCK BODIES AND TRUCK TRAILERS.....	(G)	(L)	(A)	(B)	-	-	(A)	(B)	72	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	26.6	2,972.2	9.3	386.3	9.1	367.6	0.2	18.7	20	
PETROLEUM REFINERIES.....	(F)	(N)	(A)	(H)	(B)	(H)	(A)	(E)	3	
FABRICATED RUBBER PRODUCTS, N.E.C.....	(H)	(M)	(B)	(G)	(B)	(G)	(B)	(F)	31	
SELECTED PRIMARY METAL INDUSTRIES.....	25.6	3,196.0	0.4	48.0	(A)	4.0	0.4	44.0	6	
MISCELLANEOUS INDUSTRIES'.....	(H)	(M)	(F)	(K)	(F)	(K)	(A)	(F)	1	

See footnotes at end of table.

TABLE 4. VALUE OF SHIPMENTS, TOTAL EMPLOYMENT AND GOVERNMENT SHIPMENTS BY GEOGRAPHIC AREA, INDUSTRY GROUP AND CUSTOMER CLASS FOR MA-175 PLANTS: 1977--CONTINUED

(EMPLOYMENT FIGURES IN THOUSANDS; VALUE FIGURES IN MILLIONS OF DOLLARS)

GEOGRAPHICAL AREA AND INDUSTRIAL GROUP	NUMBER OF EMPLOYEES	TOTAL VALUE OF SHIPMENTS	GOVERNMENT SHIPMENTS						STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
			TOTAL		PRIME SHIPMENTS		SUBSHIPMENTS			
			EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	SHIPMENTS	EMPLOYEES	SHIPMENTS		
EAST SOUTH CENTRAL, TOTAL.....	216.2	16,828.1	51.0	1,956.2	44.4	1,661.5	6.6	294.6	2	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	10.5	1,211.2	(A)	21.5	(A)	19.3	(B)	2.2	2	
COMMUNICATION EQUIPMENT.....	11.1	476.2	1.0	109.7	1.0	83.4	(A)	26.3	1	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	(F)	(K)	(C)	(I)	(C)	(H)	(A)	(E)	1	
AEROSPACE INDUSTRIES.....	8.1	306.3	4.7	136.2	3.2	85.9	1.5	50.3	4	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	(I)	(N)	(I)	(M)	(I)	(M)	(B)	(H)	1	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	(F)	(K)	(A)	(E)	-	-	(A)	(E)	28	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	4.5	149.0	(A)	1.2	-	-	(A)	1.2	9	
OTHER MACHINERY.....	19.0	696.8	1.0	27.4	(A)	0.5	1.0	26.9	54	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	26.5	1,264.2	0.2	9.7	(A)	2.5	0.1	7.2	2	
SELECTED FABRICATED METAL PRODUCTS.....	29.0	1,519.1	1.1	53.2	0.7	35.2	0.4	18.0	24	
TRUCK BODIES AND TRUCK TRAILERS.....	4.8	273.6	0.2	11.5	-	-	0.2	11.5	59	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	(I)	(N)	(H)	(M)	(H)	(M)	(F)	(J)	1	
PETROLEUM REFINERIES.....	4.2	3,817.8	(A)	89.8	(A)	89.2	(A)	0.5	37	
FABRICATED RUBBER PRODUCTS, N.E.C.....	7.5	339.9	0.2	5.3	-	-	0.2	5.3	26	
SELECTED PRIMARY METAL INDUSTRIES.....	23.2	3,027.1	0.5	46.0	(A)	5.1	0.5	40.9	21	
WEST SOUTH CENTRAL, TOTAL.....	351.9	54,338.1	61.3	3,342.0	46.2	2,674.7	15.1	667.3	4	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	24.3	1,355.0	4.8	218.1	4.7	212.9	0.1	5.2	7	
COMMUNICATION EQUIPMENT.....	43.3	2,594.1	16.0	644.2	11.2	452.4	4.8	191.8	8	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	16.3	644.2	1.2	48.2	(A)	1.6	1.2	46.6	2	
AEROSPACE INDUSTRIES.....	(I)	(N)	(I)	(N)	(H)	(N)	(F)	(K)	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	26.8	1,027.8	5.4	166.9	5.3	156.5	0.2	10.4	1	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	8.8	536.3	0.7	21.7	0.3	8.8	0.4	12.9	23	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	(G)	(M)	(A)	(F)	(A)	(E)	(A)	(C)	1	
OTHER MACHINERY.....	(I)	(N)	(F)	(J)	(A)	(C)	(F)	(J)	37	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	(H)	(N)	(C)	(J)	(B)	(H)	(C)	(I)	30	
SELECTED FABRICATED METAL PRODUCTS.....	50.6	2,224.1	0.8	35.8	0.1	7.1	0.7	28.7	28	
TRUCK BODIES AND TRUCK TRAILERS.....	(F)	(K)	(B)	(F)	(A)	(E)	(B)	(F)	1	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	20.8	4,702.6	1.0	38.3	0.1	8.1	0.9	30.2	60	
PETROLEUM REFINERIES.....	43.7	35,001.6	0.6	650.8	0.5	598.2	(A)	52.6	21	
FABRICATED RUBBER PRODUCTS, N.E.C.....	7.1	364.3	0.2	8.5	0.2	7.9	(A)	0.6	5	
SELECTED PRIMARY METAL INDUSTRIES.....	11.3	741.1	(A)	6.7	(A)	4.5	(A)	2.2	6	
MOUNTAIN, TOTAL.....	140.7	10,735.8	30.1	1,640.7	18.2	1,095.6	11.9	545.1	2	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	20.3	1,595.7	1.2	114.9	1.1	108.5	(A)	6.5	4	
COMMUNICATION EQUIPMENT.....	13.0	661.9	6.0	223.2	3.9	138.7	2.2	84.5	2	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	16.1	476.7	1.9	65.3	0.2	8.3	1.6	57.0	8	
AEROSPACE INDUSTRIES.....	(H)	(N)	(H)	(M)	(H)	(M)	(F)	(K)	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	1.2	46.8	0.2	10.8	(A)	4.5	0.1	6.4	1	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	(H)	(M)	(F)	(K)	(E)	(J)	(F)	(J)	3	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	(C)	(H)	(A)	(B)	-	-	(A)	(B)	50	
OTHER MACHINERY.....	8.5	439.3	0.5	24.0	0.2	16.6	0.3	7.4	58	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELECTRICAL EQUIPMENT.....	(E)	(I)	(A)	(B)	-	-	(A)	(B)	3	
SELECTED FABRICATED METAL PRODUCTS.....	20.3	880.4	0.6	31.6	-	-	0.6	31.6	48	
TRUCK BODIES AND TRUCK TRAILERS.....	1.2	59.7	-	-	-	-	-	-	1	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	4.9	526.9	0.8	14.3	0.8	9.7	0.1	4.6	71	
PETROLEUM REFINERIES.....	4.6	2,933.9	0.1	74.7	0.1	70.8	(A)	4.0	40	
FABRICATED RUBBER PRODUCTS, N.E.C.....	7.1	317.8	(A)	1.8	(A)	1.8	-	-	1	
SELECTED PRIMARY METAL INDUSTRIES.....	5.9	517.2	(B)	(I)	(A)	(B)	(B)	(I)	1	
MISCELLANEOUS INDUSTRIES.....	(A)	(F)	(A)	(F)	(A)	(F)	-	-	1	

See footnotes at end of table.

TABLE 4. VALUE OF SHIPMENTS, TOTAL EMPLOYMENT AND GOVERNMENT SHIPMENTS BY GEOGRAPHIC AREA, INDUSTRY GROUP
AND CUSTOMER CLASS FOR MA-175 PLANTS: 1977--CONTINUED

(EMPLOYMENT FIGURES IN THOUSANDS; VALUE FIGURES IN MILLIONS OF DOLLARS)

GEOGRAPHICAL AREA AND INDUSTRIAL GROUP	NUMBER OF EMPLOYEES	TOTAL VALUE OF SHIPMENTS	GOVERNMENT SHIPMENTS						STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
			TOTAL		PRIME SHIPMENTS		SUBSHIPMENTS			
			EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	SHIPMENTS	EMPLOYEES	SHIPMENTS		
PACIFIC, TOTAL.....	748.9	53,790.1	273.8	15,390.9	193.1	11,717.9	80.7	3,672.9	2	
TURBINES, CONSTRUCTION MACHINERY, MACHINE TOOLS AND COMPUTERS, AND RELATED PRODUCTS.....	67.8	3,835.7	5.1	272.7	3.0	169.9	2.1	102.8	11	
COMMUNICATION EQUIPMENT.....	75.5	3,477.4	49.3	2,231.5	36.3	1,658.0	13.0	573.5	1	
ELECTRONIC COMPONENTS AND ACCESSORIES.....	61.6	2,534.5	10.1	382.7	1.8	70.7	8.2	312.0	6	
AEROSPACE INDUSTRIES.....	216.5	15,594.0	145.9	8,742.3	120.4	7,485.1	25.5	1,257.2	1	
SHIPBUILDING AND REPAIRING AND ORDNANCE.....	35.8	1,901.9	21.3	1,214.3	18.7	1,076.2	2.6	138.1	9	
SCIENTIFIC INSTRUMENTS, MECHANICAL MEASURING DEVICES, OPTICAL INSTRUMENTS AND PHOTOGRAPHIC EQUIPMENT.....	52.4	2,219.6	9.0	373.7	4.4	191.0	4.6	182.7	21	
SURGICAL AND DENTAL EQUIPMENT, OPHTHALMIC GOODS AND WATCHES AND WATCHCASES.....	(H)	(M)	(B)	(H)	(B)	(J)	(A)	(F)	22	
OTHER MACHINERY.....	60.8	2,061.3	7.9	313.1	0.6	32.0	7.2	281.1	17	
ELECTRIC TRANSMISSION AND INDUSTRIAL APPARATUS; AND MISCELLANEOUS ELEC EQUIPMENT.....	29.9	1,797.5	3.2	130.0	1.2	38.3	2.0	91.7	22	
SELECTED FABRICATED METAL PRODUCTS.....	66.0	3,356.3	13.1	578.8	1.7	11.4	11.4	507.4	39	
TRUCK BODIES AND TRUCK TRAILERS.....	6.9	374.6	(A)	2.1	-	-	(A)	2.1	70	
SELECTED CHEMICALS AND ALLIED PRODUCTS.....	(F)	(M)	(C)	(H)	(B)	(F)	(C)	(H)	62	
PETROLEUM REFINERIES.....	(H)	(N)	(C)	(M)	(C)	(M)	(A)	(I)	31	
FABRICATED RUBBER PRODUCTS, N.E.C.....	8.7	274.4	0.5	16.6	0.1	3.2	0.4	13.4	30	
SELECTED PRIMARY METAL INDUSTRIES.....	31.9	2,431.5	3.2	173.7	0.2	21.5	3.1	152.1	15	
MISCELLANEOUS INDUSTRIES ¹	(G)	(K)	(F)	(K)	(F)	(K)	(B)	(F)	1	

Note: See table 2 for SIC composition of industry groups. See note to table 3 for ranges represented by letter symbols.

- Represents zero. N.e.c. Not elsewhere classified.

¹Represents nonmanufacturing facilities of the manufacturing companies canvassed, in addition to selected nonprofit research corporations working on defense contracts.

TABLE 5. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS, AND
(EMPLOYMENT FIGURES IN THOUSANDS)

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	NUMBER OF EMPLOYEES	VALUE ADDED BY MANUFACTURE	TOTAL VALUE OF SHIPMENTS	TOTAL		PRIME SHIPMENTS	
				EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS
UNITED STATES, TOTAL.....	4,612.3	153,805.5	345,384.0	927.4	48,258.1	653.0	36,337.1
NEW ENGLAND.....	457.7	12,757.6	22,797.8	119.1	5,328.3	84.2	3,945.9
MAINE.....	11.9	268.7	484.5	2.8	123.9	2.4	112.0
LEWISTON-AUBURN.....	0.9	19.8	34.1	(A)	0.1	-	-
PORTLAND.....	3.1	64.0	109.2	(C)	(H)	(B)	(H)
NEW HAMPSHIRE.....	27.4	746.5	1,171.9	5.6	187.1	3.1	106.4
MANCHESTER.....	4.0	73.4	119.3	1.1	32.1	0.2	7.0
NASHUA.....	5.6	150.9	235.3	(F)	(K)	(F)	(J)
VERMONT.....	15.3	400.8	842.9	3.6	178.7	2.0	115.0
MASSACHUSETTS.....	190.2	5,806.9	9,819.5	40.9	1,849.0	25.8	1,269.5
BOSTON.....	93.7	2,934.1	4,807.1	25.8	1,136.5	14.9	752.0
BROCKTON.....	3.0	68.4	125.2	0.2	5.1	-	-
FALL RIVER, MASS.-R.I.....	2.9	75.2	133.5	(E)	(J)	(E)	(J)
FITCHBURG-LEOMINISTER.....	3.4	83.1	144.2	0.5	24.3	(B)	(H)
LAURENCE-HAVERHILL, MASS.-N.H.....	17.1	565.3	923.7	3.5	185.2	(F)	(K)
LOWELL, MASS.-N.H.....	7.7	196.5	345.1	2.6	135.8	1.7	102.6
NEW BEDFORD.....	4.4	113.3	221.0	0.9	40.2	0.8	39.3
PITTSFIELD.....	(G)	(K)	(F)	(K)	(F)	(K)	(K)
SPRINGFIELD, CHICOPPEE-HOLYOKE, MASS.-CONN.....	14.7	358.0	605.4	1.3	58.3	0.7	30.7
WORCESTER.....	6.8	186.1	395.9	0.8	67.0	(A)	0.2
RHODE ISLAND.....	24.2	475.4	1,060.2	2.8	99.5	1.8	73.9
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS.....	28.9	619.9	1,493.3	1.2	42.9	0.3	15.4
CONNECTICUT.....	188.7	5,059.3	9,418.8	63.4	2,890.1	49.1	2,269.0
BRIDGEPORT.....	29.9	894.4	1,553.0	5.8	334.3	4.7	262.2
BRISTOL.....	4.4	118.5	193.7	0.2	6.4	(A)	1.4
DANBURY.....	7.4	229.6	404.5	1.1	69.6	0.9	63.5
HARTFORD.....	49.8	1,580.6	2,713.8	17.5	928.8	12.2	735.5
MERIDEN.....	1.0	21.0	41.2	(A)	4.6	(A)	3.7
NEW BRITAIN.....	13.0	322.8	610.6	1.8	91.6	1.3	74.3
NEW HAVEN-WEST HAVEN.....	12.5	100.3	677.8	2.2	138.7	1.8	124.4
NEW LONDON-GROTON-NORWICH, CONN.-R.I.....	31.3	689.4	1,109.5	(I)	(M)	(I)	(M)
NORWALK.....	5.7	213.7	308.5	1.6	82.7	1.3	66.5
STAMFORD.....	8.0	204.8	351.6	1.2	60.0	0.9	48.3
WATERBURY.....	11.2	306.0	719.6	0.7	43.4	(A)	2.1
MIDDLE ATLANTIC.....	777.7	26,706.0	53,621.9	129.2	6,123.2	80.6	4,188.9
NEW YORK.....	337.9	13,034.0	22,533.9	68.8	3,368.1	47.3	2,524.7
ALBANY-SCHENECTADY-TROY.....	(G)	(L)	(M)	(E)	(H)	(C)	(I)
BINGHAMTON, N.Y.-PA.....	26.4	746.6	1,731.4	8.1	368.0	5.3	234.0
BUFFALO.....	23.3	825.8	1,897.5	1.6	80.8	0.5	32.1
ELMIRA.....	3.4	100.1	136.9	0.3	11.7	0.1	5.2
NASSAU-SUFFOLK.....	60.4	1,985.8	3,092.2	39.4	2,105.3	31.8	1,806.4
NEW YORK, N.Y.-N.J.....	59.6	1,472.2	2,890.2	9.7	458.2	4.6	221.6
POUGHKEEPSIE.....	(H)	(M)	(N)	(A)	(G)	(A)	(G)
ROCHESTER.....	85.8	5,220.1	6,917.9	(F)	(K)	(E)	(J)
SYRACUSE.....	18.2	476.5	1,332.2	(F)	(K)	(E)	(J)
UTICA-ROME.....	12.4	385.0	699.6	3.3	129.7	(E)	(J)
NEW JERSEY.....	164.3	4,856.8	11,658.9	28.4	1,240.4	14.2	707.7
ATLANTIC CITY.....	(B)	(F)	(G)	(A)	(G)	-	-
JERSEY CITY.....	19.2	695.3	1,835.2	1.2	91.6	0.9	69.9
LONG BRANCH-ASBURY PARK.....	5.3	160.7	253.3	1.0	37.0	0.7	23.5
NEW BRUNSWICK-PERTH AMBOY, SAYREVILLE.....	18.6	782.8	2,344.7	1.6	51.9	0.6	24.6
NEWARK.....	55.9	1,484.9	2,838.8	9.0	325.9	3.4	157.0
PATERSON-CLIFTON-PASSAIC.....	9.7	228.3	360.0	3.9	130.1	2.4	77.9
TRENTON.....	7.7	213.1	438.3	1.4	79.9	0.8	46.5
VINELAND-MILLVILLE-BRIDGETON.....	1.9	41.4	71.2	(A)	0.7	-	-
PENNSYLVANIA.....	275.5	8,815.2	19,429.1	31.9	1,514.7	19.0	956.5
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J.....	15.2	674.0	1,529.9	0.6	54.7	0.3	32.2
ALTOONA.....	2.8	100.6	154.9	(A)	3.4	(A)	2.9
ERIE.....	14.6	418.3	756.2	1.8	70.4	0.4	14.0
HARRISBURG.....	8.6	219.5	449.9	0.6	26.8	0.2	7.9
JOHNSTOWN.....	2.0	47.7	96.0	-	-	-	-
LANCASTER.....	12.8	349.3	705.8	1.7	48.4	0.7	20.7
NORTHEAST PENNSYLVANIA.....	9.2	240.1	465.1	1.8	81.6	1.4	66.2
PHILADELPHIA, PA.-N.J.....	123.9	3,745.4	10,264.7	21.7	1,020.0	15.8	788.0
PITTSBURGH.....	42.1	1,552.4	2,729.2	2.2	135.0	0.8	43.8
READING.....	7.9	256.3	503.6	0.2	9.6	-	-
WILLIAMSPORT.....	3.2	104.0	216.7	0.3	12.6	(A)	0.6
YORK.....	11.9	407.3	821.5	3.3	198.7	2.6	160.5
EAST NORTH CENTRAL.....	1,181.0	38,108.7	84,282.3	90.1	5,373.3	50.5	3,380.7
OHIO.....	306.7	9,972.4	21,133.2	34.6	2,108.2	20.9	1,393.5
AKRON.....	24.0	528.3	1,222.7	4.2	207.9	2.3	92.5
CANTON.....	17.3	589.2	1,571.7	0.8	54.9	0.3	21.1
CINCINNATI, OHIO-KY.-IND.....	46.8	1,343.7	2,170.1	8.6	483.6	7.1	397.2
CLEVELAND.....	69.0	2,329.1	4,202.0	7.0	303.1	2.4	93.8
COLUMBUS.....	22.1	691.1	1,202.9	1.3	59.3	(C)	(I)
DAYTON.....	22.3	605.2	1,083.8	3.1	120.9	2.3	96.1
HAMILTON-MIDDLETON.....	3.1	97.9	192.9	0.5	21.5	0.2	9.1
LIMA.....	12.9	430.2	1,705.6	0.9	60.7	0.3	30.0
LORAIN-ELYRIA.....	5.8	194.9	289.9	0.2	9.5	(A)	2.5
MANSFIELD.....	2.0	61.8	104.5	(A)	2.3	(A)	1.1
SPRINGFIELD.....	4.7	119.2	225.7	0.6	32.2	0.2	15.7
TOLEDO, OHIO-MICH.....	13.4	839.8	2,755.4	0.7	45.7	0.5	31.5
YOUNGSTOWN-WARREN.....	8.9	291.0	682.7	0.8	51.3	(A)	0.5
INDIANA.....	183.4	5,610.7	13,248.9	19.4	1,022.8	11.9	636.0
ANDERSON.....	15.4	643.6	1,071.6	(C)	(I)	(A)	(E)

See footnotes at end of table.

GOVERNMENT SHIPMENTS, BY GEOGRAPHIC AREA AND AGENCY FOR MA-175 PLANTS: 1977

VALUE FIGURES IN MILLIONS OF DOLLARS

GOVERNMENT SHIPMENTS										STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
SUBSHIPMENTS		TO DOD		TO NASA		TO ERDA		TO OTHER AGENCIES			
EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS		
274.4	11,921.0	687.4	36,852.0	42.6	2,338.6	46.3	2,418.8	151.1	6,648.5	1	
35.0	1,382.4	98.2	4,567.7	1.4	60.6	1.4	50.1	18.1	649.7	1	
0.3	11.8	2.6	119.0	-	-	-	-	0.1	4.9	1	
(A)	0.1	-	(H)	-	-	-	-	(A)	0.1	33	
(G)	(6)	(C)	(H)	-	-	-	-	(A)	(E)	1	
2.5	80.8	4.3	146.8	(A)	(E)	(A)	0.4	(E)	(F)	4	
0.8	25.2	0.8	25.0	(A)	0.7	(A)	0.2	(A)	6.4	3	
(C)	(H)	(F)	(K)	(A)	(B)	(A)	(B)	(A)	(F)	1	
1.6	63.6	3.4	170.8	(A)	(F)	-	-	(A)	(F)	2	
15.2	579.5	29.6	1,460.1	0.3	13.9	0.3	12.0	10.7	363.0	2	
10.9	384.5	16.8	827.7	0.3	12.9	0.3	9.8	8.4	286.1	3	
0.2	5.1	(A)	0.4	-	-	-	-	0.2	4.8	62	
(A)	(F)	(E)	(J)	-	-	-	-	(A)	(F)	1	
(B)	(H)	(B)	(H)	-	-	-	-	(B)	(F)	9	
(B)	(H)	(F)	(K)	(A)	(C)	-	-	(B)	(G)	4	
0.8	33.1	2.0	121.4	-	-	-	-	0.5	14.4	1	
(A)	0.9	0.8	39.4	-	-	-	-	(A)	0.9	2	
(B)	(H)	(F)	(K)	(A)	(A)	(A)	(B)	(B)	(G)	1	
0.6	27.6	1.0	46.3	(A)	(A)	-	-	0.3	11.9	17	
(C)	(H)	(C)	(H)	(A)	(B)	(A)	(C)	(A)	(E)	1	
1.0	25.6	1.9	80.6	(A)	(B)	(A)	-	0.8	18.7	8	
1.0	27.5	0.4	22.4	(A)	(B)	(A)	1.4	0.8	18.9	18	
14.4	621.1	56.2	2,590.4	0.9	42.4	1.0	37.7	5.3	219.6	1	
1.1	72.1	5.1	280.6	0.1	6.6	-	-	0.6	47.2	7	
0.1	5.0	(A)	0.8	-	-	-	-	0.1	5.6	1	
0.2	6.1	0.9	59.0	(A)	(A)	-	-	0.2	10.5	2	
5.4	193.4	14.8	833.8	0.7	29.5	(A)	2.7	2.0	62.9	3	
(A)	0.9	(A)	3.7	-	-	-	-	(A)	0.9	26	
0.6	17.3	(E)	(J)	(A)	(C)	(A)	(A)	0.5	16.6	7	
0.3	14.2	2.0	130.8	(A)	1.1	(A)	0.2	0.1	6.6	2	
(E)	(K)	(I)	(M)	(A)	(B)	(C)	(I)	(B)	(G)	2	
0.3	16.3	1.3	61.7	(A)	(F)	(A)	(C)	0.3	18.3	8	
0.3	11.7	(C)	(I)	(A)	(C)	-	-	0.3	12.5	3	
0.7	41.3	0.2	22.2	(A)	(A)	(A)	0.1	0.5	21.1	19	
48.6	1,934.3	98.8	4,872.4	4.8	220.3	3.1	137.6	22.5	892.9	2	
21.5	843.4	57.6	2,935.9	1.4	66.2	0.6	30.8	9.2	335.2	2	
(B)	(H)	(C)	(I)	(A)	(A)	(A)	(E)	(B)	(H)	8	
2.8	134.0	7.2	351.4	0.6	26.4	(A)	1.1	0.3	9.1	1	
1.2	48.6	1.2	51.5	0.2	5.5	-	-	0.3	23.8	10	
0.2	6.5	0.1	5.0	(A)	(A)	-	-	0.2	6.7	1	
7.6	298.9	34.6	1,930.0	0.6	29.7	0.2	9.4	4.1	136.2	2	
5.1	236.7	6.7	336.8	0.2	10.3	0.4	25.6	2.4	85.7	6	
(A)	(F)	(A)	(E)	(A)	(C)	-	-	(A)	(G)	1	
(C)	(I)	(E)	(K)	(A)	(B)	(A)	(B)	(C)	(I)	8	
(F)	(J)	(F)	(K)	(A)	(A)	(A)	(B)	(B)	(H)	10	
(E)	(J)	(F)	(K)	(A)	(C)	(A)	(B)	(B)	(H)	1	
14.1	532.6	20.4	922.3	1.1	51.4	0.4	13.1	6.6	253.5	6	
(A)	(G)	-	-	-	-	-	-	(A)	(G)	45	
0.3	21.7	1.1	86.3	(A)	(A)	(A)	(A)	0.1	5.2	4	
0.3	13.6	(C)	(I)	(A)	(E)	-	-	(A)	1.6	1	
1.1	27.3	0.9	19.9	(A)	(A)	(A)	(B)	0.8	31.8	41	
5.6	168.8	5.7	225.1	(A)	3.2	(B)	3.2	3.0	96.4	9	
1.6	52.1	(F)	(K)	(B)	(G)	(A)	(A)	2.6	3	3	
0.5	33.4	0.4	24.2	0.4	24.8	-	-	0.5	30.9	9	
(A)	0.7	-	-	-	-	-	-	(A)	0.7	1	
12.9	558.2	20.8	1,014.2	2.3	102.7	2.1	93.7	6.7	304.1	5	
0.5	22.6	0.5	32.2	-	(A)	-	-	0.1	22.5	18	
(A)	0.6	(A)	2.9	-	-	-	-	(A)	0.6	4	
1.4	56.4	1.4	48.6	(A)	(A)	-	-	0.4	21.8	25	
0.5	18.9	0.3	17.6	(A)	(B)	(A)	(A)	0.3	9.0	2	
-	-	-	-	-	-	-	-	-	-	1	
0.9	27.7	(E)	(I)	(A)	(B)	(A)	(E)	0.5	15.3	7	
0.5	15.4	1.8	78.0	(A)	(A)	(A)	(A)	0.5	3.0	20	
6.0	231.9	14.5	714.3	2.4	108.0	0.3	13.0	4.6	184.7	4	
1.5	91.2	0.9	59.2	-	-	0.6	40.7	0.7	35.1	19	
0.2	9.6	(A)	1.3	-	-	-	-	0.2	8.4	42	
0.3	11.9	0.3	11.5	(A)	(A)	-	-	(A)	0.9	3	
0.8	38.2	2.5	162.3	-	-	0.2	8.4	0.6	28.0	1	
39.6	1,992.6	60.6	3,538.2	0.8	46.0	5.8	655.5	22.9	1,133.7	1	
13.8	714.7	23.2	1,191.8	0.3	18.0	5.3	628.2	5.8	270.2	1	
1.9	115.4	3.7	189.7	(A)	0.5	4.7	0.3	13.2	3	3	
0.5	33.9	0.6	44.1	(A)	(A)	(A)	(A)	0.2	10.8	5	
1.5	86.4	(G)	(L)	(B)	(H)	(C)	(J)	(C)	(H)	1	
4.6	209.3	5.1	229.5	(A)	1.1	(A)	2.8	1.8	69.7	7	
(B)	(H)	(E)	(J)	-	-	-	-	(B)	(G)	6	
0.8	24.8	1.1	59.2	(A)	0.9	1.6	45.9	0.4	14.9	21	
0.5	12.5	(B)	(G)	(A)	(C)	-	-	(A)	11.5	3	
0.5	30.7	(C)	(J)	-	-	-	-	(A)	4.0	1	
0.2	7.1	0.2	7.4	(A)	(B)	-	-	(A)	1.7	41	
(A)	1.2	(A)	1.6	-	-	-	-	(A)	0.7	1	
0.4	16.5	0.3	19.6	-	-	-	-	0.3	12.6	26	
0.2	14.1	0.6	40.2	(A)	0.3	(A)	0.9	(A)	4.3	2	
0.8	50.8	0.2	12.9	-	-	-	-	0.7	38.5	7	
7.5	386.8	14.0	751.2	0.2	9.3	(A)	1.4	5.2	261.0	2	
(C)	(I)	(C)	(I)	(A)	(A)	-	-	(A)	(F)	23	

