MOOG INC Form 10-K December 20, 2001

#### **FORM 10-K** UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

(Mark One)

#### [X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE **SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended September 29, 2001 OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE **SECURITIES EXCHANGE ACT OF 1934** 

For the transition period from to Commission file number 1-5129

#### MOOG INC.

(Exact Name of Registrant