TABLE 5. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS, AND
(EMPLOYMENT FIGURES IN THOUSANDS:

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	NUMBER OF EMPLOYEES	VALUE ADDED BY MANUFACTURE	TOTAL VALUE OF SHIPMENTS	TOTAL		PRIME SHIPMENTS	
				EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS
EAST NORTH CENTRAL--CONTINUED							
INDIANA--CONTINUED							
EVANSVILLE, IND.-KY.	8.1	253.6	1,037.7	0.2	12.3	(A)	0.8
FORT WAYNE	19.9	540.0	1,176.7	4.9	160.4	(F)	(K)
GARY-HAMMOND-EAST CHICAGO	13.1	416.2	2,218.7	2.0	147.5	(B)	(I)
INDIANAPOLIS	42.1	1,211.7	2,549.7	(F)	(J)	(F)	(J)
LAFAYETTE-WEST LAFAYETTE	4.2	109.3	286.5	0.2	14.2	(A)	(C)
MUNCIE	3.7	115.6	218.0	0.5	26.4	0.4	21.7
SOUTH BEND	8.9	267.6	490.7	2.1	109.8	0.5	27.5
TERRE HAUTE	2.0	82.8	313.8	(A)	(B)	-	-
ILLINOIS	394.6	13,062.8	30,582.6	11.0	612.0	4.8	295.6
BLOOMINGTON-NORMAL	1.4	34.3	82.9	(A)	(A)	-	-
CHAMPAIGN-URBANA-RANTOUL	0.3	10.6	19.5	(A)	0.9	-	-
CHICAGO	283.7	9,371.1	19,153.7	6.7	368.8	3.1	188.8
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL.	12.9	374.9	1,193.0	0.6	48.1	0.3	14.0
DECATUR	7.5	336.7	802.0	(A)	6.4	(A)	5.9
PEORIA	(6)	(L)	(M)	(B)	(H)	(A)	(H)
ROCKFORD	22.8	630.2	1,080.6	1.9	104.5	0.5	24.7
SPRINGFIELD	1.2	34.5	48.6	(B)	3.1	(A)	1.6
MICHIGAN	158.1	5,219.8	11,018.0	17.0	1,240.7	9.2	842.7
ANN ARBOR	13.9	532.8	966.5	0.1	5.4	(A)	2.8
BATTLE CREEK	5.2	195.5	388.4	0.1	8.9	(A)	2.9
BAY CITY	1.5	46.3	83.2	(A)	(F)	(A)	(C)
DETROIT	66.6	2,494.2	5,516.7	9.1	786.4	5.4	567.2
FLINT	2.5	43.6	107.6	(A)	0.8	-	-
GRAND RAPIDS	11.2	282.3	551.8	2.9	113.3	1.7	63.8
JACKSON	8.6	132.4	290.8	0.6	45.2	0.4	36.8
KALAMAZOO-PORTAGE	9.0	198.1	403.1	0.6	46.2	(B)	(H)
LANSING-EAST LANSING	5.8	169.3	362.4	(A)	3.8	-	-
MUSKEGON-MUSKEGON HEIGHTS	9.2	308.6	560.0	1.7	161.1	1.0	126.2
SAGINAW	1.5	39.2	58.9	(A)	0.1	-	-
WISCONSIN	138.2	4,243.0	8,299.6	8.1	389.6	3.7	212.9
APPLETON-OSHKOSH	5.3	153.0	362.1	0.4	29.6	(B)	(H)
GREEN BAY	1.1	40.4	64.9	(A)	(C)	-	-
KENOSHA	1.4	56.8	138.6	(A)	0.3	-	-
LA CROSSE	0.4	6.8	19.0	(B)	(G)	(A)	(E)
MADISON	1.6	43.1	79.6	-	-	-	-
MILWAUKEE	80.7	2,490.9	4,412.1	5.5	224.0	2.1	94.6
RACINE	7.8	232.8	365.6	0.2	7.5	-	-
WEST NORTH CENTRAL							
MINNESOTA	319.6	10,054.4	22,669.7	66.9	3,845.0	51.0	3,219.6
DULUTH-SUPERIOR, MINN-WISC.	80.2	2,677.5	5,889.3	14.2	534.7	7.7	312.5
MINNEAPOLIS-ST. PAUL, MINN.-WISC.	0.8	39.4	394.4	(A)	3.0	(A)	1.2
ROCHESTER	62.0	2,237.9	4,783.1	13.9	511.0	7.6	298.1
ST. CLOUD	5.8	121.9	288.6	(A)	(B)	-	-
5.0	13.3	16.7	(A)	(A)	-	-	-
IOWA	64.4	1,858.9	4,197.9	7.3	298.9	4.9	186.8
CEDAR RAPIDS	14.3	373.0	692.7	3.6	143.0	2.5	101.8
DES MOINES	1.5	31.3	69.7	0.2	6.0	(A)	1.2
DUBUQUE	7.6	352.7	740.5	(A)	6.4	(A)	6.4
SIOUX CITY, IOWA-NEBR.	3.6	108.0	298.6	(A)	4.6	-	-
WATERLOO-CEDAR FALLS	2.3	51.5	76.4	0.7	30.6	0.5	25.7
MISSOURI	94.2	3,014.7	6,471.0	37.2	2,655.1	33.3	2,471.5
COLUMBIA	1.2	50.2	74.1	(A)	-	-	-
KANSAS CITY, MO.-KANSAS	23.3	695.6	1,899.9	8.0	298.5	7.4	274.9
ST. LOUIS, MO.-ILL.	70.4	2,541.4	7,448.9	28.7	2,392.4	25.8	2,221.6
SPRINGFIELD	4.4	116.2	178.3	(A)	-	-	-
NORTH DAKOTA	2.6	197.8	567.8	0.3	29.1	(A)	12.8
FARGO-MOORHEAD, N.D.-MINN.	0.3	4.2	28.9	(A)	0.4	-	-
SOUTH DAKOTA	3.1	63.7	115.6	(A)	1.0	-	-
NEBRASKA	21.6	677.0	1,229.8	1.6	46.3	(A)	1.9
LINCOLN	5.6	172.3	290.2	0.9	27.1	-	-
OMAHA	8.2	301.2	624.5	(A)	2.1	(A)	(A)
KANSAS	53.5	1,564.8	4,198.3	6.3	279.8	5.1	234.1
TOPEKA	1.3	30.4	54.1	0.1	5.1	-	-
WICHITA	32.3	1,024.3	2,372.8	(F)	(K)	(F)	(K)
SOUTH ATLANTIC							
DELAWARE	418.5	12,768.0	26,319.9	105.7	5,258.4	84.9	4,452.1
WILMINGTON, DEL.-N.J.-MD.	9.6	576.6	1,519.6	0.4	45.0	0.2	34.2
7.9	401.0	1,262.1	0.5	50.6	0.2	38.9	-
MARYLAND	57.5	1,750.8	3,021.5	24.0	956.1	17.0	697.9
BALTIMORE	40.7	1,219.3	2,205.4	17.9	697.8	13.3	517.7
DISTRICT OF COLUMBIA	0.9	28.8	43.5	(A)	1.3	-	-
WASHINGTON, D.C.-MD.-VA.	17.4	576.2	758.1	10.0	474.8	7.3	379.7
VIRGINIA	76.1	1,934.5	3,610.3	36.1	1,301.7	33.8	1,222.2
LYNCHBURG	7.2	260.2	526.7	(F)	(K)	(E)	(K)
NEWPORT NEWS-HAMPTON	25.5	467.4	795.2	(H)	(M)	(H)	(M)
NORFOLK-VIRGINIA BEACH-PORTSMOUTH	5.8	107.3	202.0	1.4	42.7	1.4	40.7
PETERSBURG-COLONIAL HEIGHTS-HOPEWELL	1.1	71.0	196.7	-	-	-	-
RICHMOND	4.8	142.7	402.1	0.5	10.5	(A)	(A)
ROANOKE	6.4	192.3	294.3	1.2	61.5	(E)	(J)
WEST VIRGINIA	15.4	472.7	1,624.5	1.0	64.6	0.4	18.5
CHARLESTON	2.5	91.0	230.9	-	-	-	-

See footnotes at end of table.

GOVERNMENT SHIPMENTS, BY GEOGRAPHIC AREA AND AGENCY FOR MA-175 PLANTS: 1977--CONTINUED

VALUE FIGURES IN MILLIONS OF DOLLARS)

GOVERNMENT SHIPMENTS										STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
SUBSHIPMENTS		TO DOD		TO NASA		TO ERDA		TO OTHER AGENCIES			
EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS		
0.2 (E) (I) (K) (C) (I) (F) (L)	11.6 (1) (K) (B) (A) (G) (M)	(A) (F) (B) (I) (A) (L)	5.5 (K) (I) -	(B) -	(G) -	(A) -	(A) -	(B) -	(G) (H) (E) (K) (I) (B) 0.2	15 11 14 2 1 1 1	
0.2 (A) 1.6 (A)	13.3 4.7 82.3 (B)	(A) (A) 2.1	0.8 3.3 108.3 -	- -	- (A)	(F) -	(A) -	(A) -	(G) (H) (E) (K) (I) (B) 1.3	3 3 1 1 1 1 1	
6.2 (A) (A) (A) 3.6 0.3 (A) (A) (A) 1.5 (A)	316.4 0.9 180.0 30.1 0.6 (G) (A) 79.8 1.6	5.7 -	302.2 -	0.3 -	18.3 -	0.3 -	18.5 -	4.8 -	273.1 (A) (A) 0.9 3.8 0.2 (A) (G) (A) 12.0 (A)	2 1 43 5 1 2 1 1 2	
7.7 (A) (A) 0.1 (A) 3.8 (A) 0.8 1.2 0.2 (C) (I) (A) 0.7 (A)	397.9 2.6 6.0 (F) 219.2 49.4 8.5 37.0 3.8 34.9 0.1	12.5 (A) (A) 0.1 (A) 6.5 (F) -	1,038.9 0.3 8.0 -	(A) -	(A) -	(A) -	(A) -	4.4 -	201.6 -	4	
4.3 (A) (G) (A) (C) (A) (B) (G)	176.7 -	5.2 (B) (I)	254.1 -	(A) -	(B) -	(B) -	(B) -	2.7 -	127.8 (A) (C) (A) 0.3	3 1 22 1	
3.4 0.2	129.5 7.5	3.3	121.6 -	(A) -	(B) -	(A) -	(B) -	2.2 0.2	101.8 7.5	2 24	
15.9	625.4	52.4	3,254.3 -	1.2	69.3 -	5.4 -	179.1 -	7.9 -	342.3 -	1	
6.5 (A) 1.8	222.2 10.2	10.2	366.0 0.7	(C) -	(I) -	(A) -	(G) -	3.3 -	134.7 -	4	
6.3 (A) (A)	212.9 -	10.1	354.6 -	(C) -	(I) -	(A) -	(G) -	3.0 -	123.5 -	4	
2.4 (E) (I) (B) (F) (A) (A) (F)	112.1 6.3 (F) (B) (G) 3.3 4.6 (C)	(A) (K) (A) (G) -	238.2 (K) (A) -	(A) -	1.6 -	- -	- -	1.0 -	59.1 (G) (E) (A) 3.1 4.6 (F)	3 1 10 1 89 10	
3.9 (A) 0.6 2.9	183.6 23.7 170.8	30.3 2.5	2,395.0 115.4	(B) (A)	(I) (A)	(G) -	(G) -	(K) -	1.1 0.4	52.0 23.1 58.4	1 1 1
0.3 (A)	16.3 0.4	(A)	12.6 -	-	-	-	-	0.3 -	16.5 0.4	57 94	
(A)	1.0	-	-	-	-	-	-	(A)	1.0	44	
1.6 (C) (I)	44.4 -	(B)	(F)	(A)	(A)	(A)	(A)	1.5 -	43.4 (I)	56 91	
(A)	2.0	(A)	1.1	-	-	-	-	(A)	1.0	27	
1.2 0.1 (C)	45.7 5.1 (I)	(G) (F)	(K) (K)	(B) (B)	(F) (F)	-	-	(C) -	(I) 0.1 (H)	5 96 5	
20.9	806.3	73.0	3,937.3	3.4	153.7	10.1	453.6	19.2	713.8	2	
0.2 0.3	8.8 11.8	0.1 0.2	27.5 33.5	(A) (A)	2.1 (F)	(A) (A)	0.3 0.2	0.2 0.2	13.1 13.4	8 7	
7.0 4.6	258.2 180.2	17.4 13.1	719.1 510.3	0.3 0.1	15.6 5.9	0.4 0.3	14.0 12.5	5.9 4.3	207.4 169.2	2 3	
(A) 2.7	1.3 95.1	- 8.0	- 419.5	(B) (B)	(G) (E)	(E) -	(A) (E)	- 1.9	1.3 47.3	68 4	
2.3 (A) (C) (A)	79.5 (F) (G)	27.4 (B) (H)	978.7 (G) (M)	(A) (A)	(C) -	(E) -	(K) -	6.9 (A) (G)	219.1 (F) (K) (F)	2 1 1 1	
0.5 0.1	10.4 (G)	(A) (E)	1.0 (J)	(A) (A)	(C) (C)	(A) (A)	(B) (B)	0.5 0.5	9.4 9.4	68 56	
0.6	46.1	0.4	18.6	(A)	0.5	-	-	0.6	45.6	13 1	

TABLE 5. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS, AND
(EMPLOYMENT FIGURES IN THOUSANDS)

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	NUMBER OF EMPLOYEES	VALUE ADDED BY MANUFACTURE	TOTAL VALUE OF SHIPMENTS	TOTAL		PRIME SHIPMENTS	
				EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS
SOUTH ATLANTIC--CONTINUED							
WEST VIRGINIA--CONTINUED							
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO.....	(F)	(K)	(N)	(B)	(I)	(A)	(H)
PARKERSBURG-MARIETTA, W.VA.-OHIO.....	1.8	49.6	88.4	(A)	0.9	-	-
STEUBENVILLE-WIRTON, W.VA.-OHIO.....	1.0	35.7	253.3	(B)	(I)	-	-
WHEELING, W.VA.-OHIO.....	1.5	25.4	65.3	(A)	(A)	-	-
NORTH CAROLINA.....	74.7	2,623.8	4,722.3	3.0	112.2	1.5	59.8
ASHEVILLE.....	4.4	108.7	168.7	0.3	6.6	(A)	2.3
BURLINGTON.....	(H)	(M)	(M)	(C)	(I)	(C)	(I)
CHARLOTTE-GASTONIA.....	6.0	203.9	411.2	0.3	8.3	-	-
FAYETTEVILLE.....	(B)	(F)	(G)	(B)	(G)	(B)	(G)
GREENSBORO--WINSTON-SALEM--HIGH POINT.....	15.4	551.3	1,140.4	0.2	12.3	0.1	8.2
RALEIGH-DURHAM.....	10.5	279.7	803.7	0.3	15.5	(A)	1.0
WILMINGTON.....	2.1	117.0	234.4	(A)	2.1	(A)	(A)
SOUTH CAROLINA.....	49.3	1,313.2	2,370.6	8.0	346.2	7.7	334.4
CHARLESTON.....	2.9	38.2	92.6	(C)	(I)	(C)	(I)
COLUMBIA.....	5.7	172.3	325.6	(B)	(G)	(A)	(F)
GREENVILLE-SPARTANBURG.....	9.2	213.3	412.3	0.2	7.5	0.1	5.8
GEORGIA.....	43.8	1,450.8	3,513.3	4.0	293.6	3.7	278.6
ALBANY.....	0.5	11.9	58.3	(A)	0.2	-	-
ATLANTA.....	19.5	776.8	1,427.0	(F)	(L)	(F)	(L)
AUGUSTA, GA.-S.C.....	(G)	(K)	(L)	(G)	(L)	(G)	(L)
COLUMBUS.....	0.4	7.0	12.1	(A)	(E)	(A)	(E)
FLORIDA.....	91.2	2,616.8	5,894.3	29.2	2,139.6	20.5	1,806.5
DAYTONA BEACH.....	1.3	40.9	59.4	1.0	48.9	0.2	7.5
FORT LAUDERDALE-HOLLYWOOD.....	8.6	294.3	437.1	1.9	64.4	0.7	36.0
GAINESVILLE.....	2.1	48.9	75.7	0.1	3.9	(A)	2.1
JACKSONVILLE.....	5.4	108.5	194.3	0.5	15.2	0.3	10.5
LAKELAND-WINTER HAVEN.....	3.6	136.1	448.7	(A)	0.8	-	-
MELBOURNE-TITUSVILLE-COCOA.....	10.6	290.4	427.3	(G)	(L)	(F)	(K)
MIAMI.....	8.6	235.4	435.4	(A)	3.9	(A)	1.4
ORLANDO.....	9.5	273.2	401.0	(F)	(K)	(F)	(K)
PENSACOLA.....	2.1	56.5	86.7	(A)	1.7	-	-
TAMPA-ST. PETERSBURG.....	19.0	538.1	1,110.7	7.0	227.9	4.7	153.5
WEST PALM BEACH-BOCA RATON.....	11.3	399.7	1,555.4	(G)	(N)	(G)	(N)
EAST SOUTH CENTRAL.....	216.2	6,721.2	16,828.1	51.0	1,956.2	44.4	1,661.5
KENTUCKY.....	45.1	1,603.2	4,033.8	3.0	283.4	2.5	254.8
LEXINGTON.....	8.8	522.1	861.7	(A)	0.6	-	-
LOUISVILLE, KY.-IND.....	11.6	259.0	823.3	(E)	(J)	(E)	(J)
OWENSBORO.....	1.6	42.0	78.3	0.2	9.2	0.2	8.1
TENNESSEE.....	70.5	1,881.9	4,559.7	16.1	678.8	12.4	506.4
CHATTANOOGA, TENN.-GA.....	8.7	195.9	462.5	0.5	14.2	0.4	7.2
KNOXVILLE.....	11.6	252.8	792.8	(G)	(K)	(F)	(K)
MEMPHIS, TENN.-ARK.-MISS.....	7.2	357.7	1,070.1	0.2	20.6	(A)	15.0
NASHVILLE-DAVIDSON.....	8.2	176.3	376.3	0.6	24.8	(A)	1.3
ALABAMA.....	47.1	1,368.9	3,896.5	7.2	272.4	5.0	185.7
BIRMINGHAM.....	9.8	316.1	570.2	(E)	(I)	(E)	(I)
FLORENCE.....	5.0	139.5	736.4	(A)	(F)	(A)	(A)
GADSDEN.....	1.1	20.3	40.5	(B)	(H)	(B)	(H)
HUNTSVILLE.....	11.7	249.8	716.0	3.6	99.9	2.0	54.1
MOBILE.....	5.8	263.1	677.3	(A)	(F)	(A)	(F)
MONTGOMERY.....	0.8	18.1	51.5	(A)	2.1	-	-
TUSCALOOSA.....	0.9	53.9	376.4	(A)	40.1	(A)	39.6
MISSISSIPPI.....	53.5	1,867.2	4,338.1	24.7	721.6	24.5	714.6
BILOXI-GULFPORT.....	0.4	19.1	31.9	-	-	-	-
JACKSON.....	3.7	80.7	235.3	0.2	10.4	0.2	8.3
WEST SOUTH CENTRAL.....	351.9	14,287.1	54,338.1	61.3	3,342.0	46.2	2,674.7
ARKANSAS.....	34.5	925.7	2,146.5	1.5	47.5	0.4	14.4
FAYETTEVILLE-SPRINGDALE.....	5.0	72.7	149.5	(A)	(A)	-	-
LITTLE ROCK-NORTH LITTLE ROCK.....	10.6	289.8	718.5	(A)	2.0	(A)	0.2
PINE BLUFF.....	0.8	13.0	48.7	(A)	(A)	-	-
LOUISIANA.....	57.1	3,314.5	13,546.7	1.4	204.1	0.9	166.6
ALEXANDRIA.....	1.5	35.8	91.2	0.2	16.6	(A)	5.9
BATON ROUGE.....	5.0	911.3	3,561.8	(A)	(I)	(A)	(I)
LAKE CHARLES.....	4.4	508.4	2,944.1	(A)	(H)	(A)	(H)
NEW ORLEANS.....	25.3	462.2	1,743.4	0.9	42.5	0.7	34.4
SHREVEPORT.....	12.7	304.8	1,187.0	0.2	55.6	(A)	41.9
OKLAHOMA.....	52.6	1,758.6	5,398.2	7.1	276.6	4.1	174.2
FORT SMITH.....	2.1	89.6	140.4	(A)	(A)	-	-
OKLAHOMA CITY.....	16.0	455.3	1,100.0	1.4	33.1	0.3	7.1
TULSA.....	22.1	840.9	2,028.6	3.5	138.5	1.9	71.7
TEXAS.....	207.7	8,288.3	33,246.7	51.3	2,813.7	40.7	2,319.5
ABILENE.....	1.2	27.1	558.1	0.2	151.2	0.2	148.2
AMARILLO.....	0.3	29.7	151.3	(A)	1.1	-	-
AUSTIN.....	1.9	56.9	77.6	1.2	42.8	1.0	35.1
BEAUMONT-PORT ARTHUR-ORANGE.....	23.2	1,847.7	7,437.5	(B)	(J)	(A)	(J)
BROWNSVILLE-HARLINGEN-SAN BENITO.....	1.3	27.6	48.2	(A)	(A)	-	-
CORPUS CHRISTI.....	2.7	227.8	2,877.9	(A)	132.6	(A)	-
DALLAS-FORT WORTH.....	81.7	2,612.3	4,343.9	37.0	1,802.3	29.0	1,456.3
EL PASO.....	1.5	299.7	816.0	(A)	22.3	(A)	4.2
GALVESTON-TEXAS CITY.....	4.6	403.9	3,493.1	(A)	58.7	(A)	57.9
HOUSTON.....	42.9	1,282.3	9,381.6	1.1	90.3	0.1	42.4

See footnotes at end of table.

GOVERNMENT SHIPMENTS, BY GEOGRAPHIC AREA AND AGENCY FOR MA-175 PLANTS: 1977--CONTINUED

VALUE FIGURES IN MILLIONS OF DOLLARS)

GOVERNMENT SHIPMENTS										STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
SUBSHIPMENTS		TO DOD		TO NASA		TO ERDA		TO OTHER AGENCIES			
EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS		
(B)	(I)	(A)	(H)	-	-	-	-	(B)	(I)	1	
(A)	0.9	-	-	-	-	-	-	(A)	0.9	14	
(B)	(I)	-	-	-	-	-	-	(B)	(I)	1	
(A)	(A)	-	-	-	-	-	-	(A)	-	19	
1.5	52.4	1.8	60.5	(A)	0.3	(A)	0.4	1.2	51.0	8	
0.2	4.3	0.2	4.9	(A)	(A)	-	-	(A)	1.7	1	
(A)	(E)	(C)	(I)	-	-	-	-	(A)	(B)	1	
0.3	8.3	-	-	-	-	-	-	0.3	8.3	73	
-	-	(B)	(G)	-	-	-	-	(A)	(E)	1	
(A)	4.1	0.2	8.5	-	-	(A)	0.3	(A)	3.4	7	
0.3	14.5	(A)	1.0	(A)	(A)	-	-	0.3	14.5	27	
(A)	2.1	-	-	-	-	-	-	(A)	2.1	57	
0.2	11.8	1.1	37.4	(A)	(A)	(G)	(L)	(B)	(H)	6	
(A)	(B)	(C)	(I)	-	-	-	-	(A)	(B)	67	
(A)	(F)	(A)	(F)	(A)	(A)	(A)	(A)	(A)	(F)	1	
(A)	1.6	0.1	3.7	-	-	(A)	1.3	(A)	2.4	20	
0.3	15.0	3.3	251.3	(A)	2.4	(A)	1.4	0.6	38.5	1	
(A)	0.2	-	-	-	-	-	-	(A)	0.2	86	
(B)	(G)	(F)	(K)	(A)	(F)	-	-	(H)	(I)	1	
(A)	(E)	(A)	(E)	-	(A)	(G)	(L)	(A)	(E)	1	
-	-	(A)	(A)	-	-	-	-	(A)	1.2	30	
8.7	333.1	21.5	1,844.2	3.0	131.9	1.2	41.2	3.5	122.3	4	
0.9	41.4	1.0	48.6	(A)	0.2	-	-	(A)	0.2	15	
1.3	28.4	1.0	30.7	0.1	5.6	(A)	0.6	0.9	27.5	18	
(A)	1.8	(A)	3.0	(A)	(A)	-	-	(A)	0.9	20	
0.1	4.7	0.3	9.5	-	-	-	-	0.2	5.7	21	
(A)	0.8	-	-	-	-	-	-	(A)	0.8	67	
(E)	(J)	(F)	(K)	(F)	(J)	(A)	(A)	(C)	(I)	20	
(A)	2.5	(A)	0.4	(A)	(A)	-	-	(A)	3.5	23	
(E)	(I)	(F)	(K)	(A)	(A)	(A)	(C)	(C)	(H)	2	
(A)	1.7	-	-	-	-	-	-	(A)	1.7	70	
2.3	74.4	4.3	138.4	0.9	25.7	1.2	38.7	0.7	25.1	5	
(B)	(I)	(G)	(N)	(A)	(F)	(A)	(E)	(B)	(H)	1	
6.6	294.6	33.4	1,125.9	1.1	45.2	13.4	620.4	3.2	164.7	2	
0.5	28.6	(B)	(I)	(A)	(A)	(F)	(K)	0.3	14.5	3	
(A)	0.6	-	-	-	-	-	-	(A)	0.6	1	
(C)	(H)	(E)	(J)	(A)	(A)	-	-	(B)	(H)	10	
(A)	1.1	0.2	8.6	-	-	-	-	(A)	0.6	1	
3.7	172.4	(F)	(K)	(A)	(F)	(H)	(L)	(C)	(J)	2	
0.1	7.0	0.3	5.6	-	-	(A)	(F)	0.2	8.6	8	
(C)	(I)	(A)	(F)	-	(A)	(K)	(K)	(B)	(H)	1	
0.2	5.6	-	-	-	-	-	-	0.2	20.6	43	
0.6	23.5	0.6	21.5	(A)	1.5	-	-	(A)	1.8	3	
2.2	86.7	4.7	174.5	1.1	41.8	(A)	1.7	1.4	54.4	14	
(B)	(H)	(E)	(I)	-	-	(A)	(E)	(B)	(C)	14	
(A)	(F)	(A)	(F)	-	-	-	-	(A)	(H)	1	
-	-	-	-	-	-	-	-	(B)	-	1	
1.5	45.8	1.9	54.5	0.9	28.0	(A)	0.7	0.7	16.8	14	
(A)	(E)	(A)	(F)	(A)	(B)	-	-	(A)	(E)	5	
(A)	2.1	-	-	-	-	-	-	(A)	2.1	81	
(A)	0.4	(A)	26.8	(A)	11.5	-	-	(A)	1.8	79	
0.2	6.9	24.3	706.4	-	-	(A)	0.1	0.4	15.1	1	
-	-	-	-	-	-	-	-	0.2	10.4	91	
15.1	667.3	47.9	2,690.0	1.2	57.2	1.8	45.8	10.4	549.0	4	
1.1	33.2	0.3	11.5	-	-	-	-	1.2	36.1	50	
(A)	(A)	-	-	-	-	-	-	(A)	(A)	1	
(A)	1.8	-	-	-	-	-	-	(A)	2.0	1	
(A)	(A)	-	-	-	-	-	-	(A)	(A)	30	
0.5	37.5	1.0	166.2	(A)	4.5	(A)	(A)	0.3	33.4	17	
0.1	10.8	(A)	0.7	-	-	-	-	0.2	15.9	81	
(A)	(F)	(A)	(I)	-	-	-	-	(A)	(E)	1	
-	-	(A)	(H)	-	-	-	-	-	-	1	
0.2	8.1	(C)	(I)	(A)	(F)	-	-	(A)	(C)	5	
0.2	13.7	(A)	43.0	-	-	-	-	0.1	12.6	59	
3.0	102.4	4.6	200.7	0.3	12.8	(A)	(A)	2.1	63.1	21	
(A)	(A)	-	-	-	-	-	-	(A)	(A)	1	
1.1	26.0	0.3	7.1	-	-	-	-	1.1	26.0	75	
1.6	66.7	2.7	109.0	(B)	(H)	(A)	(A)	0.5	16.7	3	
10.5	494.2	41.9	2,311.6	0.9	39.9	1.8	45.7	6.7	416.4	4	
(A)	3.0	0.2	151.2	-	-	-	-	-	-	84	
(A)	1.1	-	-	-	-	-	-	(A)	1.1	58	
0.2	7.7	1.2	39.5	-	-	-	-	(A)	3.3	3	
(B)	(H)	(B)	(H)	(A)	(A)	(A)	(A)	(B)	(J)	5	
(A)	(A)	-	-	-	-	-	-	(A)	(A)	61	
(A)	3.1	(A)	129.1	-	-	-	-	(A)	3.5	22	
8.1	346.0	31.4	1,560.0	0.8	37.6	(A)	0.8	4.8	204.0	1	
(A)	18.1	(A)	3.9	-	-	(A)	(A)	(A)	18.4	54	
(A)	0.8	(A)	0.6	-	-	-	-	(A)	58.1	1	
0.9	47.8	0.2	60.4	(A)	(B)	(A)	(A)	0.8	29.5	11	

TABLE 5. TOTAL EMPLOYMENT, VALUE ADDED, VALUE OF SHIPMENTS, AND
(EMPLOYMENT FIGURES IN THOUSANDS)

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	NUMBER OF EMPLOYEES	VALUE ADDED BY MANUFACTURE	TOTAL VALUE OF SHIPMENTS	TOTAL		PRIME SHIPMENTS	
				EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS
WEST SOUTH CENTRAL--CONTINUED							
TEXAS--CONTINUED							
LUBBOCK.....	6.0	138.9	295.9	4.2	185.4	4.2	185.3
ODESSA.....	1.8	59.0	100.1	(A)	0.2	-	-
SAN ANTONIO.....	5.7	200.6	407.7	0.3	22.4	0.2	18.4
SHERMAN-DENISON.....	1.4	70.2	115.9	(A)	(E)	(A)	(E)
TEXARKANA, TEXAS-ARK.....	(E)	(H)	(I)	(E)	(I)	(E)	(I)
TYLER.....	0.6	30.9	209.6	0.4	5.1	-	-
WACO.....	(C)	(H)	(I)	(B)	(H)	(B)	(H)
WICHITA FALLS.....	1.4	30.9	61.2	(B)	3.5	-	-
MOUNTAIN.....	140.7	5,183.3	10,735.8	30.1	1,640.7	18.2	1,095.6
MONTANA.....	1.8	54.8	923.1	(A)	24.6	(A)	23.5
GREAT FALLS.....	0.3	7.0	175.1	(A)	23.5	(A)	23.5
IDAHO.....	3.8	195.0	360.6	(A)	(B)	-	-
WYOMING.....	2.0	191.8	689.5	(B)	23.2	(A)	16.6
COLORADO.....	45.4	1,752.4	3,496.4	7.4	400.3	5.3	311.6
COLORADO SPRINGS.....	3.9	82.2	154.4	0.4	14.0	0.2	5.3
DENVER-BOULDER.....	34.1	1,341.5	2,685.2	6.5	364.8	(G)	(L)
PUEBLO.....	0.8	14.1	32.8	(A)	-	-	-
NEW MEXICO.....	9.8	220.9	316.1	1.2	37.0	(A)	1.8
ALBUQUERQUE.....	8.5	176.7	245.6	1.2	33.8	(A)	1.8
ARIZONA.....	57.1	2,045.3	3,129.2	14.5	762.7	9.9	559.1
PHOENIX.....	48.6	1,796.7	2,621.0	9.7	472.5	5.4	277.6
TUCSON.....	(F)	(K)	(L)	(F)	(L)	(F)	(L)
UTAH.....	19.5	682.3	1,745.4	6.6	368.7	3.0	183.0
PROVO-OREM.....	1.1	31.0	43.1	(A)	1.8	-	-
SALT LAKE CITY-OGDEN.....	14.0	537.9	1,463.5	3.7	211.4	1.2	87.1
NEVADA.....	1.3	40.8	75.5	(B)	(H)	-	-
LAS VEGAS.....	0.7	22.0	50.3	(B)	(H)	-	-
RENO.....	0.6	18.8	25.1	(A)	(C)	-	-
PACIFIC.....	748.9	27,219.3	53,790.1	273.8	15,390.9	193.1	11,717.9
WASHINGTON.....	81.7	2,732.0	7,237.2	26.1	1,650.9	21.5	1,410.5
RICHLAND-KENNEWICK.....	0.4	12.3	22.4	-	-	-	-
SEATTLE-EVERETT.....	70.2	2,352.5	4,815.3	(I)	(N)	(H)	(N)
SPOKANE.....	5.9	201.8	529.8	0.3	11.6	-	-
TACOMA.....	2.0	56.0	110.7	0.4	23.2	0.3	19.6
OREGON.....	31.8	921.3	1,668.5	5.7	241.8	2.6	103.4
PORTLAND, ORE.-WASH.....	23.0	676.2	1,254.3	2.5	109.1	1.3	59.4
CALIFORNIA.....	632.7	22,507.7	42,195.7	241.2	13,079.1	168.7	9,828.3
ANAHEIM-SANTA ANA-GARDEN GROVE.....	92.8	2,921.3	4,446.6	35.5	1,601.7	22.2	1,026.0
BAKERSFIELD.....	3.2	89.0	153.0	0.3	10.3	(A)	1.5
FRESNO.....	1.6	44.2	131.9	(A)	4.0	-	-
LOS ANGELES-LONG BEACH.....	307.0	11,311.2	21,497.8	135.2	7,601.2	94.3	5,701.2
OXNARD-SIMI VALLEY-VENTURA.....	7.7	228.4	363.6	2.8	132.6	1.3	65.5
RIVERSIDE-SAN BERNARDINO-ONTARIO.....	10.9	312.9	652.1	2.1	112.2	1.3	80.1
SACRAMENTO.....	5.1	145.1	289.4	2.2	120.3	1.7	95.1
SALINAS-SEASIDE-MONTEREY.....	1.2	44.5	79.6	(A)	0.4	-	-
SAN DIEGO.....	45.4	1,411.5	2,413.3	15.7	710.5	9.8	483.8
SAN FRANCISCO-OAKLAND.....	34.9	1,842.0	4,716.9	8.6	514.0	6.7	437.9
SAN JOSE.....	107.2	3,580.9	5,753.2	35.9	2,091.3	30.1	1,821.4
SANTA BARBARA-SANTA MARIA-LOMPOC.....	3.6	68.2	121.6	1.2	53.0	0.9	41.1
SANTA CRUZ.....	0.7	29.7	53.2	(A)	(A)	-	-
SANTA ROSA.....	2.7	100.4	156.6	0.5	31.7	(A)	2.8
STOCKTON.....	2.6	84.5	222.8	0.3	8.8	-	-
VALLEJO-FAIRFIELD-NAPA.....	0.6	36.0	520.3	(A)	56.6	(A)	53.0
ALASKA.....	0.9	755.2	1,672.3	(A)	(K)	(A)	(K)
HAWAII.....	1.6	303.1	1,016.4	(C)	(K)	(B)	(K)
HONOLULU.....	1.6	303.1	1,016.4	(C)	(K)	(B)	(K)

Note: In some instances, data are withheld to avoid disclosing the operations of individual companies. The data withheld are expressed in terms of the symbols and ranges shown below. In all instances, where the data are less than .1, the symbol (A) is used.

Symbol	Range	Symbol	Range	Symbol	Range
(A).....	Less than .1	(G).....	5.0 to 9.9	(K).....	100.0 to 249.9
(B).....	.1 to .4	(H).....	10.0 to 24.9	(L).....	250.0 to 499.9
(C).....	.5 to .9	(I).....	25.0 to 49.9	(M).....	500.0 to 999.9
(E).....	1.0 to 1.9	(J).....	50.0 to 99.9	(N).....	1,000.0 and over
(F).....	2.0 to 4.9				

- Represents zero.

¹Standard Metropolitan Statistical Areas in more than one state are listed only one time, under their principal state. This total includes the activities in all states for that SMSA's. See appendix A for a definition of the SMSA's.

GOVERNMENT SHIPMENTS, BY GEOGRAPHIC AREA AND AGENCY FOR MA-175 PLANTS: 1977--CONTINUED

VALUE FIGURES IN MILLIONS OF DOLLARS)

GOVERNMENT SHIPMENTS										STANDARD ERROR OF ESTIMATE (PERCENT) FOR TOTAL GOVERNMENT SHIPMENTS	
SUBSHIPMENTS		TO DOD		TO NASA		TO ERDA		TO OTHER AGENCIES			
EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS	EMPLOYEES	VALUE OF SHIPMENTS		
(A)	(B)	4.2	185.3	-	-	-	-	(A)	(B)	24	
(A)	0.2	-	-	-	-	-	-	(A)	0.2	86	
0.1	4.0	(A)	12.9	-	-	-	-	(A)	9.5	18	
-	-	(A)	(E)	-	-	-	-	-	(A)	1	
-	-	(E)	(I)	-	-	-	-	-	-	1	
0.4	3.1	(A)	2.4	-	-	-	-	0.3	0.7	33	
(A)	(E)	(B)	(H)	(A)	(F)	-	-	(A)	(A)	1	
(B)	3.5	-	-	-	-	-	-	(B)	3.5	80	
12.0	545.1	21.6	1,210.2	3.1	159.4	0.6	24.5	4.9	246.5	2	
(A)	1.1	(A)	23.5	-	-	-	-	(A)	1.1	87	
-	-	(A)	23.5	-	-	-	-	-	(A)	91	
(A)	(B)	-	-	-	-	-	-	(A)	(B)	1	
(B)	6.7	(A)	16.1	-	-	-	-	(B)	7.1	62	
2.1	88.7	4.3	234.8	(E)	(J)	(A)	(F)	1.6	85.9	3	
0.3	8.7	0.3	9.3	(A)	0.4	(A)	(A)	0.1	4.3	23	
(E)	(J)	(F)	(K)	(E)	(J)	(A)	(F)	(E)	(J)	3	
(A)	(A)	-	-	-	-	-	-	(A)	(A)	9	
1.2	35.2	0.8	25.2	(A)	(E)	(B)	(G)	(B)	4.4	16	
1.1	32.0	0.8	25.2	(A)	(E)	(B)	(G)	(A)	1.2	16	
4.6	203.6	11.8	648.3	0.7	32.8	0.3	12.2	1.7	69.4	2	
4.3	194.8	7.3	363.4	0.7	31.8	0.2	11.2	1.5	66.0	2	
(B)	(G)	(F)	(L)	(A)	(E)	(A)	(E)	(B)	(F)	1	
3.6	185.7	4.6	262.3	0.9	50.0	(A)	1.8	1.0	54.5	6	
(A)	1.8	-	-	-	-	-	-	(A)	1.8	70	
2.5	124.3	2.9	171.3	(A)	0.3	(A)	1.8	0.7	37.9	9	
(B)	(H)	-	-	-	-	-	-	(B)	(H)	1	
(B)	(H)	-	-	-	-	-	-	(B)	(H)	1	
(A)	(C)	-	-	-	-	-	-	(A)	(C)	1	
80.7	3,672.9	201.5	11,655.8	25.5	1,526.9	4.8	252.2	41.9	1,955.9	2	
4.6	240.4	22.5	1,439.0	0.6	38.4	(A)	1.2	3.0	172.3	2	
-	-	-	-	-	-	-	-	-	-	1	
4.1	219.0	22.2	1,407.8	0.6	38.4	(A)	1.2	2.3	116.3	1	
0.3	11.6	-	-	-	-	-	-	0.3	11.6	93	
(A)	3.7	0.2	11.5	-	-	-	-	0.2	11.7	12	
3.1	138.3	3.7	137.0	(A)	3.6	0.5	36.4	1.4	64.7	5	
1.2	49.7	1.2	50.0	(A)	3.2	(A)	0.2	1.2	55.7	6	
72.5	3,250.8	175.0	9,739.6	24.9	1,484.9	4.3	214.6	37.0	1,639.9	2	
13.2	575.7	25.1	1,151.5	2.0	92.5	0.6	32.2	7.8	325.4	14	
0.3	8.8	0.2	6.2	(A)	1.8	-	-	(A)	2.3	36	
(A)	4.0	-	-	-	-	-	-	(A)	4.0	81	
40.9	1,900.0	95.2	5,420.9	18.9	1,189.5	3.2	160.7	17.9	830.0	2	
1.5	67.1	2.0	97.0	0.4	23.0	(A)	0.5	0.4	12.1	7	
0.8	32.1	1.6	99.1	(A)	1.4	-	-	0.4	11.6	10	
0.5	25.1	1.8	104.5	0.3	13.0	(A)	0.3	(A)	2.4	1	
(A)	0.4	-	-	-	-	-	-	(A)	0.4	44	
5.3	226.6	11.5	519.9	1.4	73.4	(A)	3.0	2.7	114.2	7	
1.9	76.0	6.0	396.0	(A)	2.0	0.2	6.1	2.4	110.0	18	
5.8	269.9	30.2	1,804.1	1.3	77.5	0.2	11.3	4.1	198.4	1	
0.3	11.9	0.9	41.4	0.2	9.4	-	-	(A)	2.3	13	
(A)	-	-	-	-	-	-	-	(A)	(A)	30	
0.5	28.9	0.4	17.4	(A)	0.5	(A)	0.7	0.1	13.1	39	
0.3	8.8	-	-	-	-	-	-	0.3	8.8	55	
(A)	3.6	(A)	53.0	-	-	-	-	(A)	3.6	6	
-	(E)	(A)	(K)	-	-	-	-	(A)	(I)	97	
(C)	(I)	(B)	(K)	-	-	-	-	(C)	(I)	27	
(C)	(I)	(B)	(K)	-	-	-	-	(C)	(I)	27	

TABLE 6. NUMBER OF ESTABLISHMENTS REPORTING IN DEFENSE--ORIENTED INDUSTRIES, BY INDUSTRY AND RANGE OF VALUE OF GOVERNMENT SHIPMENTS: 1977

CODE	INDUSTRY	TOTAL NUMBER OF ESTAB- LISHMENTS	ESTABLISHMENTS REPORTING GOVERNMENT SHIPMENTS OF--						
			OVER \$100 MILLION	\$50 TO \$100 MILLION	\$25 TO \$49 MILLION	\$5 TO \$24 MILLION	\$1 TO \$4 MILLION	UNDER \$1 MILLION	NONE
	ALL INDUSTRIES, TOTAL.....	6,275	90	78	112	450	626	2,350	2,369
28	CHEMICALS AND ALLIED PRODUCTS.....	199	5	3	1	7	11	63	109
2813	INDUSTRIAL GASES.....	23	-	-	-	-	1	9	13
2819	INDUSTRIAL INORGANIC CHEMICALS, N.E.C.	100	5	1	-	4	4	38	48
2873	NITROGENOUS FERTILIZERS.....	23	-	-	-	1	-	4	18
2874	PHOSPHATIC FERTILIZERS.....	31	-	-	-	-	-	8	23
2892	EXPLOSIVES.....	22	-	2	1	2	6	4	7
29	PETROLEUM AND COAL PRODUCTS.....	176	1	6	8	32	20	43	66
2911	PETROLEUM REFINING.....	151	1	6	8	32	20	33	51
2992	LUBRICATING OILS AND GREASES.....	25	-	-	-	-	-	10	15
30	RUBBER AND MISCELLANEOUS PLASTICS PRODUCT	225	-	-	2	5	13	108	97
3041	RUBBER AND PLASTIC HOSE AND BELTING....	35	-	-	-	1	2	21	11
3069	FABRICATED RUBBER PRODUCTS, N.E.C.....	190	-	-	2	4	11	87	86
3293	GASKETS, PACKETS, AND SEALING DEVICES....	48	-	-	-	-	3	27	18
33	PRIMARY METAL INDUSTRIES.....	546	-	1	4	26	55	213	247
3324	STEEL INVESTMENT FOUNDRIES.....	21	-	-	-	3	2	9	7
3325	STEEL FOUNDRIES, N.E.C.....	78	-	1	-	3	9	36	29
3339	PRIMARY NONFERROUS METALS, N.E.C.....	12	-	-	1	-	-	3	8
3351	COPPER ROLLING AND DRAWING.....	61	-	-	-	25	8	30	21
3353	ALUMINUM SHEET, PLATE, AND FOIL.....	32	-	-	-	5	2	8	17
3354	ALUMINUM EXTRUDED PRODUCTS.....	47	-	-	-	3	5	11	28
3355	ALUMINUM ROLLING AND DRAWING, N.E.C.....	7	-	-	-	4	-	-	3
3356	NONFERROUS ROLLING AND DRAWING, N.E.C.....	34	-	-	3	3	1	9	18
3357	NONFERROUS WIRE DRAWING AND INSULATING.....	128	-	-	-	3	14	65	46
3361	ALUMINUM FOUNDRIES.....	65	-	-	-	2	9	36	48
3369	NONFERROUS FOUNDRIES, N.E.C.....	31	-	-	-	2	1	6	22
34	FABRICATED METAL PRODUCTS.....	1,102	3	8	18	55	80	478	460
3441	FABRICATED STRUCTURAL METAL.....	215	-	-	1	4	6	93	111
3443	FABRICATED PLATE WORK (BOILER SHOPS)...	191	1	1	-	8	16	82	83
3451	SCREW MACHINE PRODUCTS.....	86	-	-	-	-	4	43	39
3452	BOLTS, NUTS, RIVETS, AND WASHERS.....	124	-	-	-	6	5	55	58
3462	IRON AND STEEL FORGINGS.....	68	-	1	1	2	13	26	25
3463	NONFERROUS FORGINGS.....	12	-	-	2	3	1	4	2
3482	SMALL ARMS AMMUNITION.....	9	-	1	-	2	1	3	2
3483	AMMUNITION, EXCEPT FOR SMALL ARMS, N.E.C	36	-	4	8	14	4	5	1
3484	SMALL ARMS.....	21	1	-	1	1	1	5	13
3489	ORDNANCE AND ACCESSORIES, N.E.C.....	20	-	1	4	6	2	4	2
3494	VALVES AND PIPE FITTINGS.....	175	-	-	2	5	20	94	54
3499	FABRICATED METAL PRODUCTS, N.E.C.....	145	-	-	-	4	7	64	70
35	MACHINERY, EXCEPT ELECTRICAL.....	1,407	3	3	9	72	110	660	550
3511	TURBINES AND TURBINE GENERATOR SETS.....	27	-	-	3	4	7	1	12
3519	INTERNAL COMBUSTION ENGINES, N.E.C.....	58	1	-	2	4	7	25	19
3531	CONSTRUCTION MACHINERY.....	157	-	-	-	12	13	80	52
3536	HOISTS, CRANES, AND MONORAILS.....	29	-	-	-	1	1	16	12
3537	INDUSTRIAL TRUCKS AND TRACTORS.....	46	-	-	-	1	4	20	21
3541	MACHINE TOOLS, METAL CUTTING TYPES.....	85	-	1	-	1	5	45	33
3542	MACHINES TOOLS, METAL FORMING TYPES.....	62	-	-	-	2	2	28	30
3561	PUMPS AND PUMPING EQUIPMENT.....	125	-	-	-	5	10	58	52
3562	BALL AND ROLLER BEARINGS.....	61	-	-	-	5	11	32	13
3563	AIR AND GAS COMPRESSORS.....	33	-	-	-	2	4	23	4
3566	SPEED CHANGERS, DRIVES, AND GEARS.....	46	-	-	-	1	-	36	9
3568	POWER TRANSMISSION EQUIPMENT, N.E.C.....	47	-	-	-	1	5	23	18
3569	GENERAL INDUSTRIAL MACHINERY, N.E.C.....	89	-	-	-	1	4	50	34
3573	ELECTRONIC COMPUTING EQUIPMENT.....	126	1	2	3	20	18	42	40
3574	CALCULATING AND ACCOUNTING MACHINES.....	19	1	-	-	2	3	7	6
3579	OFFICE MACHINES, N.E.C.....	39	-	-	1	4	3	14	17
3592	CARBURETORS, PISTONS, RINGS, VALVES.....	34	-	-	-	-	3	18	13
3599	MACHINERY, EXCEPT ELECTRICAL, N.E.C.....	324	-	-	-	7	10	142	165
36	ELECTRICAL AND ELECTRONIC EQUIPMENT.....	1,501	23	24	39	111	196	594	514
3612	TRANSFORMERS.....	59	-	-	-	4	7	27	21
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS...	110	-	-	-	3	8	51	48
3621	MOTORS AND GENERATORS.....	135	-	-	2	10	15	50	58
3622	INDUSTRIAL CONTROLS.....	82	-	-	1	2	5	42	32
3643	CURRENT-CARRYING WIRING DEVICES.....	82	-	-	-	-	5	36	41
3644	NONCURRENT-CARRYING WIRING DEVICES.....	51	-	-	-	-	5	28	23
3661	TELEPHONE AND TELEGRAPH APPARATUS.....	58	-	-	-	2	7	36	13
3662	RADIO AND TV COMMUNICATION EQUIPMENT...	324	22	23	26	51	44	86	72
3671	ELECTRON TUBES, RECEIVING TYPE.....	5	-	-	-	2	-	-	1
3672	CATHODE RAY TELEVISION PICTURE TUBES.....	10	-	-	-	1	2	2	7
3673	ELECTRON TUBES, TRANSMITTING.....	27	-	-	5	5	9	5	3
3674	SEMICONDUCTORS AND RELATED DEVICES.....	83	1	-	5	10	21	32	16
3675	ELECTRONIC CAPACITORS.....	47	-	-	-	2	9	24	12
3676	ELECTRONIC RESISTORS.....	37	-	-	-	1	5	26	5
3677	ELECTRONIC COILS AND TRANSFORMERS.....	43	-	-	-	-	3	21	19

See footnotes at end of table.

TABLE 6. NUMBER OF ESTABLISHMENTS REPORTING IN DEFENSE--ORIENTED INDUSTRIES, BY INDUSTRY AND RANGE OF VALUE OF GOVERNMENT SHIPMENTS: 1977--CONTINUED

CODE	INDUSTRY	TOTAL NUMBER OF ESTAB- LISHMENTS	ESTABLISHMENTS REPORTING GOVERNMENT SHIPMENTS OF--						
			OVER \$100 MILLION	\$50 TO \$100 MILLION	\$25 TO \$49 MILLION	\$5 TO \$24 MILLION	\$1 TO \$4 MILLION	UNDER \$1 MILLION	NONE
36	ELECTRICAL AND ELECTRONIC EQUIPMENT..CON.								
3678	ELECTRONIC CONNECTORS.....	31	-	-	1	3	10	7	10
3679	ELECTRONIC COMPONENTS, N.E.C.....	148	-	-	8	22	68	49	
3691	STORAGE BATTERIES.....	41	-	1	-	2	5	12	21
3692	PRIMARY BATTERIES, DRY AND WET.....	19	-	-	-	-	7	7	5
3693	X-RAY APPARATUS AND TUBES.....	19	-	-	-	2	6	6	5
3694	ENGINE ELECTRICAL EQUIPMENT.....	48	-	-	-	3	4	15	26
3699	ELECTRICAL EQUIPMENT AND SUPPLIES N.E.C	41	-	-	-	-	2	13	26
37	TRANSPORTATION EQUIPMENT.....	486	54	24	25	99	57	82	145
3713	TRUCK AND BUS BODIES.....	70	-	-	-	3	6	17	44
3715	TRUCK TRAILERS.....	40	-	-	-	-	2	8	30
3721	AIRCRAFT.....	40	13	4	1	7	3	4	8
3724	AIRCRAFT ENGINES AND ENGINE PARTS.....	65	8	3	2	19	13	10	10
3728	AIRCRAFT EQUIPMENT, N.E.C.....	94	4	7	4	32	18	17	12
3731	SHIPBUILDING AND REPAIRING.....	98	5	1	6	18	12	25	31
3761	GUIDED MISSILES AND SPACE VEHICLES.....	38	14	2	3	12	-	-	7
3764	SPACE PROPULSION UNITS AND PARTS.....	18	2	6	3	5	1	-	1
3769	SPACE VEHICLE EQUIPMENT, N.E.C.....	16	4	1	3	3	2	1	2
3795	TANKS AND TANK COMPONENTS.....	7	4	-	3	-	-	-	-
38	INSTRUMENTS AND RELATED PRODUCTS.....	567	-	6	4	40	76	280	161
3811	ENGINEERING AND SCIENTIFIC INSTRUMENTS.....	74	-	2	3	10	12	33	14
3823	PROCESS CONTROL INSTRUMENTS.....	42	-	-	-	2	6	24	10
3824	FLUID METERS AND COUNTING DEVICES.....	22	-	-	-	-	-	14	8
3825	INSTRUMENTS TO MEASURE ELECTRICITY.....	93	-	2	-	8	15	45	23
3829	MEASURING AND CONTROLLING DEVICES, N.E.C	38	-	-	1	5	4	20	8
3832	OPTICAL INSTRUMENTS AND LENSES.....	36	-	1	-	4	7	16	8
3842	SURGICAL APPLIANCES AND SUPPLIES.....	81	-	-	-	5	12	40	24
3843	DENTAL EQUIPMENT AND SUPPLIES.....	33	-	-	-	-	4	18	11
3851	OPHTHALMIC GOODS.....	35	-	-	-	-	2	21	12
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES.....	77	-	1	-	4	12	35	25
3873	WATCHES, CLOCKS, AND WATCHCASES.....	36	-	-	-	2	2	14	18
88	MISCELLANEOUS INDUSTRIES ¹	18	1	3	2	3	5	2	2

Note: Distribution is based upon uninflated reported government shipments data. The "none" category includes delinquent reporters on the survey.

- Represents zero.

¹Represents nonmanufacturing facilities of the manufacturing companies canvassed, in addition to selected nonprofit research corporations working on defense contracts.

TABLE 7. NUMBER OF ESTABLISHMENTS REPORTING IN DEFENSE--ORIENTED INDUSTRIES, BY GEOGRAPHIC AREA AND RANGE OF VALUE OF GOVERNMENT SHIPMENTS: 1977

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	TOTAL NUMBER OF ESTABLISHMENTS	OVER \$100 MILLION	\$50 TO \$100 MILLION	\$25 TO \$49 MILLION	\$5 TO \$24 MILLION	\$1 TO \$4 MILLION	UNDER \$1 MILLION	NONE
UNITED STATES, TOTAL.....	6,275	90	78	112	450	626	2,550	2,369
NEW ENGLAND.....	604	15	6	10	55	70	248	200
MAINE.....	22	1	-	-	1	2	9	9
LEWISTON-AUBURN.....	3	-	-	-	-	-	2	1
PORTLAND.....	6	-	-	-	1	1	2	2
NEW HAMPSHIRE.....	45	-	1	-	4	10	19	11
MANCHESTER.....	9	-	-	-	2	3	2	2
NASHUA.....	9	-	1	-	1	1	3	3
VERMONT.....	19	1	-	-	2	3	6	7
MASSACHUSETTS.....	242	6	1	9	24	24	107	71
BOSTON.....	118	3	1	6	12	17	55	24
BROCKTON.....	7	-	-	-	-	-	4	3
FALL RIVER, MASS.-R.I.....	4	-	1	-	-	-	-	3
FITCHBURG-LEOMINSTER.....	4	-	-	-	-	-	-	1
LAWERENCE-HAVERHILL, MASS.-N.H.....	12	1	-	-	1	1	7	2
LOWELL, MASS.-N.H.....	10	1	-	-	-	1	3	4
NEW BEDFORD.....	8	-	-	-	1	-	3	4
PITTSFIELD.....	3	1	-	-	1	-	-	1
SPRINGFIELD, CHICOPEE-HOLYOKE, MASS.-CONN.....	27	-	-	-	4	1	15	7
WORCESTER.....	19	-	-	2	-	-	6	11
RHODE ISLAND.....	51	-	1	-	2	2	17	29
PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS	53	-	-	-	3	2	17	31
CONNECTICUT.....	225	7	3	1	22	29	90	73
BRIDGEPORT.....	41	2	-	-	2	2	19	16
BRISTOL.....	4	-	-	-	-	-	2	1
DANBURY.....	18	-	1	-	-	6	5	6
HARTFORD.....	41	2	-	-	5	8	15	11
MERIDEN.....	3	-	-	-	-	1	2	-
NEW BRITAIN.....	14	-	1	-	2	1	7	3
NEW HAVEN-NORTH HAVEN.....	21	1	-	-	1	1	9	9
NEW LONDON-GROTON-NORWICH, CONN.-R.I.....	10	1	-	-	2	1	5	1
NORWALK.....	11	-	1	-	2	1	3	4
STAMFORD.....	13	-	-	1	3	1	4	4
WATERBURY.....	23	-	-	-	1	4	9	9
MIDDLE ATLANTIC.....	1,118	13	10	13	73	147	495	367
NEW YORK.....	406	6	6	5	25	59	158	147
ALBANY-SCHENECTADY-TROY.....	14	-	-	1	1	5	5	5
BINGHAMTON, N.Y.-PA.....	20	1	2	-	2	3	7	5
BUFFALO.....	44	-	-	1	1	10	15	17
ELMIRA.....	6	-	-	-	-	-	4	1
NASSAU-SUFFOLK.....	83	3	2	1	9	9	32	27
NEW YORK, N.Y.-N.J.....	132	1	2	1	5	15	59	49
POUGHKEEPSIE.....	6	-	-	1	-	-	3	2
ROCHESTER.....	37	-	-	1	-	8	16	11
SYRACUSE.....	25	1	-	-	1	5	8	11
UTICA-ROME.....	13	1	-	-	3	3	4	2
NEW JERSEY.....	278	3	3	3	16	38	132	83
ATLANTIC CITY.....	1	-	-	-	-	-	1	-
JERSEY CITY.....	17	-	-	-	2	2	7	6
LONG BRANCH-ASBURY PARK.....	10	-	-	-	2	2	4	2
NEW BRUNSWICK-PERTH AMBOY, SAYREVILLE.....	29	-	-	-	1	4	13	11
NEWARK.....	107	-	1	2	4	16	54	30
PATERSON-CLIFTON-PASSAIC.....	17	1	-	-	1	3	8	4
TRENTON.....	16	-	-	1	1	2	8	4
VINELAND-MILLVILLE-BRIDGETON.....	3	-	-	-	-	-	1	2
PENNSYLVANIA.....	434	4	1	5	32	50	205	137
ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J.....	26	-	-	5	3	2	13	8
ALTOONA.....	5	-	-	-	-	1	2	2
ERIE.....	26	-	-	-	4	3	14	5
HARRISBURG.....	18	-	-	-	2	2	10	4
JOHNSTOWN.....	2	-	-	-	-	-	-	2
LANCASTER.....	19	-	-	-	2	2	13	2
NORTHEAST PENNSYLVANIA.....	18	-	-	-	2	2	7	6
PHILADELPHIA, PA.-N.J.....	176	4	2	2	9	17	84	58
PITTSBURGH.....	65	-	-	-	7	10	24	24
READING.....	16	-	-	-	-	1	10	5
WILLIAMSPORT.....	6	-	-	-	1	1	1	3
YORK.....	15	1	-	2	-	3	8	1
EAST NORTH CENTRAL.....	1,795	7	14	20	79	128	780	767
OHIO.....	518	2	6	9	18	47	223	213
AKRON.....	31	-	2	-	2	-	12	15
CANTON.....	23	-	-	1	1	4	8	9
CINCINNATI, OHIO-KY-IND.....	56	1	1	-	-	-	29	25
CLEVELAND.....	142	-	2	1	2	18	60	59
COLUMBUS.....	32	-	-	1	1	2	13	15
DAYTON.....	30	-	-	1	2	7	11	9
HAMILTON-MIDDLETOWN.....	7	-	-	-	2	1	4	-
LIMA.....	20	-	-	1	1	1	9	8
LORAIN-ELYRIA.....	12	-	-	-	1	1	8	3
MANSFIELD.....	5	-	-	-	-	1	2	2
SPRINGFIELD.....	10	-	-	-	2	1	3	4
TOLEDO, OHIO-MICH.....	26	-	-	1	-	1	11	12
YOUNGSTOWN-WARREN.....	24	-	-	1	1	-	14	8
INDIANA.....	239	2	5	1	15	10	108	98
ANDERSON.....	4	-	-	-	2	-	1	1
EVANSVILLE, IND.-KY.....	13	-	-	-	1	1	4	7
FORT WAYNE.....	28	1	1	-	1	3	17	6
GARY-HAMMOND-EAST CHICAGO.....	23	-	2	-	-	-	11	10
INDIANAPOLIS.....	40	1	-	1	1	1	19	17
LAFAYETTE-WEST LAFAYETTE.....	6	-	-	-	2	-	3	1

See footnotes at end of table.

TABLE 7. NUMBER OF ESTABLISHMENTS REPORTING IN DEFENSE--ORIENTED INDUSTRIES, BY GEOGRAPHIC AREA AND RANGE OF VALUE OF GOVERNMENT SHIPMENTS: 1977--CONTINUED

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	TOTAL NUMBER OF ESTABLISHMENTS	OVER \$100 MILLION	\$50 TO \$100 MILLION	\$25 TO \$49 MILLION	\$5 TO \$24 MILLION	\$1 TO \$4 MILLION	UNDER \$1 MILLION	NONE
EAST NORTH CENTRAL--CONTINUED								
INDIANA--CONTINUED								
MUNCIE.....	5	-	-	-	1	1	3	-
SOUTH BEND.....	11	-	1	-	2	-	6	2
TERRE HAUTE.....	4	-	-	-	-	-	1	3
ILLINOIS.....	518	-	1	1	21	41	239	215
BLOOMINGTON-NORMAL.....	1	-	-	-	-	-	1	-
CHAMPAIGN-URBANA-RANTOUL.....	1	-	-	-	-	-	1	-
CHICAGO.....	370	-	-	1	13	29	175	152
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL.....	19	-	-	-	3	1	6	9
DECATUR.....	6	-	-	-	-	-	4	1
KANKAKEE.....	4	-	-	-	1	-	2	1
PEORIA.....	7	-	-	-	1	2	2	2
ROCKFORD.....	40	-	1	-	1	3	15	20
SPRINGFIELD.....	2	-	-	-	-	1	-	-
MICHIGAN.....	306	3	1	6	12	16	112	156
ANN ARBOR.....	10	-	-	-	-	1	5	4
BATTLE CREEK.....	7	-	-	-	-	1	3	2
BAY CITY.....	2	-	-	-	-	1	1	-
DETROIT.....	142	2	-	4	1	7	53	75
FLINT.....	6	-	-	-	-	-	3	3
GRAND RAPIDS.....	24	-	1	-	2	4	1	16
JACKSON.....	12	-	-	-	1	-	5	5
KALAMAZOO-PORTEGE.....	17	-	-	-	-	-	6	9
LANSING-EAST LANSING.....	15	-	-	-	-	-	8	7
MUSKEGON-MUSKEGON HEIGHTS.....	14	1	-	-	2	-	7	4
SAGINAW.....	3	-	-	-	-	-	1	2
WISCONSIN.....	214	-	1	3	13	14	98	85
APPLETON-OSHKOSH.....	9	-	-	-	-	-	3	4
GREEN BAY.....	3	-	-	-	-	-	1	2
KENOSHA.....	2	-	-	-	-	-	2	-
LA CROSSE.....	1	-	-	-	-	-	-	-
MADISON.....	4	-	-	-	-	-	-	4
MILWAUKEE.....	107	-	1	2	6	10	54	34
RACINE.....	15	-	-	-	-	1	9	5
WEST NORTH CENTRAL.....								
MINNESOTA.....	415	5	5	7	18	37	184	159
DULUTH-SUPERIOR, MINN.-WISC.....	127	1	1	3	1	16	58	47
MINNEAPOLIS-ST. PAUL, MINN.-WISC.....	4	-	-	-	-	1	-	-
ROCHESTER.....	99	1	1	3	1	11	50	32
ST. CLOUD.....	2	-	-	-	-	-	1	1
IOWA.....	2	-	-	-	-	-	-	-
CEDAR RAPIDS.....	82	1	-	2	6	4	36	33
DES MOINES.....	7	1	-	-	1	-	4	1
DUBUQUE.....	7	-	-	-	-	1	1	5
SIOUX CITY, IOWA-NEBR.....	3	-	-	-	-	-	3	1
WATERLOO-CEDAR FALLS.....	7	-	-	1	-	-	2	1
MISSOURI.....	4	-	-	-	-	-	-	-
COLUMBIA.....	106	3	2	1	7	7	47	39
KANSAS CITY, MO.-KANSAS.....	1	-	-	-	-	-	1	-
ST. LOUIS, MO.-ILL.....	32	1	1	1	2	4	16	8
SPRINGFIELD.....	69	2	1	1	7	5	30	23
NORTH DAKOTA.....	5	-	-	-	-	-	1	4
FARGO-MOORHEAD, N.D.-MINN.....	4	-	-	-	-	-	2	-
SOUTH DAKOTA.....	1	-	-	-	-	-	5	2
SIOUX FALLS.....	7	-	-	-	-	-	-	-
NEBRASKA.....	1	-	-	-	-	-	-	-
LINCOLN.....	33	-	-	-	-	1	3	11
OMAHA.....	8	-	-	-	-	-	4	4
10	-	-	-	-	-	1	5	4
KANSAS.....	10	-	-	-	-	-	-	-
TOPEKA.....	56	-	2	1	2	6	25	20
WICHITA.....	3	-	-	-	-	-	1	2
14	-	2	-	-	2	3	7	-
SOUTH ATLANTIC.....								
DELAWARE.....	554	9	7	16	43	52	219	208
WILMINGTON, DEL.-N.J.-MD.....	18	-	-	-	-	2	9	5
19	-	-	-	-	3	2	9	5
MARYLAND.....	62	2	3	6	7	9	25	10
BALTIMORE.....	35	1	3	4	4	5	12	6
DISTRICT OF COLUMBIA.....	2	-	-	-	-	-	2	-
WASHINGTON, D.C.-MD-VA.....	32	2	-	2	6	3	15	4
VIRGINIA.....	84	3	1	2	12	6	33	27
LYNCHBURG.....	7	1	-	-	1	1	4	-
NEWPORT NEWS-HAMPTON.....	3	1	-	-	-	-	1	-
NORFOLK-VIRGINIA BEACH-PORTSMOUTH.....	9	-	-	-	-	-	3	1
PETERSBURG-COLONIAL HEIGHTS-HOPEWELL.....	2	-	-	1	-	-	4	2
RICHMOND.....	11	-	-	-	-	-	2	2
ROANOKE.....	6	-	-	1	1	1	8	2
WEST VIRGINIA.....	26	-	-	1	1	4	6	14
CHARLESTON.....	3	-	-	-	-	-	3	-
HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO.....	4	-	-	-	-	-	2	2
PARKERSBURG-MARIETTA, W.VA.-OHIO.....	5	-	-	1	-	-	3	1
STEUBENVILLE-WEIRTON, W.VA.-OHIO.....	2	-	-	-	-	-	2	2
WHEELING, W.VA.-OHIO.....	4	-	-	1	-	-	1	1
NORTH CAROLINA.....	103	-	-	1	4	8	53	37
ASHEVILLE.....	8	-	-	-	-	1	6	1
BURLINGTON.....	2	-	-	1	-	1	-	-
CHARLOTTE-GASTONIA.....	15	-	-	-	-	1	7	8
FAYETTEVILLE.....	1	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 7. NUMBER OF ESTABLISHMENTS REPORTING IN DEFENSE--ORIENTED INDUSTRIES, BY GEOGRAPHIC AREA AND RANGE OF VALUE OF GOVERNMENT SHIPMENTS: 1977--CONTINUED

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	TOTAL NUMBER OF ESTABLISHMENTS	OVER \$100 MILLION	\$50 TO \$100 MILLION	\$25 TO \$49 MILLION	\$5 TO \$24 MILLION	\$1 TO \$4 MILLION	UNDER \$1 MILLION	NONE
SOUTH ATLANTIC--CONTINUED								
NORTH CAROLINA--CONTINUED								
GREENSBORO--WINSTON-SALEM--HIGH POINT...	21	-	-	-	-	3	8	10
RALEIGH-DURHAM.....	10	-	-	-	1	1	4	1
WILMINGTON.....	4	-	-	-	-	-	-	-
SOUTH CAROLINA.....	54	1	-	-	1	7	28	17
CHARLESTON.....	6	-	-	-	1	1	2	2
COLUMBIA.....	9	-	-	-	-	2	6	1
GREENVILLE-SPARTANBURG.....	15	-	-	-	-	2	8	5
GEORGIA.....	72	1	-	-	-	6	23	42
ALBANY.....	3	-	-	-	-	-	1	2
ATLANTA.....	26	1	-	-	-	1	10	14
AUGUSTA, GA.-S.C.....	5	1	-	-	-	1	1	2
COLUMBUS.....	1	-	-	-	-	-	-	-
FLORIDA.....	133	2	3	6	16	10	40	56
DAYTONA BEACH.....	3	-	-	1	1	-	-	1
FORT LAUDERDALE-HOLLYWOOD.....	17	-	-	-	4	1	7	5
GAINESVILLE.....	2	-	-	-	-	1	1	-
JACKSONVILLE.....	8	-	-	-	-	1	3	4
LAKELAND-WINTER HAVEN.....	9	-	-	-	-	-	2	7
MELBOURNE-TITUSVILLE-COCOA.....	12	-	2	1	4	1	2	2
MIAMI.....	15	-	-	-	-	1	6	8
ORLANDO.....	13	1	-	-	-	2	6	4
PENSACOLA.....	2	-	-	-	-	1	1	1
TAMPA-ST. PETERSBURG.....	30	-	1	3	2	4	5	15
WEST PALM BEACH-BOCA RATON.....	8	1	-	-	-	-	4	3
EAST SOUTH CENTRAL.....	298	4	1	3	23	15	117	135
KENTUCKY.....	69	1	-	-	4	2	34	28
LEXINGTON.....	5	-	-	-	-	1	4	1
LOUISVILLE, KY.-IND.....	22	-	1	-	-	2	11	7
OWENSBORO.....	1	-	-	-	1	-	-	-
TENNESSEE.....	97	2	1	2	7	4	41	40
CHATTANOOGA, TENN.-GA.....	12	-	-	-	1	1	8	8
KNOXVILLE.....	7	1	-	-	-	1	3	2
MEMPHIS, TENN.-ARK.-MISS.....	17	-	-	-	-	1	10	6
NASHVILLE-DAVIDSON.....	14	-	-	-	1	-	6	7
ALABAMA.....	83	-	-	1	11	7	21	43
BIRMINGHAM.....	22	-	-	1	-	2	4	15
FLORENCE.....	4	-	-	-	-	1	1	2
GADSDEN.....	4	-	-	-	-	-	-	3
HUNTSVILLE.....	15	-	-	-	5	2	4	4
MOBILE.....	9	-	-	-	-	1	5	3
MONTGOMERY.....	2	-	-	-	-	-	1	1
TUSCALOOSA.....	2	-	-	-	1	-	-	1
MISSISSIPPI.....	49	1	-	-	-	1	2	21
BILOXI-GULFPORT.....	1	-	-	-	-	-	-	1
JACKSON.....	7	-	-	-	-	1	-	6
WEST SOUTH CENTRAL.....	475	5	7	10	31	32	149	241
ARKANSAS.....	51	-	-	-	1	4	17	29
FAYETTEVILLE-SPRINGDALE.....	6	-	-	-	-	2	2	4
LITTLE ROCK-NORTH LITTLE ROCK.....	9	-	-	-	-	1	3	5
PINE BLUFF.....	2	-	-	-	-	-	2	-
LOUISIANA.....	65	-	-	1	8	3	13	40
ALEXANDRIA.....	2	-	-	-	-	2	-	6
BATON ROUGE.....	7	-	-	1	-	-	-	5
LAKE CHARLES.....	7	-	-	-	2	-	-	1
MONROE.....	1	-	-	-	-	-	-	1
NEW ORLEANS.....	17	-	-	-	4	-	5	8
SHREVEPORT.....	11	-	-	-	1	1	5	4
OKLAHOMA.....	79	-	1	1	6	3	28	40
FORT SMITH.....	4	-	-	-	-	1	1	3
OKLAHOMA CITY.....	19	-	-	-	1	1	9	9
TULSA.....	38	-	1	1	1	3	14	18
TEXAS.....	280	5	6	8	16	22	91	132
ABILENE.....	3	-	-	1	-	1	-	1
AMARILLO.....	1	-	-	-	-	-	1	-
AUSTIN.....	3	-	-	1	-	-	1	1
BEAUMONT-PORT ARTHUR-ORANGE.....	21	-	1	1	1	1	7	11
BROWNSVILLE-HARLINGEN-SAN BENITO.....	3	-	-	-	-	-	1	2
BRYAN-COLLEGE STATION.....	2	-	-	-	-	-	-	2
CORPUS CHRISTI.....	6	-	1	1	1	1	1	2
DALLAS-FORT WORTH.....	68	4	2	1	1	6	7	23
EL PASO.....	5	-	-	-	1	-	2	2
GALVESTON-TEXAS CITY.....	7	-	-	-	1	-	3	3
HOUSTON.....	85	-	1	-	3	3	3	51
LAREDO.....	1	-	-	-	-	-	1	1
LUBBOCK.....	4	1	-	-	-	-	-	2
ODESSA.....	4	-	-	-	-	-	1	3
SAN ANGELO.....	2	-	-	-	-	-	1	1
SAN ANTONIO.....	11	-	-	-	2	1	5	13
SHERMAN-DENISON.....	3	-	-	-	-	-	-	2
TEXARKANA, TEXAS-ARK.....	1	-	-	1	-	-	-	1
TYLER.....	3	-	-	-	-	1	-	3
WACO.....	2	-	-	-	-	1	-	1
WICHITA FALLS.....	5	-	-	-	-	-	3	2
MOUNTAIN.....	152	4	4	5	18	18	52	51
MONTANA.....	4	-	-	-	-	1	3	-
BILLINGS.....	2	-	-	-	-	2	-	-
GREAT FALLS.....	1	-	-	-	-	1	-	-

See footnotes at end of table.

TABLE 7. NUMBER OF ESTABLISHMENTS REPORTING IN DEFENSE--ORIENTED INDUSTRIES, BY GEOGRAPHIC AREA AND RANGE OF VALUE OF GOVERNMENT SHIPMENTS: 1977--CONTINUED

DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹	TOTAL NUMBER OF ESTABLISHMENTS	OVER \$100 MILLION	\$50 TO \$100 MILLION	\$25 TO \$49 MILLION	\$5 TO \$24 MILLION	\$1 TO \$4 MILLION	UNDER \$1 MILLION	NONE
MOUNTAIN DIVISION--CONTINUED								
IDAHODOTD.....	7	-	-	-	-	-	2	5
BOISE CITY.....	1	-	-	-	-	-	-	1
WYOMING.....	7	-	-	-	-	2	4	1
COLORADO.....	50	1	-	1	7	5	17	19
COLORADO SPRINGS.....	5	-	-	-	1	1	3	-
DENVER-BOULDER.....	37	1	-	1	4	4	10	17
PUEBLO.....	2	-	-	-	-	-	2	-
NEW MEXICO.....	10	-	-	-	2	1	1	6
ALBUQUERQUE.....	7	-	-	-	2	1	1	3
ARIZONADOTD.....	42	2	3	2	5	4	16	10
PHOENIX.....	32	1	3	2	5	1	12	8
TUCSON.....	3	1	-	-	-	2	-	-
UTAH.....	30	1	1	2	3	5	7	11
PROVO-OREM.....	3	-	-	-	-	-	2	1
SALT LAKE CITY-OGDEN.....	24	-	1	2	3	5	4	9
NEVADADOTD.....	2	-	-	-	1	-	1	-
LAS VEGAS.....	1	-	-	-	1	-	-	-
RENO.....	1	-	-	-	-	-	1	-
PACIFIC.....	864	28	24	28	110	127	306	241
WASHINGTON.....	66	3	-	1	10	6	30	16
RICHLAND-KENNEWICK.....	2	-	-	-	-	-	-	2
SEATTLE-EVERETT.....	42	3	-	1	6	4	20	8
SPOKANE.....	9	-	-	-	-	-	4	5
TACOMA.....	5	-	-	-	1	-	3	1
OREGON.....	38	-	2	1	1	9	16	9
PORTRLAND, ORE.-WASH.....	28	-	1	-	1	7	14	5
SALEM.....	1	-	-	-	-	-	-	1
CALIFORNIA.....	753	25	21	26	96	112	260	213
ANAHEIM-SANTA ANA-GARDEN GROVE.....	94	4	2	3	14	14	31	26
BAKERSFIELD.....	7	-	-	-	1	-	3	3
FRESNO.....	5	-	-	-	-	-	-	4
LOS ANGELES-LONG BEACH.....	358	15	8	13	45	57	124	96
MODESTO.....	2	-	-	-	1	-	-	1
OXNARD-SIMI VALLEY-VENTURA.....	12	-	-	2	4	-	4	-
RIVERSIDE-SAN BERNARDINO-ONTARIO.....	24	-	1	-	2	3	6	12
SACRAMENTO.....	7	-	2	-	-	-	1	4
SALINAS-SEASIDE-MONTEREY.....	3	-	-	-	-	-	2	1
SAN DIEGO.....	49	2	2	2	9	10	16	8
SAN FRANCISCO-OAKLAND.....	60	1	1	2	6	6	26	18
SAN JOSE.....	92	3	3	4	8	17	32	25
SANTA BARBARA-SANTA MARIA-LOMPOC.....	10	-	-	-	3	-	3	4
SANTA CRUZ.....	2	-	-	-	-	-	1	1
SANTA ROSA.....	4	-	-	-	2	-	1	1
STOCKTON.....	6	-	-	-	-	-	4	2
VALLEJO-FAIRFIELD-NAPA.....	2	-	1	-	-	-	1	-
ALASKA.....	2	-	-	-	1	-	-	1
HAWAII.....	5	-	1	-	2	-	-	2
HONOLULU.....	5	-	1	-	2	-	-	2

Note: Distribution is based upon uninflated, reported government shipments data. The "none" category includes delinquent reporters on the survey.

- Represents zero.

¹Standard Metropolitan Statistical Areas in more than one state are listed only one time under their principal state. This total includes the activities in all states for that SMSA. Selected SMSA's, usually small in government shipments, have been excluded from this table. See appendix A for a definition of the SMSA's.

TABLE 8. EMPLOYMENT, COSTS, VALUE ADDED, AND VALUE OF SHIPMENTS, BY INDUSTRY AND GEOGRAPHIC AREA FOR DEPARTMENT OF DEFENSE FACILITIES: 1977

ITEM	ALL EMPLOYEES (WAGE BOARD AND GRADED)		PRODUCTION WORKERS (WAGE BOARD)			COSTS	
	NUMBER (1,000)	PAYROLL (MILLION DOLLARS)	NUMBER (1,000)	HOURS (MILLIONS)	WAGES (MILLION DOLLARS)	MATERIALS, SUPPLIES AND PARTS USED (MILLION DOLLARS)	CONTRACTUAL SERVICES AND OTHER COSTS (MILLION DOLLARS)
UNITED STATES, TOTAL.....	234.2	4382.2	139.1	256.9	2468.7	1,639.0	2526.2
INDUSTRY GROUP							
23 APPAREL AND OTHER TEXTILE PRODUCTS.....	1.4	17.2	1.3	2.1	15.5	1.7	1.6
28 CHEMICALS AND ALLIED PRODUCTS.....	3.4	62.0	1.4	2.9	26.1	24.6	36.5
281 INDUSTRIAL CHEMICALS.....	0.5	10.1	0.2	0.4	3.6	1.8	3.0
289 MISCELLANEOUS CHEMICAL PRODUCTS.....	1.0	16.1	0.5	0.9	8.7	3.7	5.8
348 SMALL ARMS AMMUNITION; ORDNANCE AND ACCESSORIES.....	30.9	561.2	14.8	34.0	249.3	146.4	287.8
366 COMMUNICATIONS EQUIPMENT.....	12.6	272.5	4.8	8.8	95.7	63.1	207.9
37 TRANSPORTATION EQUIPMENT.....	130.2	2372.9	91.9	164.9	1629.3	970.2	912.7
372 AIRCRAFT AND PARTS.....	48.8	903.1	34.4	61.2	613.2	568.9	513.2
373 SHIP AND BOAT BUILDING AND REPAIRING.....	66.0	1170.4	50.4	90.8	901.0	501.7	259.2
376 SPACE VEHICLES, MISSILES, ETC.....	13.6	271.0	5.6	10.4	91.8	91.3	150.0
379 MISCELLANEOUS TRANSPORTATION.....	1.8	28.4	1.5	2.5	23.3	8.3	10.3
--- RESEARCH AND DEVELOPMENT.....	52.9	1051.6	23.1	40.9	426.6	384.6	1073.0
GEOGRAPHIC DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA¹							
NEW ENGLAND DIVISION.....	11.8	215.9	5.6	10.0	87.5	48.5	160.3
NEW HAMPSHIRE.....	7.4	119.6	5.1	9.2	80.1	26.7	25.3
MASSACHUSETTS.....	1.2	28.4	0.2	0.3	2.9	3.6	36.6
BOSTON SMSA.....	1.2	28.4	0.2	0.3	2.9	3.6	36.6
RHODE ISLAND.....	3.2	67.9	0.3	0.5	4.6	18.1	98.4
MIDDLE ATLANTIC DIVISION.....	28.5	557.7	15.1	27.3	261.2	174.1	388.6
NEW YORK.....	3.8	67.6	1.7	3.5	27.5	52.8	7.4
ALBANY-SCHENECTADY-TROY SMSA.....	2.7	44.9	1.6	3.4	26.3	48.2	6.6
NEW JERSEY.....	6.9	151.4	1.6	2.9	31.1	18.5	179.2
NEWARK SMSA.....	5.6	128.0	0.9	1.5	19.2	12.1	167.2
PENNSYLVANIA.....	17.8	338.8	11.9	21.0	202.6	102.9	202.0
PHILADELPHIA, PA.-N.J. SMSA.....	13.4	245.8	7.7	13.7	126.1	56.8	184.8
EAST NORTH CENTRAL DIVISION.....	13.6	254.7	6.4	11.2	105.8	90.8	252.3
OHIO.....	4.2	92.3	1.3	2.4	24.4	15.2	200.5
DAYTON SMSA.....	2.5	59.9	0.2	.4	3.1	2.8	196.9
INDIANA.....	6.6	107.4	3.2	5.6	49.4	51.5	38.7
INDIANAPOLIS SMSA.....	2.5	46.6	1.1	2.0	20.6	30.5	15.4
ILLINOIS.....	2.9	55.0	1.8	3.2	32.0	24.1	13.0
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL., SMSA.....	2.9	55.0	1.8	3.2	32.0	24.1	13.0
SOUTH ATLANTIC DIVISION.....	63.5	1173.1	36.0	65.7	617.2	462.1	642.8
MARYLAND.....	8.9	185.8	2.8	5.3	51.6	90.7	143.9
DISTRICT OF COLUMBIA.....	4.8	109.2	0.7	1.5	13.6	18.2	111.4
VIRGINIA.....	22.7	385.7	13.9	25.3	217.3	121.4	191.5
NORFOLK-VIRGINIA BEACH-PORTSMOUTH, SMSA.....	15.3	241.7	11.9	21.3	183.5	101.6	66.1
NORTH CAROLINA.....	2.5	42.0	1.9	3.4	32.1	38.8	9.3
SOUTH CAROLINA.....	8.1	134.6	6.1	11.1	101.2	33.1	34.0
GEORGIA.....	6.4	124.8	5.2	9.0	102.3	72.8	12.8
ATLANTA SMSA.....	-	-	-	-	-	-	-
MACON SMSA.....	6.4	124.8	5.2	9.0	102.3	72.8	12.8
FLORIDA.....	10.1	191.0	5.4	10.1	99.1	86.9	139.9
JACKSONVILLE SMSA.....	2.8	51.6	2.0	3.7	38.4	36.7	15.5
PENSACOLA SMSA.....	3.4	60.6	2.5	4.5	44.8	28.1	19.5
EAST SOUTH CENTRAL DIVISION.....	8.2	164.3	4.4	8.2	71.2	78.6	137.8
KENTUCKY.....	2.4	39.9	1.6	3.4	26.7	11.1	6.5
LEXINGTON SMSA.....	-	-	-	-	-	-	-
LOUISVILLE, KY-IND. SMSA.....	2.4	39.9	1.6	3.4	26.7	11.1	6.5
TENNESSEE.....	0.2	3.3	(z)	(z)	0.1	7.0	97.1
ALABAMA.....	5.4	116.7	2.8	4.8	44.4	58.3	20.3
HUNTSVILLE SMSA.....	2.4	68.3	(z)	(z)	0.4	3.4	12.3
MISSISSIPPI.....	0.2	4.5	(z)	(z)	(z)	2.1	13.9

See footnotes at end of table.

TABLE 8. EMPLOYMENT, COSTS, VALUE ADDED, AND VALUE OF SHIPMENTS, BY INDUSTRY AND GEOGRAPHIC AREA FOR DEPARTMENT OF DEFENSE FACILITIES: 1977--CONTINUED

ITEM	VALUE OF SHIPMENTS OR RECEIPTS FOR SERVICE BY TYPE OF ACTIVITY						VALUE ADDED BY MANUFACTURE	
	MANUFAC-TURE AND ASSEMBLY (MILLION DOLLARS)	CONSTRUCT-ION AND CONVERSION (MILLION DOLLARS)	RESEARCH AND DEVELOP-MENT (MILLION DOLLARS)	OTHER BILLINGS (MILLION DOLLARS)	TOTAL BILLINGS (MILLION DOLLARS)	TOTAL REVENUE (MILLION DOLLARS)	A (MILLION DOLLARS)	B (MILLION DOLLARS)
UNITED STATES, TOTAL.....	463.6	151.7	2335.2	5,100.6	8,051.1	8325.5	6686.7	4160.5
INDUSTRY GROUP								
23 APPAREL AND OTHER TEXTILE PRODUCTS.....	19.2	-	-	-	19.2	21.3	19.6	17.9
28 CHEMICALS AND ALLIED PRODUCTS.....	40.7	-	6.5	80.7	127.9	128.0	103.4	66.9
281 INDUSTRIAL CHEMICALS.....	0.3	-	0.5	14.1	14.9	14.9	13.1	10.2
289 MISCELLANEOUS CHEMICAL PRODUCTS.....	10.9	-	-	15.2	26.1	26.0	22.3	16.5
348 SMALL ARMS AMMUNITION; ORDNANCE AND ACCESSORIES..	165.2	8.4	346.2	544.7	1,064.6	1045.4	899.0	611.3
366 COMMUNICATIONS EQUIPMENT.....	96.7	-	121.5	334.8	553.0	549.8	486.6	278.7
37 TRANSPORTATION EQUIPMENT.....	57.9	141.2	521.9	3172.9	3894.0	4305.3	3335.1	2422.4
372 AIRCRAFT AND PARTS.....	47.7	8.6	182.4	1,606.8	1,845.6	1,917.4	1,348.6	835.4
373 SHIP AND BOAT BUILDING AND REPAIRING.....	4.4	109.4	39.0	1,320.2	1,472.9	1,814.6	1,512.9	1,273.7
376 SPACE VEHICLES, MISSILES, ETC.....	5.6	18.2	300.5	204.3	528.6	526.3	434.9	285.0
379 MISCELLANEOUS TRANSPORTATION.....	0.2	5.1	-	41.6	46.9	46.9	38.7	28.4
--- RESEARCH AND DEVELOPMENT.....	10.7	2.0	1334.0	948.0	2,294.6	2170.8	1786.1	713.2
GEOGRAPHIC DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA ¹								
NEW ENGLAND DIVISION.....	3.5	78.7	170.1	136.5	388.8	446.2	397.7	237.4
NEW HAMPSHIRE.....	0.1	78.7	0.5	45.7	125.0	185.2	158.5	133.2
MASSACHUSETTS.....	3.4	-	59.6	7.0	70.0	69.4	65.8	29.2
BOSTON SMSA.....	3.4	-	59.6	7.0	70.0	69.4	65.8	29.2
RHODE ISLAND.....	-	-	110.0	83.8	193.8	191.5	173.4	75.1
MIDDLE ATLANTIC DIVISION.....	142.9	3.3	273.7	729.8	1,149.6	1155.5	981.3	592.7
NEW YORK.....	73.2	-	27.9	24.9	126.0	133.2	80.4	73.0
ALBANY-SCHENECTADY-TROY SMSA.....	73.2	-	5.1	19.5	97.7	105.0	56.8	50.2
NEW JERSEY.....	5.5	-	101.2	234.3	341.0	348.6	330.1	151.0
NEWARK SMSA.....	4.8	-	82.3	211.7	298.9	304.9	292.8	125.5
PENNSYLVANIA.....	64.2	3.3	144.6	470.5	682.6	673.7	570.8	368.8
PHILADELPHIA, PA.-N.J. SMSA.....	45.4	1.4	144.6	320.5	511.9	504.7	447.9	263.1
EAST NORTH CENTRAL DIVISION.....	131.0	2.9	201.5	237.3	572.6	581.7	490.9	238.6
OHIO.....	0.4	0.1	177.6	104.6	282.7	287.8	272.6	72.1
DAYTON SMSA.....	0.3	0.1	177.6	61.4	239.4	239.4	236.6	39.7
INDIANA.....	83.3	-	17.7	89.5	190.5	201.8	150.3	111.6
INDIANAPOLIS SMSA.....	61.2	-	14.4	9.4	85.0	90.9	60.4	45.0
ILLINOIS.....	47.2	2.8	6.2	43.1	99.4	92.0	68.0	54.9
DAVENPORT-ROCK ISLAND-MULINE, IOWA-ILL. SMSA.....	47.2	2.8	6.2	43.1	99.4	92.0	68.0	54.9
SOUTH ATLANTIC DIVISION.....	48.8	16.9	786.3	1289.1	2141.2	2266.4	1804.3	1161.5
MARYLAND.....	37.6	-	213.8	210.1	461.5	457.0	366.3	222.3
DISTRICT OF COLUMBIA.....	-	-	227.8	4.7	232.4	234.2	216.0	104.6
VIRGINIA.....	7.6	16.9	248.9	445.9	719.3	727.4	606.0	414.4
NORFOLK-VIRGINIA BEACH-PORTSMOUTH, SMSA.....	4.7	16.9	1.3	390.4	413.3	418.9	317.3	251.2
NORTH CAROLINA.....	0.7	-	2.8	73.6	77.0	83.8	45.0	35.7
SOUTH CAROLINA.....	0.6	-	-	149.2	149.9	221.4	188.3	154.3
GEORGIA.....	-	-	-	185.9	185.9	213.5	140.7	127.9
ATLANTA SMSA.....	-	-	-	-	-	-	-	-
MACON SMSA.....	-	-	-	185.9	185.9	213.5	140.7	127.9
FLORIDA.....	2.4	-	93.2	219.7	315.3	329.1	242.2	102.3
JACKSONVILLE SMSA.....	1.7	-	-	99.4	101.1	107.2	70.5	55.0
PENSACOLA SMSA.....	0.7	-	-	103.6	104.4	112.7	84.7	65.2
EAST SOUTH CENTRAL DIVISION.....	24.4	18.2	130.5	136.8	309.8	302.6	224.0	86.2
KENTUCKY.....	22.7	-	0.1	44.5	67.4	60.2	49.0	42.5
LEXINGTON SMSA.....	-	-	-	-	-	-	-	-
LOUISVILLE, KY-IND. SMSA.....	22.7	-	0.1	44.5	67.4	60.2	49.0	42.5
TENNESSEE.....	-	-	25.3	-	25.3	25.3	18.3	-78.8
ALABAMA.....	1.6	18.2	84.5	92.2	196.6	196.6	138.3	118.0
HUNTSVILLE SMSA.....	-	-	84.5	-	84.5	84.5	81.1	68.8
MISSISSIPPI.....	-	-	20.6	-	20.6	20.6	18.4	4.5

See footnote at end of table.

TABLE 8. EMPLOYMENT, COSTS, VALUE ADDED, AND VALUE OF SHIPMENTS, BY INDUSTRY AND GEOGRAPHIC AREA FOR DEPARTMENT OF DEFENSE FACILITIES: 1977--CONTINUED

ITEM	ALL EMPLOYEES (WAGE BOARD AND GRADED)		PRODUCTION WORKERS (WAGE BOARD)			COSTS	
	NUMBER (1,000)	PAYROLL (MILLION DOLLARS)	NUMBER (1,000)	HOURS (MILLIONS)	WAGES (MILLION DOLLARS)	MATERIALS, SUPPLIES AND PARTS USED (MILLION DOLLARS)	CONTRACTUAL SERVICES AND OTHER COSTS (MILLION DOLLARS)
GEOGRAPHIC DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA¹--CON.							
WEST SOUTH CENTRAL DIVISION.....	24.2	428.1	18.5	38.5	324.8	287.1	151.1
ARKANSAS.....	1.0	16.1	0.5	0.9	8.7	3.7	5.8
OKLAHOMA.....	9.6	169.2	7.5	19.4	132.0	132.7	101.9
OKLAHOMA CITY SMSA.....	8.0	145.4	6.3	10.9	116.0	129.6	91.2
TEXAS.....	13.6	242.8	10.5	18.1	184.2	150.6	43.3
CORPUS CHRISTI SMSA.....	-	-	-	-	-	-	-
SAN ANTONIO SMSA.....	8.2	140.7	6.2	10.6	105.0	78.4	20.0
TEXARKANA, TEX.-ARK. SMSA.....	2.6	43.7	2.1	3.6	36.9	20.4	15.6
MOUNTAIN DIVISION.....	12.2	202.8	8.3	14.5	133.6	74.4	185.6
COLORADO.....	0.9	18.4	0.5	0.9	10.0	5.0	4.3
NEW MEXICO.....	0.5	11.0	(2)	(2)	0.1	3.7	135.5
UTAH.....	9.3	152.1	6.8	11.9	109.1	61.3	41.2
NEVADA.....	1.5	21.3	1.0	1.7	14.4	4.4	4.5
PACIFIC DIVISION.....	72.2	1385.5	44.8	81.4	867.4	423.4	607.7
WASHINGTON.....	13.0	240.2	9.2	17.2	174.9	71.3	44.3
CALIFORNIA.....	53.8	1037.8	31.4	56.7	608.5	323.7	542.0
BAKERSFIELD SMSA.....	6.6	129.7	1.6	2.8	28.6	36.7	162.2
LOS ANGELES-LONG BEACH SMSA.....	7.4	129.6	6.0	10.6	106.4	42.8	33.5
SAN DIEGO SMSA.....	9.1	173.6	4.7	8.4	80.8	80.0	167.3
SAN FRANCISCO-OAKLAND SMSA.....	5.8	116.7	4.2	7.8	87.7	49.1	32.1
VALLEJO-NAPA SMSA.....	10.1	209.7	7.7	14.1	165.2	32.4	31.5
HAWAII.....	5.5	107.5	4.2	7.6	84.0	28.4	21.5

See footnotes at end of table.

TABLE 8. EMPLOYMENT, COSTS, VALUE ADDED, AND VALUE OF SHIPMENTS, BY INDUSTRY AND GEOGRAPHIC AREA FOR DEPARTMENT OF DEFENSE FACILITIES: 1977--CONTINUED

ITEM	VALUE OF SHIPMENTS OR RECEIPTS FOR SERVICE BY TYPE OF ACTIVITY						VALUE ADDED BY MANUFACTURE	
	MANUFAC-TURE AND ASSEMBLY (MILLION DOLLARS)	CONSTRUCT-ION AND CONVERSION (MILLION DOLLARS)	RESEARCH AND DEVELOP-MENT (MILLION DOLLARS)	OTHER BILLINGS (MILLION DOLLARS)	TOTAL BILLINGS (MILLION DOLLARS)	TOTAL REVENUE (MILLION DOLLARS)	A (MILLION DOLLARS)	B (MILLION DOLLARS)
GEOGRAPHIC DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA¹								
WEST SOUTH CENTRAL DIVISION.....	50.7	8.5	18.5	778.6	856.3	840.2	553.1	402.1
ARKANSAS.....	10.9	-	-	15.2	26.1	26.0	22.3	16.5
OKLAHOMA.....	25.4	8.5	(Z)	373.5	407.4	396.5	263.8	161.9
OKLAHOMA CITY SMSA.....	4.5	8.5	-	345.0	358.0	352.4	222.9	131.7
TEXAS.....	14.3	-	18.5	389.9	422.8	417.7	267.1	223.7
CORPUS CHRISTI SMSA.....	-	-	-	-	-	-	-	-
SAN ANTONIO SMSA.....	-	-	18.5	198.6	217.2	217.2	138.8	118.7
TEXARKANA, TEX.-ARK. SMSA.....	14.3	-	-	70.3	84.7	79.7	59.3	43.7
MOUNTAIN DIVISION.....	14.0	10.7	164.7	269.8	459.2	480.0	405.6	220.0
COLORADO.....	0.5	5.6	1.2	20.4	27.7	27.7	22.7	18.4
NEW MEXICO.....	-	-	150.2	-	150.2	150.2	146.6	11.0
UTAH.....	6.2	5.1	13.2	219.0	243.6	264.4	203.1	161.9
NEVADA.....	7.3	-	-	30.3	37.7	37.7	33.3	28.7
PACIFIC DIVISION.....	48.3	12.4	590.0	1522.8	2173.5	2253.0	1829.6	1222.0
WASHINGTON.....	21.8	3.0	5.0	326.1	357.9	372.9	301.6	257.3
CALIFORNIA.....	26.5	9.4	584.9	1096.3	1717.1	1711.5	1387.8	845.8
BAKERSFIELD SMSA.....	-	-	232.9	24.2	257.1	253.6	216.9	54.7
LOS ANGELES-LONG BEACH SMSA.....	-	9.2	0.4	140.9	150.5	220.2	177.4	143.9
SAN DIEGO SMSA.....	12.4	-	163.7	238.8	435.0	441.1	361.1	193.8
SAN FRANCISCO-OAKLAND SMSA.....	9.5	0.2	(Z)	182.1	191.7	194.7	145.6	113.6
VALLEJO-NAPA SMSA.....	0.3	-	33.6	181.4	215.3	282.3	249.9	218.4
HAWAII.....	-	0.1	(Z)	98.5	98.6	168.7	140.2	118.8

Note: See appendix B, explanation of terms for MA-171 survey. Detail may not add to totals due to independent rounding. Value added (A) represents total revenue less cost of materials, while value added (B) is total revenue less cost of materials, contractual services and other costs.

- Represents zero. (Z) Less than .05.

¹See appendix A for a description of each SMSA.

Table 9. EMPLOYMENT, COSTS, VALUE ADDED, AND VALUE OF SHIPMENTS, BY INDUSTRY AND GEOGRAPHIC AREA
FOR DEPARTMENT OF DEFENSE FACILITIES: 1976

Item	All employees (wage board and graded)		Production workers (wage board)			Costs	
	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies and parts used (million dollars)	Contractual services and other costs (million dollars)
United States, total.....	239.7	4,200.3	138.4	249.9	2,270.8	1,562.9	2,364.9
INDUSTRY GROUP							
23 Apparel and other textile products.....	1.5	16.8	1.4	2.3	15.2	1.6	1.5
28 Chemicals and allied products.....	5.5	99.8	1.7	3.3	29.1	30.6	62.5
281 Industrial chemicals.....	3.5	66.7	1.0	1.8	16.9	14.9	42.6
289 Miscellaneous chemical products.....	0.9	14.7	0.5	0.8	7.9	7.5	3.5
348 Small arms ammunition; ordnance and accessories.....	30.6	529.6	14.6	28.5	238.9	147.2	244.6
366 Communications equipment.....	15.5	292.6	6.0	10.5	97.8	75.7	89.6
37 Transportation equipment.....	132.9	2,255.3	90.0	161.9	1,473.6	933.0	979.4
372 Aircraft and parts.....	49.8	831.9	34.8	62.6	561.0	469.3	618.5
373 Ship and boat building and repairing.....	64.0	1,071.3	48.5	87.4	814.8	371.1	196.4
376 Space vehicles, missiles, etc.....	17.1	327.0	5.1	9.2	77.0	84.7	156.7
379 Miscellaneous transportation.....	1.9	25.1	1.6	2.7	20.8	7.9	7.9
-- Research and development.....	51.1	960.9	23.0	40.6	391.8	342.9	983.0
GEOGRAPHIC DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA¹							
New England division.....	11.5	198.0	5.2	9.2	74.9	47.3	124.0
New Hampshire.....	7.0	105.3	4.7	8.4	67.8	26.5	23.1
Massachusetts.....	1.3	28.2	0.1	0.3	2.4	4.2	22.5
Rhode Island.....	3.2	64.4	0.3	0.5	4.6	16.6	78.5
Middle Atlantic division.....	31.4	557.1	15.1	26.4	230.1	163.8	346.2
New York.....	3.8	67.7	1.7	3.0	25.7	34.2	5.4
Albany-Schenectady-Troy SMSA.....	2.7	45.3	1.6	2.8	24.5	32.0	4.3
New Jersey.....	7.7	160.5	1.2	2.2	21.1	35.0	137.9
Newark SMSA.....	4.9	102.4	1.0	1.8	17.9	12.3	23.5
Pennsylvania.....	19.9	328.8	12.2	21.3	183.3	94.7	202.9
Philadelphia, Pa.-N.J. SMSA.....	15.0	253.0	8.2	14.4	122.3	62.5	187.0
East North Central division.....	14.0	251.6	6.4	12.1	105.3	84.9	312.9
Ohio.....	4.3	88.5	1.4	2.4	22.7	15.4	267.4
Dayton SMSA.....	2.5	58.8	0.2	0.3	3.4	5.2	264.4
Indiana.....	6.2	102.8	3.0	6.1	48.2	45.1	27.5
Indianapolis SMSA.....	2.5	44.3	1.2	2.1	19.8	27.3	13.6
Illinois.....	3.5	60.2	2.0	3.7	34.3	24.4	18.0
South Atlantic division.....	64.9	1,131.1	35.5	65.3	566.8	480.6	568.4
Maryland.....	16.5	317.0	4.1	7.7	71.2	76.9	225.6
District of Columbia.....	5.0	108.3	0.8	1.5	14.0	18.1	102.1
Virginia.....	16.9	254.7	12.5	23.1	182.2	163.3	77.0
Norfolk-Virginia Beach-Portsmouth, SMSA.....	14.7	220.8	11.4	20.8	167.0	157.8	68.0
North Carolina.....	2.4	36.7	1.9	3.4	27.5	33.4	8.2
South Carolina.....	7.1	115.6	5.4	9.7	87.6	34.5	17.2
Georgia.....	6.6	113.7	5.4	9.4	93.2	69.5	10.4
Florida.....	10.4	185.1	5.5	10.5	90.9	84.9	128.0
Jacksonville SMSA.....	2.7	45.6	1.9	3.5	32.7	29.5	13.5
Pensacola SMSA.....	3.4	54.1	2.5	4.6	39.9	24.1	17.0
East South Central division.....	14.0	260.4	5.5	10.1	82.3	76.7	147.7
Kentucky.....	3.5	54.5	2.5	5.0	37.3	15.9	8.9
Lexington SMSA.....	1.0	14.8	0.8	1.4	10.9	3.7	1.4
Louisville, Ky.-Ind. SMSA.....	2.5	39.7	1.7	3.6	26.4	12.2	7.5
Tennessee.....	0.2	3.1	(Z)	(Z)	0.1	5.5	95.1
Alabama.....	10.2	200.8	3.0	5.1	44.9	54.6	38.5
Huntsville SMSA.....	7.6	162.1	0.6	1.1	10.0	14.0	33.0
West South Central division.....	23.7	394.5	18.5	31.8	301.5	255.3	194.0
Arkansas.....	0.9	14.7	0.5	0.8	7.9	7.5	3.5
Oklahoma.....	9.1	153.1	7.2	12.5	120.0	128.8	150.4
Oklahoma City SMSA.....	8.3	140.0	6.5	11.2	110.6	126.8	146.7
Texas.....	13.7	226.7	10.8	18.4	173.7	119.1	40.1
San Antonio SMSA.....	8.5	138.3	6.4	10.8	104.3	67.4	20.9
Texarkana, Tex.-Ark. SMSA.....	2.3	33.7	2.1	3.5	30.1	13.0	9.5
Mountain division.....	12.4	193.4	8.6	15.2	128.8	72.1	221.9
Colorado.....	1.7	29.7	1.1	1.9	19.7	7.7	9.1
New Mexico.....	0.5	10.3	-	-	0.1	3.7	176.8
Utah.....	9.5	142.4	7.0	12.3	101.3	57.8	33.1
Nevada.....	0.8	11.0	0.5	1.1	7.7	2.9	2.9
Pacific division.....	67.8	1,214.2	43.7	79.7	781.1	382.2	449.8
Washington.....	12.8	220.2	9.0	16.7	157.9	70.5	41.4
California.....	49.8	897.6	30.7	55.7	548.4	284.0	395.9
Bakersfield SMSA.....	6.7	126.1	1.7	2.9	28.2	43.6	149.7
Los Angeles-Long Beach SMSA.....	7.3	121.2	5.9	10.4	98.1	42.0	25.0
San Diego SMSA.....	9.5	164.5	4.9	9.0	75.8	65.9	121.4
San Francisco-Oakland SMSA.....	5.9	109.2	4.3	8.0	80.7	43.6	29.9
Vallejo-Napa.....	10.0	189.8	7.5	13.6	147.8	36.1	31.4
Hawaii.....	5.2	96.4	4.0	7.2	74.9	27.6	12.5

See footnotes at end of table.

Table 9. EMPLOYMENT, COSTS, VALUE ADDED, AND VALUE OF SHIPMENTS, BY INDUSTRY AND GEOGRAPHIC AREA FOR DEPARTMENT OF DEFENSE FACILITIES: 1976—Continued

Item	Value of shipments or receipts for service by type of activity						Value added by manufacture	
	Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other billings (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	A (million dollars)	B (million dollars)
United States, total.....	409.3	304.7	2,511.6	4,781.7	8,007.3	7,951.2	6,388.3	4,023.4
INDUSTRY GROUP								
23 Apparel and other textile products.....	20.6	-	-	-	20.7	19.9	18.3	16.8
28 Chemicals and allied products.....	31.8	-	47.4	114.7	193.9	197.8	167.2	104.7
281 Industrial chemicals.....	14.2	-	42.8	67.3	124.3	124.6	109.7	67.1
289 Miscellaneous chemical products.....	12.7	-	-	12.5	25.2	25.5	18.0	14.5
348 Small arms ammunition; ordnance and accessories.....	117.4	17.8	336.8	495.5	967.5	951.7	804.4	559.8
366 Communications equipment.....	101.7	0.6	157.6	213.1	473.0	457.9	382.2	292.6
37 Transportation equipment.....	61.7	284.3	583.4	3,198.7	4,128.0	4,103.0	3,170.0	2,190.6
372 Aircraft and parts.....	49.1	10.3	273.8	1,482.7	1,815.8	1,802.2	1,332.9	714.4
373 Ship and boat building and repairing.....	8.0	268.7	34.0	1,368.7	1,679.3	1,668.7	1,297.7	1,101.3
376 Space vehicles, missiles, etc.....	4.5	4.2	275.6	307.7	592.0	591.1	506.4	349.8
379 Miscellaneous transportation.....	0.2	1.1	-	39.7	40.9	40.9	33.0	25.1
--- Research and development.....	9.5	2.0	1,380.7	746.1	2,138.2	2,139.2	1,796.3	813.3
GEOGRAPHIC DIVISION, STATE, AND STANDARD METROPOLITAN STATISTICAL AREA¹								
New England division.....	2.0	63.7	181.7	120.3	367.7	382.0	334.7	210.6
New Hampshire.....	0.1	63.7	0.7	81.1	145.6	162.9	136.4	113.3
Massachusetts.....	1.9	-	48.9	4.4	55.2	55.3	51.2	28.7
Rhode Island.....	-	-	132.1	34.8	166.9	163.7	147.1	68.7
Middle Atlantic division.....	136.5	9.8	489.9	458.0	1,094.2	1,116.0	952.2	606.0
New York.....	66.7	-	29.3	18.4	114.4	110.1	75.9	70.5
Albany-Schenectady-Troy SMSA.....	66.7	-	5.8	13.6	86.1	81.8	49.8	45.5
New Jersey.....	7.5	-	289.2	73.6	370.3	369.8	334.8	197.0
Newark SMSA.....	7.5	-	51.7	73.6	132.8	132.3	120.0	96.5
Pennsylvania.....	62.4	9.8	171.4	365.9	609.5	636.1	541.5	338.5
Philadelphia, Pa.-N.J. SMSA.....	51.4	7.8	171.4	251.6	482.3	510.6	448.1	261.1
East North Central division.....	132.9	1.4	308.0	228.7	670.9	654.8	570.0	257.1
Ohio.....	0.7	0.1	271.8	96.1	368.7	371.2	355.9	88.5
Dayton SMSA.....	0.2	0.1	271.8	56.4	328.4	328.4	323.2	58.8
Indiana.....	96.6	-	19.3	88.9	204.8	181.4	136.4	108.9
Indianapolis SMSA.....	64.1	-	16.3	10.4	90.7	85.7	58.4	44.8
Illinois.....	35.6	1.4	16.9	43.7	97.5	102.1	77.7	59.7
South Atlantic division.....	43.6	31.7	771.0	1,135.3	1,981.5	2,025.9	1,545.3	976.9
Maryland.....	26.5	-	468.7	144.9	640.1	640.7	563.8	338.3
District of Columbia.....	-	-	213.9	13.2	227.0	228.1	210.0	107.8
Virginia.....	14.6	23.0	5.2	392.9	435.7	436.6	273.3	196.3
Norfolk-Virginia Beach-Portsmouth, SMSA.....	11.7	23.0	1.8	346.8	383.4	386.3	228.5	160.5
North Carolina.....	0.7	-	2.6	61.2	64.5	68.2	34.8	26.6
South Carolina.....	-	8.6	-	137.1	145.7	182.4	147.9	130.8
Georgia.....	-	-	-	195.0	195.0	196.8	127.2	116.9
Florida.....	1.9	-	80.6	191.0	273.5	273.2	188.3	60.3
Jacksonville SMSA.....	1.4	-	-	93.4	94.8	91.0	61.4	47.9
Pensacola SMSA.....	0.5	-	-	86.8	87.4	90.8	66.7	49.7
East South Central division.....	23.1	4.2	93.7	306.6	427.4	425.7	349.0	201.4
Kentucky.....	21.5	-	0.1	64.3	85.9	83.9	68.1	59.1
Lexington SMSA.....	4.3	-	-	21.9	26.2	20.4	16.7	15.3
Louisville, Ky.-Ind. SMSA.....	17.2	-	0.1	42.4	59.7	63.6	51.4	43.9
Tennessee.....	-	-	26.4	-	26.4	26.4	20.8	(Z)
Alabama.....	1.7	4.2	59.4	242.3	307.6	307.6	253.0	214.5
Huntsville SMSA.....	-	-	59.4	149.9	209.2	209.2	195.2	162.1
West South Central division.....	33.9	9.7	15.0	775.4	834.0	827.9	572.6	378.6
Arkansas.....	12.7	-	-	12.5	25.2	25.5	18.0	14.5
Oklahoma.....	12.4	9.7	-	408.9	431.0	425.7	296.9	146.6
Oklahoma City SMSA.....	5.2	9.7	-	397.4	412.4	405.9	279.1	132.4
Texas.....	8.8	-	15.0	354.0	377.8	376.7	257.6	217.5
San Antonio SMSA.....	6.9	-	15.0	194.5	216.3	216.3	148.9	128.1
Texarkana, Tex.-Ark. SMSA.....	1.9	-	-	55.7	57.7	56.2	43.2	33.7
Mountain division.....	6.4	17.5	207.0	260.6	491.5	489.5	417.4	195.5
Colorado.....	0.4	16.4	1.4	27.7	45.9	46.2	38.4	29.4
New Mexico.....	-	-	190.2	-	190.2	190.2	186.5	9.8
Utah.....	0.2	1.1	15.3	218.6	235.2	237.5	179.7	146.6
Nevada.....	5.8	-	0.1	14.3	20.2	15.6	12.7	9.8
Pacific division.....	30.9	166.6	445.3	1,496.9	2,139.9	2,029.3	1,647.2	1,197.3
Washington.....	9.5	161.7	3.2	344.1	518.5	349.9	279.3	237.9
California.....	21.3	5.0	442.1	986.3	1,455.0	1,496.5	1,212.5	816.5
Bakersfield SMSA.....	-	-	232.0	19.3	251.3	252.4	208.8	59.1
Los Angeles-Long Beach SMSA.....	-	-	3.6	2.1	191.3	197.0	200.7	158.8
San Diego SMSA.....	11.6	-	162.9	181.4	356.0	346.3	280.4	133.8
San Francisco-Oakland SMSA.....	7.9	0.5	(Z)	176.3	184.7	185.4	141.8	111.9
Vallejo-Napa SMSA.....	0.1	0.8	28.1	155.3	184.2	231.2	195.0	163.6
Hawaii.....	-	-	(Z)	166.5	166.5	183.0	155.4	142.8

Note: See appendix B, explanation of terms for MA-171 survey. Detail may not add to totals due to independent rounding. Value added A represents total revenue less cost of materials, while value added B is total revenue less cost of materials, contractual services and other costs.

- Represents zero. (Z) Less than .05.

¹See appendix A for a description of each SMSA.

Appendix A

STANDARD METROPOLITAN STATISTICAL AREAS

(Titles and definitions of the two standard consolidated areas and the 263 Standard Metropolitan Statistical Areas in the United States established by the Office of Management and Budget as of August 15, 1973)

Chicago, Ill.—Northwestern Indiana	
Standard Consolidated Area	Consists of Chicago, Ill., SMSA, and Gary-Hammond-East Chicago, Ind., SMSA
New York, N.Y.—Northeastern New Jersey	
Standard Consolidated Area	Consists of New York, N.Y.-N.J., SMSA; Nassau-Suffolk, N.Y., SMSA; Newark, N.J., SMSA; Jersey City, N.J., SMSA; Paterson-Clifton-Passaic, N.J., SMSA; and New Brunswick-Perth Amboy-Sayreville, N.J., SMSA
Abilene, Tex.	Consists of Callahan, Jones, and Taylor Counties, Tex.
Akron, Ohio	Consists of Portage and Summit Counties, Ohio
Albany, Ga.	Consists of Dougherty and Lee Counties, Ga.
Albany-Schenectady-Troy, N.Y.	Consists of Albany, Montgomery, Rensselaer, Saratoga, and Schenectady Counties, N.Y.
Albuquerque, N. Mex.	Consists of Bernalillo and Sandoval Counties, N. Mex.
Alexandria, La.	Consists of Grant and Rapides Parishes, La.
Allentown-Bethlehem-Easton, Pa.-N.J.	Consists of Carbon, Lehigh, and Northampton Counties, Pa., and Warren County, N.J.
Altoona, Pa.	Coextensive with Blair County, Pa.
Amarillo, Tex.	Consists of Potter and Randall Counties, Tex.
Anaheim-Santa Ana-Garden Grove, Calif.	Coextensive with Orange County, Calif.
Anchorage, Alaska	Coextensive with Anchorage Census Division, Alaska
Anderson, Ind.	Coextensive with Madison County, Ind.
Ann Arbor, Mich.	Coextensive with Washtenaw County, Mich.
Appleton-Oshkosh, Wis.	Consists of Calumet, Outagamie, and Winnebago Counties, Wis.
Asheville, N.C.	Consists of Buncombe and Madison Counties, N.C.
Atlanta, Ga.	Consists of Butts, Cherokee, Clayton, Cobb, De Kalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, and Walton Counties, Ga.
Atlantic City, N.J.	Coextensive with Atlantic County, N.J.
Augusta, Ga.-S.C.	Consists of Columbia and Richmond Counties, Ga., and Aiken County, S.C.
Austin, Tex.	Consists of Hays and Travis Counties, Tex.
Bakersfield, Calif.	Coextensive with Kern County, Calif.
Baltimore, Md.	Consists of Baltimore city, and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties, Md.
Baton Rouge, La.	Consists of Ascension, East Baton Rouge, Livingston, and West Baton Rouge Parishes, La.
Battle Creek, Mich.	Consists of Barry and Calhoun Counties, Mich.
Bay City, Mich.	Coextensive with Bay County, Mich.
Beaumont-Port Arthur-Orange, Tex.	Consists of Hardin, Jefferson, and Orange Counties, Tex.
Billings, Mont.	Coextensive with Yellowstone County, Mont.
Biloxi-Gulfport, Miss.	Consists of Hancock, Harrison, and Stone Counties, Miss.
Binghamton, N.Y.-Pa.	Consists of Broome and Tioga Counties, N.Y., and Susquehanna County, Pa.
Birmingham, Ala.	Consists of Jefferson, St. Clair, Shelby, and Walker Counties, Ala.

Appendix A—Continued

Bloomington-Normal, Ill.	Coextensive with McLean County, Ill.
Boise City, Idaho	Coextensive with Ada County, Idaho
Boston, Mass.	Consists of Beverly, Lynn, Peabody, and Salem cities, and Boxford, Danvers, Hamilton, Lynnfield, Manchester, Marblehead, Middleton, Nahant, Saugus, Swampscott, Topsfield, and Wenham towns in Essex County; Cambridge, Everett, Malden, Medford, Melrose, Newton, Somerville, Waltham, and Woburn cities, and Acton, Arlington, Ashland, Bedford, Belmont, Boxborough, Burlington, Carlisle, Concord, Framingham, Holliston, Lexington, Lincoln, Natick, North Reading, Reading, Sherborn, Stoneham, Sudbury, Wakefield, Watertown, Wayland, Weston, Wilmington, and Winchester towns in Middlesex County; Quincy city, and Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Foxborough, Franklin, Holbrook, Medfield, Medway, Millis, Milton, Needham, Norfolk, Norwood, Randolph, Sharon, Stoughton, Walpole, Wellesley, Westwood, Weymouth, and Wrentham towns in Norfolk County; Abington, Duxbury, Hanover, Hanson, Hingham, Hull, Kingston, Marshfield, Norwell, Pembroke, Rockland, Scituate towns in Plymouth County; and Boston, Chelsea, and Revere cities, and Winthrop town in Suffolk County, Mass.
Bridgeport, Conn.	Consists of Bridgeport and Shelton cities, and Easton, Fairfield, Monroe, Stratford, and Trumbull towns in Fairfield County; and Derby and Milford cities in New Haven County, Conn.
Bristol, Conn.	Consists of Bristol city and Burlington town in Hartford County, and Plymouth town in Litchfield County, Conn.
Brockton, Mass.	Consists of Easton town in Bristol County; Avon town in Norfolk County; and Brockton city, and Bridgewater, East Bridgewater, Halifax, West Bridgewater, and Whitman towns in Plymouth County, Mass.
Brownsville-Harlingen-San Benito, Tex.	Coextensive with Cameron County, Tex.
Bryan-College Station, Tex.	Coextensive with Brazos County, Tex.
Buffalo, N.Y.	Consists of Erie and Niagara Counties, N.Y.
Burlington, N.C.	Coextensive with Alamance County, N.C.
Canton, Ohio	Consists of Carroll and Stark Counties, Ohio
Cedar Rapids, Iowa	Coextensive with Linn County, Iowa
Champaign-Urbana-Rantoul, Ill.	Coextensive with Champaign County, Ill.
Charleston, S.C.	Consists of Berkeley, Charleston, and Dorchester Counties, S.C.
Charleston, W. Va.	Consists of Kanawha and Putnam Counties, W. Va.
Charlotte-Gastonia, N.C.	Consists of Gaston, Mecklenburg, and Union Counties, N.C.
Chattanooga, Tenn.-Ga.	Consists of Hamilton, Marion, and Sequatchie Counties, Tenn., and Catoosa, Dade, and Walker Counties, Ga.
Chicago, Ill.	Consists of Cook, Du Page, Kane, Lake, McHenry, and Will Counties, Ill.
Cincinnati, Ohio-Ky.-Ind.	Consists of Clermont, Hamilton, and Warren Counties, Ohio; Boone, Campbell, and Kenton Counties, Ky.; and Dearborn County, Ind.
Cleveland, Ohio	Consists of Cuyahoga, Geauga, Lake, and Medina Counties, Ohio
Colorado Springs, Colo.	Consists of El Paso and Teller Counties, Colo.
Columbia, Mo.	Coextensive with Boone County, Mo.
Columbia, S.C.	Consists of Lexington and Richland Counties, S.C.
Columbus, Ga.-Ala.	Consists of Columbus city, and Chattahoochee County, Ga., and Russell County, Ala.
Columbus, Ohio	Consists of Delaware, Fairfield, Franklin, Madison, and Pickaway Counties, Ohio

Appendix A—Continued

Corpus Christi, Tex.	Consists of Nueces and San Patricio Counties, Tex.
Dallas-Fort Worth, Tex.	Consists of Collin, Dallas, Denton, Ellis, Hood, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, Tex.
Danbury, Conn.	Consists of Danbury city, and Bethel, Brookfield, New Fairfield, Newtown, and Redding towns in Fairfield County; and New Milford town in Litchfield County, Conn.
Davenport-Rock Island-Moline, Iowa-III.	Consists of Scott County, Iowa, and Henry and Rock Island Counties, III.
Dayton, Ohio	Consists of Greene, Miami, Montgomery, and Preble Counties, Ohio
Daytona Beach, Fla.	Coextensive with Volusia County, Fla.
Decatur, Ill.	Coextensive with Macon County, Ill.
Denver-Boulder, Colo.	Consists of Adams, Arapahoe, Boulder, Denver, Douglas, Gilpin, and Jefferson Counties, Colo.
Des Moines, Iowa	Consists of Polk and Warren Counties, Iowa
Detroit, Mich.	Consists of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties, Mich.
Dubuque, Iowa	Coextensive with Dubuque County, Iowa
Duluth-Superior, Minn.-Wis.	Consists of St. Louis County, Minn., and Douglas County, Wis.
El Paso, Tex.	Coextensive with El Paso County, Tex.
Elmira, N.Y.	Coextensive with Chemung County, N.Y.
Erie, Pa.	Coextensive with Erie County, Pa.
Eugene-Springfield, Oreg.	Coextensive with Lane County, Oreg.
Evansville, Ind.-Ky.	Consists of Gibson, Posey, Vanderburgh, and Warrick Counties, Ind., and Henderson County, Ky.
Fall River, Mass.-R.I.	Consists of Fall River city, and Dighton, Somerset, Swansea, and Westport towns in Bristol County, Mass.; and Little Compton, Portsmouth, and Tiverton towns in Newport County, R.I.
Fargo-Moorhead, N.D.-Minn.	Consists of Cass County, N.D., and Clay County, Minn.
Fayetteville, N.C.	Coextensive with Cumberland County, N.C.
Fayetteville-Springdale, Ark.	Consists of Benton and Washington Counties, Ark.
Fitchburg-Leominster, Mass.	Consists of Shirley and Townsend towns in Middlesex County; and Fitchburg and Leominster cities and Lunenburg and Westminster towns in Worcester County, Mass.
Flint, Mich.	Consists of Genesee and Shiawassee Counties, Mich.
Florence, Ala.	Consists of Colbert and Lauderdale Counties, Ala.
Fort Lauderdale-Hollywood, Fla.	Coextensive with Broward County, Fla.
Fort Myers, Fla.	Coextensive with Lee County, Fla.
Fort Smith, Ark.-Okla.	Consists of Crawford and Sebastian Counties, Ark., and Le Flore and Sequoyah Counties, Okla.
Fort Wayne, Ind.	Consists of Adams, Allen, De Kalb, and Wells Counties, Ind.
Fresno, Calif.	Coextensive with Fresno County, Calif.
Gadsden, Ala.	Coextensive with Etowah County, Ala.
Gainesville, Fla.	Coextensive with Alachua County, Fla.
Galveston-Texas City, Tex.	Coextensive with Galveston County, Tex.
Gary-Hammond-East Chicago, Ind.	Consists of Lake and Porter Counties, Ind.
Grand Rapids, Mich.	Consists of Kent and Ottawa Counties, Mich.
Great Falls, Mont.	Coextensive with Cascade County, Mont.
Green Bay, Wis.	Coextensive with Brown County, Wis.
Greensboro-Winston-Salem-High Point, N.C.	Consists of Davidson, Forsyth, Guilford, Randolph, Stokes, and Yadkin Counties, N.C.
Greenville-Spartanburg, S.C.	Consists of Greenville, Pickens, and Spartanburg Counties, S.C.

Appendix A—Continued

Hamilton-Middletown, Ohio	Coextensive with Butler County, Ohio
Harrisburg, Pa.	Consists of Cumberland, Dauphin and Perry Counties, Pa.
Hartford, Conn.	Consists of Hartford city, and Avon, Bloomfield, Canton, East Granby, East Hartford, East Windsor, Enfield, Farmington, Glastonbury, Granby, Manchester, Marlborough, Newington, Rocky Hill, Simsbury, South Windsor, Suffield, West Hartford, Wethersfield, Windsor, and Windsor Locks towns in Hartford County; New Hartford town in Litchfield County; Cromwell, East Hampton, and Portland towns in Middlesex County; Colchester town in New London County; and Andover, Bolton, Columbia, Coventry, Ellington, Hebron, Stafford, Tolland, Vernon, and Willington towns in Tolland County, Conn.
Honolulu, Hawaii	Coextensive with Honolulu County, Hawaii
Houston, Tex.	Consists of Brazoria, Fort Bend, Harris, Liberty, Montgomery, and Waller Counties, Tex.
Huntington-Ashland, W. Va.-Ky.-Ohio	Consists of Cabell and Wayne Counties, W. Va.; Boyd and Greenup Counties, Ky.; and Lawrence County, Ohio
Huntsville, Ala.	Consists of Limestone, Madison, and Marshall Counties, Ala.
Indianapolis, Ind.	Consists of Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby Counties, Ind.
Jackson, Mich.	Coextensive with Jackson County, Mich.
Jackson, Miss.	Consists of Hinds and Rankin Counties, Miss.
Jacksonville, Fla.	Consists of Baker, Clay, Duval, Nassau, and St. Johns Counties, Fla.
Jersey City, N.J.	Coextensive with Hudson County, N.J.
Johnstown, Pa.	Consists of Cambria and Somerset Counties, Pa.
Kalamazoo-Portage, Mich.	Consists of Kalamazoo and Van Buren Counties, Mich.
Kansas City, Mo.-Kans.	Consists of Cass, Clay, Jackson, Platte, and Ray Counties, Mo., and Johnson and Wyandotte Counties, Kans.
Kenosha, Wis.	Coextensive with Kenosha County, Wis.
Killeen-Temple, Tex.	Consists of Bell and Coryell counties, Tex.
Kingsport-Bristol, Tenn.-Va.	Consists of Hawkins and Sullivan Counties, Tenn., and Bristol city, and Scott and Washington Counties, Va.
Knoxville, Tenn.	Consists of Anderson, Blount, Knox, and Union Counties, Tenn.
La Crosse, Wis.	Coextensive with La Crosse County, Wis.
Lafayette, La.	Coextensive with Lafayette Parish, La.
Lafayette-West Lafayette, Ind.	Coextensive with Tippecanoe County, Ind.
Lake Charles, La.	Coextensive with Calcasieu Parish, La.
Lakeland-Winter Haven, Fla.	Coextensive with Polk County, Fla.
Lancaster, Pa.	Coextensive with Lancaster County, Pa.
Lansing-East Lansing, Mich.	Consists of Clinton, Eaton, Ingham, and Ionia Counties, Mich.
Laredo, Tex.	Coextensive with Webb County, Tex.
Las Vegas, Nev.	Coextensive with Clark County, Nev.
Lawrence-Haverhill, Mass.-N.H.	Consists of Lawrence and Haverhill cities, and Amesbury, Andover, Georgetown, Groveland, Merrimac, Methuen, North Andover, Salisbury, and West Newbury towns in Essex County, Mass.; and Atkinson, Hampstead, Kingston, Newton, Plaistow, Salem, and Windham towns, in Rockingham County, N.H.
Lawton, Okla.	Coextensive with Comanche County, Okla.
Lewiston-Auburn, Maine	Consists of Auburn and Lewiston cities, and Lisbon town in Androscoggin County, Maine.
Lexington, Ky.	Consists of Bourbon, Clark, Fayette, Jessamine, Scott, and Woodford Counties, Ky.

Appendix A—Continued

Lima, Ohio	Consists of Allen, Auglaize, Putnam, and Van Wert Counties, Ohio
Lincoln, Nebr.	Coextensive with Lancaster County, Nebr.
Little Rock-North Little Rock, Ark.	Consists of Pulaski and Saline Counties, Ark.
Long Branch-Asbury Park, N.J.	Coextensive with Monmouth County, N.J.
Lorain-Elyria, Ohio	Coextensive with Lorain County, Ohio
Los Angeles-Long Beach, Calif.	Coextensive with Los Angeles County, Calif.
Louisville, Ky.-Ind.	Consists of Bullitt, Jefferson, and Oldham Counties, Ky., and Clark and Floyd Counties, Ind.
Lowell, Mass.-N.H.	Consists of Lowell city, and Billerica, Chelmsford, Dracut, Tewksbury, Tyngsborough, and Westford towns in Middlesex County, Mass.; and Pelham town in Hillsborough County, N.H.
Lubbock, Tex.	Coextensive with Lubbock County, Tex.
Lynchburg, Va.	Consists of Lynchburg city, and Amherst, Appomattox, and Campbell Counties, Va.
Macon, Ga.	Consists of Bibb, Houston, Jones, and Twiggs Counties, Ga.
Madison, Wis.	Coextensive with Dane County, Wis.
Manchester, N.H.	Consists of Manchester city, and Bedford and Goffstown towns in Hillsborough County; Allenstown, Hooksett, and Pembroke towns in Merrimack County; and Derry and Londonderry towns in Rockingham County, N.H.
Mansfield, Ohio	Coextensive with Richland County, Ohio
McAllen-Pharr-Edinburg, Tex.	Coextensive with Hidalgo County, Tex.
Melbourne-Titusville-Cocoa, Fla.	Coextensive with Brevard County, Fla.
Memphis, Tenn.-Ark.-Miss.	Consists of Shelby and Tipton Counties, Tenn.; Crittenden County, Ark.; and DeSoto County, Miss.
Meriden, Conn.	Coextensive with Meriden city in New Haven County, Conn.
Miami, Fla.	Coextensive with Dade County, Fla.
Midland, Tex.	Coextensive with Midland County, Tex.
Milwaukee, Wis.	Consists of Milwaukee, Ozaukee, Washington, and Waukesha Counties, Wis.
Minneapolis-St. Paul, Minn.-Wis.	Consists of Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties, Minn., and St. Croix County, Wis.
Mobile, Ala.	Consists of Baldwin and Mobile Counties, Ala.
Modesto, Calif.	Coextensive with Stanislaus County, Calif.
Monroe, La.	Coextensive with Ouachita Parish, La.
Montgomery, Ala.	Consists of Autauga, Elmore, and Montgomery Counties, Ala.
Muncie, Ind.	Coextensive with Delaware County, Ind.
Muskegon-Muskegon Heights, Mich.	Consists of Muskegon and Oceana Counties, Mich.
Nashua, N.H.	Consists of Nashua city, and Amherst, Hudson, Merrimack, and Milford towns in Hillsborough County, N.H.
Nashville-Davidson, Tenn.	Consists of Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Williamson, and Wilson Counties, Tenn.
Nassau-Suffolk, N.Y.	Consists of Nassau and Suffolk Counties, N.Y.
New Bedford, Mass.	Consists of New Bedford city, and Acushnet, Dartmouth, Fairhaven, and Freetown towns in Bristol County; and Lakeville, Marion, and Mattapoisett towns in Plymouth County, Mass.
New Britain, Conn.	Consists of New Britain city, and Berlin, Plainville, and Southington towns in Hartford County, Conn.
New Brunswick-Perth Amboy-Sayreville, N.J.	Coextensive with Middlesex County, N.J.

Appendix A—Continued

New Haven-West Haven, Conn.	Consists of Clinton and Killingworth towns in Middlesex County, New Haven and West Haven cities, and Bethany, Branford, East Haven, Guilford, Hamden, Madison, North Branford, North Haven, Orange, Wallingford, and Woodbridge towns in New Haven County, Conn.
New London-Norwich, Conn.-R.I.	Consists of Old Saybrook town in Middlesex County; New London and Norwich cities, and Bozrah, East Lyme, Griswold, Groton, Ledyard, Lisbon, Montville, Old Lyme, Preston, Sprague, Stonington, and Waterford towns in New London County, Conn.; and Hopkinton and Westerly towns in Washington County, R.I.
New Orleans, La.	Consists of Jefferson, Orleans, St. Bernard, and St. Tammany Parishes, La.
New York, N.Y.-N.J.	Consists of Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester Counties, N.Y., and Bergen County, N.J.
Newark, N.J.	Consists of Essex, Morris, Somerset, and Union Counties, N.J.
Newport News-Hampton, Va.	Consists of Hampton, Newport News, and Williamsburg cities, and Gloucester, James City, and York Counties, Va.
Norfolk-Virginia Beach-Portsmouth, Va.-N.C.	Consists of Chesapeake, Nansemond, Norfolk, Portsmouth, Suffolk, and Virginia Beach cities, Va., and Currituck County, N.C.
Northeast Pennsylvania	Consists of Lackawanna, Luzerne, and Monroe Counties, Pa.
Norwalk, Conn.	Consists of Norwalk city, and Weston, Westport, and Wilton towns in Fairfield County, Conn.
Odessa, Tex.	Coextensive with Ector County, Tex.
Oklahoma City, Okla.	Consists of Canadian, Cleveland, McClain, Oklahoma, and Pottawatomie Counties, Okla.
Omaha, Nebr.-Iowa	Consists of Douglas and Sarpy Counties, Nebr., and Pottawattamie County, Iowa
Orlando, Fla.	Consists of Orange, Osceola, and Seminole Counties, Fla.
Owensboro, Ky.	Coextensive with Daviess County, Ky.
Oxnard-Simi Valley-Ventura, Calif.	Coextensive with Ventura County, Calif.
Parkersburg-Marietta, W. Va.-Ohio	Consists of Wirt and Wood Counties, W. Va., and Washington County, Ohio
Paterson-Clifton-Passaic, N.J.	Coextensive with Passaic County, N.J.
Pensacola, Fla.	Consists of Escambia and Santa Rosa Counties, Fla.
Peoria, Ill.	Consists of Peoria, Tazewell, and Woodford Counties, Ill.
Petersburg-Colonial Heights-Hopewell, Va.	Consists of Colonial Heights, Hopewell, and Petersburg cities, and Dinwiddie and Prince George Counties, Va.
Philadelphia, Pa.-N.J.	Consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa.; and Burlington, Camden, and Gloucester Counties, N.J.
Phoenix, Ariz.	Coextensive with Maricopa County, Ariz.
Pine Bluff, Ark.	Coextensive with Jefferson County, Ark.
Pittsburgh, Pa.	Consists of Allegheny, Beaver, Washington, and Westmoreland Counties, Pa.
Pittsfield, Mass.	Consists of Pittsfield city, and Adams, Cheshire, Dalton, Lanesborough, Lee, Lenox and Stockbridge towns in Berkshire County, Mass.
Portland, Maine	Consists of Portland, South Portland, and Westbrook cities, and Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Scarborough, Windham, and Yarmouth towns in Cumberland County; and Saco city and Old Orchard Beach town in York County, Maine
Portland, Oreg.-Wash.	Consists of Clackamas, Multnomah, and Washington Counties, Oreg., and Clark County, Wash.
Poughkeepsie, N.Y.	Coextensive with Dutchess County, N.Y.

Appendix A—Continued

Providence-Warwick-Pawtucket, R.I.-Mass.	Consists of Barrington, Bristol, and Warren towns in Bristol County; Warwick city, and Coventry, East Greenwich, and West Warwick towns in Kent County; Jamestown town in Newport County; Central Falls, Cranston, East Providence, Pawtucket, Providence, and Woonsocket cities, and Burrillville, Cumberland, Johnston, Lincoln, North Providence, North Smithfield, Scituate, and Smithfield towns in Providence County; and Narragansett, North Kingstown, and South Kingstown towns in Washington County, R.I.; Attleboro city, and North Attleborough, Norton, Rehoboth, and Seekonk towns in Bristol County; Plainville town in Norfolk County; and Blackstone and Millville towns in Worcester County, Mass.
Provo-Orem, Utah	Coextensive with Utah County, Utah
Pueblo, Colo.	Coextensive with Pueblo County, Colo.
Racine, Wis.	Coextensive with Racine County, Wis.
Raleigh-Durham, N.C.	Consists of Durham, Orange, and Wake Counties, N.C.
Reading, Pa.	Coextensive with Berks County, Pa.
Reno, Nev.	Coextensive with Washoe County, Nev.
Richland-Kennewick, Wash.	Consists of Benton and Franklin Counties, Wash.
Richmond, Va.	Consists of Richmond city, and Charles City, Chesterfield, Goochland, Hanover, Henrico, and Powhatan Counties, Va.
Riverside-San Bernardino-Ontario, Calif.	Consists of Riverside and San Bernardino Counties, Calif.
Roanoke, Va.	Consists of Roanoke and Salem cities, and Botetourt, Craig, and Roanoke Counties, Va.
Rochester, Minn.	Coextensive with Olmsted County, Minn.
Rochester, N.Y.	Consists of Livingston, Monroe, Ontario, Orleans, and Wayne Counties, N.Y.
Rockford, Ill.	Consists of Boone and Winnebago Counties, Ill.
Sacramento, Calif.	Consists of Placer, Sacramento, and Yolo Counties, Calif.
Saginaw, Mich.	Coextensive with Saginaw County, Mich.
St. Cloud, Minn.	Consists of Benton, Sherburne, and Stearns Counties, Minn.
St. Joseph, Mo.	Consists of Andrew and Buchanan Counties, Mo.
St. Louis, Mo.-Ill.	Consists of St. Louis city, and Franklin, Jefferson, St. Charles, and St. Louis Counties, Mo.; and Clinton, Madison, Monroe, and St. Clair Counties, Ill.
Salem, Oreg.	Consists of Marion and Polk Counties, Oreg.
Salinas-Seaside-Monterey, Calif.	Coextensive with Monterey County, Calif.
Salt Lake City-Ogden, Utah	Consists of Davis, Salt Lake, Tooele, and Weber Counties, Utah
San Angelo, Tex.	Coextensive with Tom Green County, Tex.
San Antonio, Tex.	Consists of Bexar, Comal, and Guadalupe Counties, Tex.
San Diego, Calif.	Coextensive with San Diego County, Calif.
San Francisco-Oakland, Calif.	Consists of Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties, Calif.
San Jose, Calif.	Coextensive with Santa Clara County, Calif.
Santa Barbara-Santa Maria-Lompoc, Calif.	Coextensive with Santa Barbara County, Calif.
Santa Cruz, Calif.	Coextensive with Santa Cruz County, Calif.
Santa Rosa, Calif.	Coextensive with Sonoma County, Calif.
Sarasota, Fla.	Coextensive with Sarasota County, Fla.
Savannah, Ga.	Consists of Bryan, Chatham, and Effingham Counties, Ga.
Seattle-Everett, Wash.	Consists of King and Snohomish Counties, Wash.
Sherman-Denison, Tex.	Coextensive with Grayson County, Tex.
Shreveport, La.	Consists of Bossier, Caddo, and Webster Parishes, La.
Sioux City, Iowa-Nebr.	Consists of Woodbury County, Iowa, and Dakota County, Nebr.

Appendix A—Continued

Sioux Falls, S.D.	Coextensive with Minnehaha County, S.D.
South Bend, Ind.	Consists of Marshall and St. Joseph Counties, Ind.
Spokane, Wash.	Coextensive with Spokane County, Wash.
Springfield, Ill.	Consists of Menard and Sangamon Counties, Ill.
Springfield, Mo.	Consists of Christian and Greene Counties, Mo.
Springfield, Ohio	Consists of Champaign and Clark Counties, Ohio
Springfield-Chicopee-Holyoke, Mass.-Conn.	Consists of Chicopee, Holyoke, Springfield, and Westfield cities, and Agawam, East Longmeadow, Hampden, Longmeadow, Ludlow, Monson, Palmer, Southwick, West Springfield, and Wilbraham towns in Hampden County; Northampton city, and Belchertown, Easthampton, Granby, Hadley, Hatfield, South Hadley, and Southhampton towns in Hampshire County; Warren town in Worcester County, Mass.; and Somers town in Tolland County, Conn.
Stamford, Conn.	Consists of Stamford city, and Darien, Greenwich, and New Canaan towns in Fairfield County, Conn.
Steubenville-Weirton, Ohio-W. Va.	Consists of Jefferson County, Ohio, and Brooke and Hancock Counties, W. Va.
Stockton, Calif.	Coextensive with San Joaquin County, Calif.
Syracuse, N.Y.	Consists of Madison, Onondaga, and Oswego Counties, N.Y.
Tacoma, Wash.	Coextensive with Pierce County, Wash.
Tallahassee, Fla.	Consists of Leon and Wakulla Counties, Fla.
Tampa-St. Petersburg, Fla.	Consists of Hillsborough, Pasco, and Pinellas Counties, Fla.
Terre Haute, Ind.	Consists of Clay, Sullivan, Vermillion, and Vigo Counties, Ind.
Texarkana, Tex.-Ark.	Consists of Bowie County, Texas, and Little River and Miller Counties, Ark.
Toledo, Ohio-Mich.	Consists of Fulton, Lucas, Ottawa, and Wood Counties, Ohio, and Monroe County, Mich.
Topeka, Kans.	Consists of Jefferson, Osage, and Shawnee Counties, Kans.
Trenton, N.J.	Coextensive with Mercer County, N.J.
Tucson, Ariz.	Coextensive with Pima County, Ariz.
Tulsa, Okla.	Consists of Creek, Mayes, Osage, Rogers, Tulsa, and Wagoner Counties, Okla.
Tuscaloosa, Ala.	Coextensive with Tuscaloosa County, Ala.
Tyler, Tex.	Coextensive with Smith County, Tex.
Utica-Rome, N.Y.	Consists of Herkimer and Oneida Counties, N.Y.
Vallejo-Fairfield-Napa, Calif.	Consists of Napa and Solano Counties, Calif.
Vineland-Millville-Bridgeton, N.J.	Coextensive with Cumberland County, N.J.
Waco, Tex.	Coextensive with McLennan County, Tex.
Washington, D.C.-Md.-Va.	Consists of District of Columbia; Charles, Montgomery, and Prince Georges Counties, Md.; and Alexandria, Fairfax, and Falls Church cities, and Arlington, Fairfax, Loudoun, and Prince William Counties, Va.
Waterbury, Conn.	Consists of Thomaston, Watertown, and Woodbury towns in Litchfield County; and Waterbury city, Naugatuck borough, and Beacon Falls, Cheshire, Middlebury, Prospect, Southbury, and Wolcott towns in New Haven County, Conn.
Waterloo-Cedar Falls, Iowa	Coextensive with Black Hawk County, Iowa
West Palm Beach-Boca Raton, Fla.	Coextensive with Palm Beach County, Fla.
Wheeling, W. Va.-Ohio	Consists of Marshall and Ohio Counties, W. Va., and Belmont County, Ohio
Wichita, Kans.	Consists of Butler and Sedgwick Counties, Kans.

Appendix A—Continued

Wichita Falls, Tex.	Consists of Clay and Wichita Counties, Tex.
Williamsport, Pa.	Coextensive with Lycoming County, Pa.
Wilmington, Del.-N.J.-Md.	Consists of New Castle County, Del.; Salem County, N.J.; and Cecil County, Md.
Wilmington, N.C.	Consists of Brunswick and New Hanover Counties, N.C.
Worcester, Mass.	Consists of Worcester city, and Auburn, Berlin, Boylston, Brookfield, Charlton, East Brookfield, Grafton, Holden, Leicester, Millbury, Northborough, Northbridge, North Brookfield, Oxford, Paxton, Shrewsbury, Spencer, Sterling, Sutton, Upton, Uxbridge, Webster, Westborough, and West Boylston towns in Worcester County, Mass.
Yakima, Wash.	Coextensive with Yakima County, Wash.
York, Pa.	Consists of Adams and York Counties, Pa.
Youngstown-Warren, Ohio	Consists of Mahoning and Trumbull Counties, Ohio

Appendix B

LIMITATIONS OF THE DATA AND EXPLANATION OF TERMS

The MA-175 survey was conducted to measure the impact of Government procurement upon the manufacturing economy and upon geographic areas in terms of 94 Government-oriented industries. Similar data for other manufacturing industries which may have made shipments to the Federal Government are not available. Therefore, the data at the U.S. level do not represent all Federal Government procurement, only that of the 94 industries selected for the sample. It is believed these industries constitute the vast bulk of Federal Procurement. For the most part, shipments to the Federal Government represented by the data shown in this report consist of finished goods or components produced to military specifications. With the exception of the machinery industries, the major portion of Government business of these industries is subject to renegotiation and, therefore, is separately identified in the records of the respondents, who, in fact, were advised that they could base their subcontract shipments and receipts on those transactions, subject to the Renegotiation Act of 1951, as amended.

Government shipments consist of products shipped to (or receipts for work done for) Federal agencies, their contractors, subcontractors, and suppliers. The Government total is further subdivided into shipments or receipts (1) on Government prime contracts and (2) to or from other manufacturers in ultimate performance of Federal Government contracts (subcontracts).

The prime contract of shipments figures for the industries surveyed account for the great bulk of all such Government contracts in manufacturing, while the subcontract data represent a much smaller proportion of the total subcontracts for all manufacturing. The survey was designed primarily to measure the volume of shipments to the Federal Government made by prime contracting industries and was not intended to include all manufacturing industries that may have been engaged in subcontracting activities related to Government contracts. In interpreting the figures for subcontract work, it should be noted that these industries do not represent all "basic materials" and "other components" industries that are usually important in subcontracts. Shipments of materials and companies purchased by the Government and furnished to contractors supplying finished equipment were reported as prime contracts.

Furthermore, there is no indication of the level of subcontracting (e.g., first tier, second tier, etc.). Because of the nature of the industries surveyed, it is likely that, except for a few industries such as electronic components, most of the subcontracting is first tier only and the pyramiding of shipments values from one tier to another is not large.

In addition to data shown for the 94 selected industries, this report includes separate data on "miscellaneous industries."

Respondents were instructed that if their company had significant research, development, test, evaluation, or production contracts in the fields of aerospace, atomic energy, electronics, instrumentation, ordnance, or shipbuilding, which were assigned by the company to establishments that were not covered in the MA-100 survey, they were to complete a form MA-175 for each such location. These nonmanufacturing facilities of the manufacturing companies reporting on this survey are classified in this category, which also includes a small number of nonprofit research corporations working on defense contracts.

The data on employment, value added, and value of shipments shown for the industries covered in the MA-175 survey differ from the corresponding totals based on the Annual Survey of Manufactures (Census form MA-100) for 1977 and prior years. For 1973 and earlier years, the MA-175 sample was limited to establishments with 100 or more employees, except for seven industries where all establishments with 50 or more employees are included. The MA-100 program covers all establishments with 250 employees or more plus a representative sample of establishments with fewer than 250 employees in the specified industries. For 1974, 1975, 1976, and 1977, the MA-175 data are derived from a probability sample (see appendix C) which employs different weights than the ASM.

The particular sample selected for this survey is one of a large number of similar probability samples of the same size that could have been selected, by chance, using the same sample design. Each of the possible samples would yield somewhat different sets of results. The sampling errors—the differences between the estimates obtained and the results theoretically obtainable from a comparable complete canvass of the same target universe—are unknown. Guides to the potential size of the sampling errors, however, are provided by the estimated relative standard errors of the estimates. These are shown for a few key data items in the report. On the average, relative standard errors tend to be somewhat higher for detailed figures than for larger aggregates.

In conjunction with its associated estimates, the relative standard error (computed as the estimated standard error of estimate divided by the value of the estimate itself) may be used to define confidence intervals, ranges which could be expected to include comparable complete coverage values for specified percentages of all possible samples. The complete coverage value would be included in the range:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

Appendix B—Continued

3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable complete coverage results would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates shown would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, if an estimated total is shown as \$20.0 million with an associated relative standard error of 2 percent, the standard error is \$0.4 million. Then there is approximately 67 percent confidence that the interval \$19.6 to \$20.4 million includes the complete coverage total, about 95 percent confidence that the interval \$19.2 to \$20.8 million includes the complete coverage total, and almost certain confidence that the interval \$18.8 to \$21.2 million includes the complete coverage total.

In addition to the sampling errors, the estimates are subject to various response and operational errors: errors of collection, reporting, transcription, etc. These operational errors would also occur if a complete canvass were to be conducted under the same conditions as this survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Census Bureau's review of the data for reasonableness and consistency.

EXPLANATION OF TERMS FOR MA-175 SURVEY

NOTE: Respondents in the MA-175 survey were asked to copy onto their MA-175 reports the figures on employment, cost of materials, and value of shipments as reported on the corresponding form MA-100 for each establishment covered in the MA-175 survey. The following definitions of these terms are based on the reporting instructions for form MA-100.

All employees—This category comprises all full-time and part-time employees on the payrolls of operating manufacturing establishments who worked or received pay for any part of the pay period ended nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during this pay period. Excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are, however, excluded from the total.

Production and related workers—This category includes workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, storage, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and watchman services, product development, auxiliary production for plants' own use (e.g., power plant), recordkeeping, and other closely associated services. Excludes proprietors and partners.

All other employees—Nonproduction personnel, including those engaged in the following activities: supervision above working foreman level, sales (including driver salesmen), sales delivery (truck drivers and helpers), advertising, credit, collection, installation and servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional and technical. Excludes proprietors and partners.

Average employment—The annual survey report forms requested employment figures for "production and related workers" for four selected pay periods (i.e., production workers' midmonth employment in March, May, August, and November). For "all other employees" only a mid-March figure was requested. Thus, the "annual average" is composed of an average of the four monthly figures for the "production workers" plus the March figure for "all other employees."

Value added by manufacture—For MA-175 data, this measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (or value of production) plus receipts for services rendered. For MA-100 data, the value added derived as described above is then adjusted by the addition of value added by merchandising operations (that is the difference between the sales value and cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year. However, value added to 1974, 1975, 1976, and 1977 for SIC 3731 was not adjusted for inventory changes between the beginning and ending of the year.

Value added avoids the duplication in the value of shipments figure which results from the use of products of some establishments as materials by others. Consequently, it is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Cost of materials—This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. Manufacturers included the cost of materials or fuel consumed regardless of whether these items were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

To arrive at the industry total cost of materials, separate figures were obtained for (a) the total delivered cost of all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during that year; (b) the amount paid for electric energy purchased; (c) the amount paid for all fuels consumed for heat, power, or the generation of electricity; (d) the cost of work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) cost of products bought and resold in the same condition. The total excludes the cost of services used, such as advertising, insurance, telephone, etc., and research, developmental, and consulting services of other establishments; it also

Appendix B—Continued

excludes overhead costs, such as depreciation charges, rent, interest, royalties, etc., it excludes materials, machinery and equipment used in plant expansion or capitalized repairs which are chargeable to fixed assets accounts.

Value of shipments—The amounts under value of shipments are the received or receivable net selling values, f.o.b. plant, after discounts and allowances, and excluding freight charges and excise taxes. Under the general heading of shipments, manufacturers were asked to include all items made by or for each establishment from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. Also included were receipts for contract work and for such miscellaneous activities as sale of scrap and refuse, installation work by manufacturing plant employees, research and development work, and repair work. The net selling value of products made in one plant on a contract basis from materials owned by others was reported by the plant providing the materials. The value of products bought and resold without further processing (merchandising) was reported separately and is included in the value of shipments totals for each industry.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company (i.e., other manufacturing plants, separate sales branches, or retail stores) as though the establishments were a separate economic unit. The company was requested to include in "value of interplant transfers within the company" not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

Value of production—Although establishments in most industries reported value of shipments (as defined above), establish-

ments in SIC 3731 reported value of production for 1977 and earlier years since value of production was considered to be a more appropriate measure of output in these industries for that period.

EXPLANATION OF TERMS FOR MA-171 SURVEY

Wage board and graded employees—These classifications refer to those nonmilitary personnel employed by Department of Defense-owned and -operated establishments. The Department of Defense categories of "Wage board" and "graded" correspond to "production and related workers" and "all other employees," respectively, for industrial manufacturing facilities.

Costs—Represents the cost of materials, supplies and parts used; the cost of contractual services; and other costs directly related to the manufacturing activities of the installation.

Value of shipments or receipts for services—Represents total billings (including progress billions) based on the Industrial Fund accounting system of the Department of Defense, including receipts for construction and conversion; manufacture and assembly; and research and development. Unbilled costs of work in progress are reported separately.

Total revenue—Represents total billings adjusted by the increase or decrease in the unbilled costs of work in progress.

Value added by manufacture—Value added A represents total revenue less cost of materials. Value added B represents total revenue less cost of materials, contractual services, and other costs.

Appendix C

DESCRIPTION OF SURVEY SAMPLE AND ESTIMATING PROCEDURE

The estimates presented in this report for the MA-175 survey are derived from a probability sample of approximately 7,000 manufacturing establishments drawn as a subsample from the 1974 Annual Survey of Manufactures (ASM). The ASM is a probability sample of approximately 70,000 establishments selected from the 1972 Census Universe of over 300,000 plants and supplemented by samples of new manufacturing plants that began operations in 1973 and 1974. The sample only included plants in 94 four-digit SIC industries which on the basis of earlier, more detailed studies had shown to be engaged in Federal procurement.

With a fixed sample size of 7,000 establishments, the use of a probability-proportionate-to-size sample design led to an arbitrary certainty cutoff of about 500 employees. All in-scope establishments with employment of 500 or more were included in the sample with certainty. Smaller establishments were assigned subsampling probabilities so that their final probabilities of selection were proportional to employment, down to a minimum final probability of selection of .005. These establishments were arrayed in descending employment size and sampled systematically. Establishments chosen for the survey were assigned weights equal to the reciprocal of the establishment's final probability of selection. Individual establishment data were inflated by their sampling weights to develop industry or geographic estimates.

This particular type of sample for 1974 to 1977 represents a departure from previous years' surveys which employed a cutoff sample design. That is, previous samples (1973 and earlier) included all plants with 100 employees or more in the previous year ASM for the 94 selected industries (with the exception of 7 industries where the cutoff was 50 employees or more). That particular type of sample employed no sampling weights by which to develop universe estimates as does the current panel. While the overall U.S. results from the two types of surveys are not too dissimilar (mainly because Federal shipments are concentrated with larger establishments) there sometimes is considerable difference in smaller industry or geographical cells between 1974 to 1977 and previous estimates which is a function

of the different sample designs. Particular attention must be directed to the "other Government" category, which shows a considerable increase in 1974. This rise is due primarily to the many small plants which were included in the 1974 panel for the first time. As these plants typically had less than \$1 million in Federal shipments, these shipments were placed in the "other" category (see below). This fact should be considered when comparing 1974 to 1977 MA-175 estimates to those of previous surveys.

The statistics for the MA-171 survey (tables 8 and 9) are obtained from a complete census of all defense-owned and -operated manufacturing facilities and hence are universe totals.

All respondents reported on form MA-175 total employment, cost of materials, and value of shipments as shown on the corresponding 1977 MA-100 form for those plants. They then indicated by means of a "check-box" inquiry the range of value of shipments made by the establishment to the Federal Government in 1977. Those establishments indicating shipments of \$1 million or more to the Federal Government reported the value of such shipments classified by the specific Government agency to which the products were billed, while the remaining respondents (those indicating value of shipments less than \$1 million to the Federal Government) were not required to complete this portion of the inquiry. However, in order to estimate for the latter respondents, a linear approximation to the mean value of the range (which the respondent checked) was employed. The following values were used to estimate shipping for establishments that shipped less than \$1 million to the Federal Government:

*Up to \$100,000, estimated at \$42,000
 \$100,000 to \$249,999, estimated at \$150,000
 \$250,000 to \$499,999, estimated at \$350,000
 \$500,000 to \$999,999, estimated at \$700,000*

These estimates are included in the "Other Government agency not specifically known" category.

In the various MA-175 tables, a Government employment figure is shown. This also is an estimated figure derived by a straight proration of the employment of the plant by the ratio of the shipments data reported by agency as a percentage of the total shipments of that establishment.

APPENDIX D

RETURN THIS FORM WITHIN 30 DAYS AFTER RECEIPT		O.M.B. No. 41-P2503 Approval Expires NOVEMBER 30, 1978 R 1 P 20					
REPORT FOR CALENDAR YEAR 1977 U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS FORM MA-178		RESPONSE TO THIS INQUIRY IS REQUIRED BY LAW Your report to the Census Bureau is confidential by law (Title 13, U.S. Code). The law also provides that copies retained in your files are immune from legal process. See Instruction Manual for specific provisions relating to this survey.					
CURRENT INDUSTRIAL REPORTS		In correspondence pertaining to this establishment's report please refer to the file number above your name.					
<p align="center">REPORT ON SHIPMENTS TO OR RECEIPTS FOR WORK DONE FOR FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS AND SUPPLIERS</p> <p>INSTRUCTIONS - Please refer to the Instruction Manual before filing this form. Complete and return this form in the envelope provided to:</p> <p>Bureau of the Census 1201 East Tenth Street Jeffersonville, Indiana 47130</p> <p>EMPLOYER IDENTIFICATION (EI) NUMBER Identification number used on Employer's Quarterly Federal Tax Return (U.S. Treasury Department Form 941) (Enter if not shown) → (Correct number if wrong)</p>		(Please correct any error in name and address including ZIP code)					
<p align="center">PART I</p> <p align="center">Section A CURRENT REPORT</p> <p>For each item listed below, enter figures for current period or mark "None" in column (d).</p>		<p align="center">PERSON TO BE CONTACTED (Enter name and telephone number if not shown - Correct if wrong) →</p> <table border="1"> <tr> <td>Name</td> </tr> <tr> <td>Area code</td> <td>Number</td> </tr> </table> <p align="center">CT1</p>	Name	Area code	Number		
Name							
Area code	Number						
		Section B PREVIOUS REPORTS					
		1977 1976 1975					
Product code	Item (a) Description	Unit of measure (b)	Item code (c)	Amount for this period in unit of measure shown in column (b) (Enter figure or mark None) (d)	None	THE FIGURES SHOWN BELOW WERE REPORTED FOR THE PREVIOUS TWO PERIODS	
						(e)	(f)
<p>NOTE: ALL ESTABLISHMENTS MUST REPORT FOR CODES 2100, 2200 & 3001 & MUST CIRCLE ONE OF THE CODES 1001 THROUGH 1006. IF CODE 1006 IS CIRCLED, THEN DATA MUST BE REPORTED FOR CODES 3012 THROUGH 3042, COLUMN (D).</p>							
<p>AVERAGE TOTAL EMPLOYMENT OF THIS PLANT (SAME AS ITEM 2, CENSUS FORM MA-1001) NUMBER 2100</p> <p>TOTAL COST OF MATERIALS OF THIS PLANT (SAME AS ITEM 5, CENSUS FORM MA-1001) \$1,000 2200</p> <p>TOTAL VALUE OF SHIPMENTS AND/OR RECEIPTS (SAME AS ITEM 11, CENSUS FORM MA-1001) \$1,000 3001</p> <p>CIRCLE CODE BELOW WHICH INCLUDES SHIPMENTS TO OR RECEIPTS FOR WORK DONE FOR FEDERAL GOVT. AGENCIES, THEIR CONTRACTORS AND SUPPLIERS</p> <p>CODE NONE 1001 UP TO \$99,999 1002 \$100,000-\$249,999 1003 \$250,000-\$499,999 1004 \$500,000-\$999,999 1005 \$1,000,000 OR MORE 1006</p> <p>IF YOU CIRCLED CODE 1006, COMPLETE ITEMS 3012-3042, IF NOT, COMPLETE PART II.</p> <p>VALUE OF SHIPMENTS TO OR RECEIPTS FOR WORK DONE FOR FEDERAL GOVT. AGENCIES, THEIR CONTRACTORS, SUBCONTRACTORS, AND SUPPLIERS</p> <p>(A) DIRECT (AS A PRIME CONTRACTOR) DOD \$1,000 3012 NASA \$1,000 3013 ERDA \$1,000 3014 OTHER FEDERAL AGENCIES \$1,000 3015</p> <p>(B) INDIRECT (AS A SUBCONTRACTOR OR SUPPLIER) INCLUDE TRANSFERS TO OTHER PLANTS OF THE SAME COMPANY (1) GOVT. AGENCY SPECIFICALLY KNOWN DOD \$1,000 3026 NASA \$1,000 3027 ERDA \$1,000 3028 OTHER FEDERAL AGENCIES \$1,000 3029 (2) GOVT. AGENCY NOT KNOWN EITHER DOD, NASA, OR ERDA \$1,000 3040 OTHER FEDERAL AGENCIES \$1,000 3041 (C) OTHER SHIPMENTS (ITEM CODE 3001 MINUS ITEM CODES 3012-3041) \$1,000 3042</p>							

Continuation sheets are included, if all of your items could not be listed on this page.
If additional space is needed, use reverse side of page 1.

* Figures not received when form was prepared.
PLEASE ENTER, if not already submitted.

APPENDIX D—Continued

APPENDIX D—Continued

FORM MA-171 <small>(11-28-77)</small> U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS DEPARTMENT OF DEFENSE-OWNED AND OPERATED ESTABLISHMENTS PRIMARILY ENGAGED IN MANUFACTURING AND ASSEMBLY, AND/OR RESEARCH AND DEVELOPMENT - 1977 <small>(Includes shipyards)</small> <small>(Supplement to the Annual Survey of Manufactures, Census Form MA-100)</small>		<small>O.M.B. No. 41-R2349: Approval Expires November 20, 1978</small> NOTICE — Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process. <small>(Please correct if any error in name and address, including ZIP code)</small>													
INSTRUCTIONS — This report is to be prepared by those Department of Defense establishments whose primary activities are manufacture and assembly and/or research and development. All shipyards are included. The information requested is based upon reports now regularly prepared by most such establishments.															
ITEM 1 — NAME AND PHYSICAL LOCATION OF ESTABLISHMENT ON DECEMBER 31, 1977															
a. Name of establishment <small>Your answers to parts b, c, d, e, and f of this item should relate to the ACTUAL PHYSICAL LOCATION of this establishment which may be different from the mailing address.</small>		d. Is this establishment physically located within the legal boundaries of the place named in "c"? <input type="checkbox"/> Yes <input type="checkbox"/> No													
b. Street and number of establishment location* <small>* If establishment location cannot be described by street and number, give name and number, if any, of road or highway and sufficient information to locate establishment, e.g., Rt. 25, 3 miles south of Charlesville.</small>		e. County in which located													
c. Type and name of place in which located — Mark (X) first applicable type and enter name of place. <table border="1" style="width: 100%;"> <thead> <tr> <th>Type</th> <th>Name of place</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> City</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Village or borough</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Town</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Township</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other — Specify</td> <td></td> </tr> </tbody> </table>		Type	Name of place	<input type="checkbox"/> City		<input type="checkbox"/> Village or borough		<input type="checkbox"/> Town		<input type="checkbox"/> Township		<input type="checkbox"/> Other — Specify		f. State <input style="width: 20px; height: 15px; vertical-align: middle;" type="text"/> ZIP code <input style="width: 20px; height: 15px; vertical-align: middle;" type="text"/>	
Type	Name of place														
<input type="checkbox"/> City															
<input type="checkbox"/> Village or borough															
<input type="checkbox"/> Town															
<input type="checkbox"/> Township															
<input type="checkbox"/> Other — Specify															
		g. Telephone number of establishment <small>(Include area code)</small>													
ITEM 2 — NATURE OF ACTIVITY <small>Describe briefly the kind of activity of this establishment. If a manufacturing plant, list the three most important products.</small>															
ITEM 3 EMPLOYMENT PAYROLLS IN CALENDAR YEAR 1977 <small>(Civilian employees only)</small>	Class of employee	Item code	Number of civilian employees in 1977					Total wages and salaries of civilian employees (Thousands of dollars) (G)							
			At end of quarter <small>(As reported on Civil Service Form SF-113-A **)</small>				Sum of columns A, B, C, and D (Col. E divided by 4) (F)								
			March (A)	June (B)	September (C)	December (D)									
			a. Wage Board employees 41												
b. All others 42															
c. TOTAL CIVILIAN EMPLOYEES <small>(Sum of lines a and b)</small> 49															
<small>** The number of Wage Board employees (line a) should be the same as reported on line 5 of SF-113-A. The total (line c) should be the same as reported on line 1 of SF-113-A.</small>															
ITEM 4 WORK-DAYS OF WAGE BOARD EMPLOYEES BY CALENDAR QUARTER 1977	<small>Enter the total number of work-days of Wage Board employees for each calendar quarter of 1977. Do not include days paid for vacations, holidays, or sick leave,</small>			Item code	1977 Quarterly period			Man-days (Thousands) (A)	Estimated number of work-hours*** (Thousands) (B)						
				51	a. January through March										
				52	b. April through June										
				53	c. July through September										
				54	d. October through December										
				59	e. TOTAL, 1977 <small>(Sum of lines a, b, c, and d)</small>										
<small>*** Obtain figure for column (B) by multiplying column (A) by average number of hours per day per Wage Board employee in this establishment.</small>															

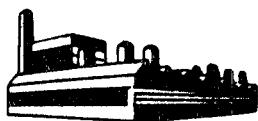
Please continue on page 2

APPENDIX D—Continued

ITEM 5 BILLINGS BY THIS ESTABLISH- MENT DURING CALENDAR YEAR 1977	Enter below the specified classes of billings of this establishment for calendar year 1977																	
	Billings for products and services (including progress billings)		Item code															
	Manufacture and assembly		61 \$															
	Construction and conversion		62															
	Overhaul, repair, and renovation		63															
	Alteration and modification		64															
	Research and development		65															
	Other billings		66															
	Total billings for products and services		67															
	Increase or decrease in unbilled costs of work in progress		68															
TOTAL EARNED REVENUE → 69																		
ITEM 6 COSTS DURING CALENDAR YEAR 1977	Types of costs incurred		Item code															
	Materials, supplies, and parts used		71 \$															
	Wages and salaries (same as item 3, code 49, col. G)		72															
	Contractual services and other costs		73															
	TOTAL COSTS INCURRED → 79																	
	VALUE ADDED (Census use only) 81																	
	ITEM 7 CHECKS TO ASSURE A COMPLETE AND ACCURATE REPORT <small>(Please complete this item after you have answered all items on this report.)</small> <p>The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report:</p> <ul style="list-style-type: none"> a. Review this report carefully to see that no items are omitted. b. Calculate and enter the four "reasonableness" checks (described below), then review the resulting figures. c. Correct your report for any errors you find; explain unusual figures in "Remarks" section. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">"Reasonableness" checks</th> <th style="text-align: left;">Calculation required for each check</th> <th style="text-align: left;">Resulting figures for 1977</th> </tr> </thead> <tbody> <tr> <td>(1) Average hourly wages per Wage Board employee</td> <td>Item code 41, column G (Wages paid Wage Board employees) ÷ item code 59, column B (Total estimated work-hours)</td> <td>\$</td> </tr> <tr> <td>(2) Work-days per year per Wage Board employee</td> <td>Item code 59, column A (Wage Board work-days in thousands) × 1,000 ÷ item code 41, column F (Average number of Wage Board employees)</td> <td>Work-days</td> </tr> <tr> <td>(3) Wages and salaries per dollar of earned revenue</td> <td>Item code 72, (Wages and salaries of civilian employees) ÷ item code 69 (Total earned revenue)</td> <td>\$</td> </tr> <tr> <td>(4) Is the total earned revenue (item code 69, total) greater than total costs incurred (item code 79, total)?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No — If "No," please explain in "Remarks" section.</td> </tr> </tbody> </table>				"Reasonableness" checks	Calculation required for each check	Resulting figures for 1977	(1) Average hourly wages per Wage Board employee	Item code 41, column G (Wages paid Wage Board employees) ÷ item code 59, column B (Total estimated work-hours)	\$	(2) Work-days per year per Wage Board employee	Item code 59, column A (Wage Board work-days in thousands) × 1,000 ÷ item code 41, column F (Average number of Wage Board employees)	Work-days	(3) Wages and salaries per dollar of earned revenue	Item code 72, (Wages and salaries of civilian employees) ÷ item code 69 (Total earned revenue)	\$	(4) Is the total earned revenue (item code 69, total) greater than total costs incurred (item code 79, total)?	<input type="checkbox"/> Yes
"Reasonableness" checks	Calculation required for each check	Resulting figures for 1977																
(1) Average hourly wages per Wage Board employee	Item code 41, column G (Wages paid Wage Board employees) ÷ item code 59, column B (Total estimated work-hours)	\$																
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(4) Is the total earned revenue (item code 69, total) greater than total costs incurred (item code 79, total)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No — If "No," please explain in "Remarks" section.																
ITEM 8 REMARKS PERTAIN- ING TO THIS REPORT																		
PERIOD OF REPORT	This report covers the period from _____ to _____																	
ITEM 9	Name of person to be contracted regarding this report	Address — Number and street, city, State, ZIP code	Telephone — Area code, number, extension															
ITEM 10	CERTIFICATION — This report is substantially accurate and has been prepared in accordance with instructions.																	
	Name of establishment	Address — Number and street, city, State, ZIP code																
	Signature of authorized official	Title	Date															

FORM MA-101 (11-25-77)

APPENDIX D—Continued



U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

Current Industrial Reports

INSTRUCTION MANUAL

FOR REPORTING ON FORM MA-175 FOR 1977

REPORT ON SHIPMENTS TO OR RECEIPTS
FOR WORK DONE FOR FEDERAL GOVERNMENT AGENCIES
AND THEIR CONTRACTORS AND SUPPLIERS

ANNUAL REPORT

MA-175 (11-1-77)

INTRODUCTION

This manual consists of your instructions for completing your report. Please complete and return the white copy of the report form and retain the completed yellow copy for use as your file copy.

- Part A below gives general instructions about your report.
- Part B explains the format of the report form and how to report the items.
- Part C gives definitions and special instructions you should use in preparing your report.
- Part D contains the reference list of items covered in this survey.

Part A – GENERAL INSTRUCTIONS

► 1. Filing the report

Return your completed form to the Bureau of the Census, 1201 East Tenth Street, Jeffersonville, Indiana 47132, Attn: CIR, within 30 days after receipt. We will accept reasonable estimates if your figures are not available within this time period. Please use the preaddressed return envelope that is sent with each report.

We have designed your report form for automatic processing by electronic computers. We would appreciate your using a typewriter to enter all your figures.

If this survey is not applicable to your establishment's operations, please note this fact under the "REMARKS" section of the report form together with a brief description of the principal products manufactured at this establishment and RETURN THE REPORT.

► 2. Correspondence about your report

In any correspondence with the Census Bureau about your report, please include the title of the survey and the 11-digit file number shown in the address box of your report form.

► 3. Confidentiality of data

Response to this inquiry is required by law (title 13, United States Code, sections 182, 224, and 225). By section 9 of the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

► 4. Publication of results of this survey

The Census Bureau will publish industry totals in the Current Industrial Reports, Series MA-175, as soon as possible after the necessary reports are received. Companies reporting in this survey can obtain copies of this publication without charge upon request to the Bureau of the Census, Industry Division, Washington, D.C. 20233.

► 5. Companies using blank report forms

The Reference List included in the Instruction Manual should be reviewed carefully to determine which of the items are applicable to your company. The descriptions and item codes should then be transcribed to the report form along with the respective current and previous period data. Please review part B of the Instruction Manual on "How to Report" for correct entry of your data.

APPENDIX D—Continued

Part B – HOW TO REPORT

- 1. **Reporting of data** – Complete part I as shown in the following illustration. All of the items included in this survey are preprinted in part I.

- 2. Employer identification number**

If your identification number is not preprinted on the form, enter the number used on your Employer's Quarterly Federal Tax Return (U.S. Treasury Department Form 941). If your number is preprinted but is wrong or has changed since your last report, cross it out and enter the correct number. Indicate in "Remarks" the reason for the change (such as reorganized, purchased existing business, etc.).

- 3. Person to contact

Enter the name and telephone number of the person to contact regarding this report, if it is not pre-printed on the form. If the preprinted name or telephone number is wrong, cross it out and enter the correct information.

- #### ► 4. Revisions to previous data

We may have changed some of the figures you originally reported either as a result of correspondence with you or because the figures were not consistent with other items you reported.

Please review all the preprinted figures. If any need revision, cross them out and enter the correct ones above them.

- #### ► 5. Reporting period

Report data for the calendar year. If calendar year book figures are not available, except at considerable cost, reasonable estimates will be acceptable.

However, if your fiscal year includes at least 10 months of the calendar year (ends between October 31 and February 28), fiscal year figures will be acceptable.

If there was a change in ownership during the year, or the establishment operated part of the year only, the data should apply to the period of operation by your company only.

APPENDIX D—Continued

Part C – DEFINITIONS AND SPECIAL INSTRUCTIONS

Shipments

Item codes 2100, 2200, and 3001 — All establishments report total employment, total cost of materials, and total value of shipments. These figures should correspond to the respective items (employment — 2h, cost of materials — 5f, and value of shipments — 11n) as reported on the Annual Survey of Manufactures (Census Form MA-100).

Circle the code which represents your government shipments. If code 1006 is circled, report the remainder of the detail codes where it applies to your establishment. If one of the codes 1001–1005 is circled, do not complete the remaining codes.

Item codes 3012 through 3015 — Data reported should represent the total value of shipments, billings, or receipts from Federal Government agencies during the year. For long lead time production or research, development, testing, and evaluation programs, the value of work done during the year should be reported on the Annual Survey of Manufactures and on this report. Such a figure is represented by net billings, or payments received by you (including progress payments), for work done during the year. This method of estimating shipments to the Government has frequent application to work done on aircraft, ships, missiles, space vehicles, and the like, as well as work done on related systems.

Transfers from one plant to another of the same company should be reported as subcontracts (item codes 3026 through 3041) even though the final shipment of the company was on prime contract.

Item codes 3026 through 3041 — Data reported should represent the value of shipments or other receipts for work done by you for Government prime contractors and subcontractors and all other shipments from this plant generated indirectly by Government contracts. This would include services performed, shipments of raw and semifabricated materials and "standard" parts, assemblies, equipment, and components, as well as work done by you in supplying "special" parts, components, or assemblies in accordance with a prime or subcontractor's designs, specifications, or directions.

Note, again, that the value of transfers to other plants of the same company are to be reported in these subcontract columns.

It is recognized that indirect Government work is not always identified as such. In view of this, estimates will be acceptable in those instances where work is not subject to the Renegotiation Act of 1951 as amended.

Item code 3042 — Data reported should represent the difference between the total values of shipments and/or receipts, item code 3001, and the sum of entries in item codes 3012 through 3041.

APPENDIX D—Continued

Part D - REFERENCE LIST

Item description	Unit of measure	Item code
Total employment of this plant (average) (Same as item 2h, Census Form MA-100)	Number	2100
Total cost of materials by this plant (Same as item 5f, Census Form MA-100)	\$1,000	2200
Total value of shipments and/or receipts (Corresponds to item 11n, Census Form MA-100)	\$1,000	3001
<i>Circle the code which includes the receipts for shipments or other work done in this plant for the Federal Government agencies and their contractors and suppliers:</i>		
1001 — None		
1002 — Up to \$99,999		
1003 — \$100,000 to \$249,999		
1004 — \$250,000 to \$499,999		
1005 — \$500,000 to \$999,999		
1006 — \$1,000,000 or more		
If you circled code 1006 (\$1,000,000 or more), complete item codes 3012-3042.		
Shipments to or receipts for work done for Federal Government agencies and their contractors, subcontractors, and suppliers		
Direct (as a prime contractor)		
DOD.	\$1,000	3012
NASA.	\$1,000	3013
ERDA (formerly AEC)	\$1,000	3014
Other Federal agencies	\$1,000	3015
Indirect (as a subcontractor or supplier) (Include transfers to other plants of the same company)		
Government agency specifically known		
DOD.	\$1,000	3026
NASA.	\$1,000	3027
ERDA (formerly AEC)	\$1,000	3028
Other Federal agencies	\$1,000	3029
Government agency not specifically known		
Either DOD, NASA, or ERDA	\$1,000	3040
Other Federal agencies	\$1,000	3041
Other shipments (Item code 3001 minus item codes 3012-3041).	\$1,000	3042

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MA-175(77)-1 Shipments of Defense-Oriented Industries, 1977
STAO

Current Industrial Reports

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Headquarters, CIA
Washington, D.C. 20505

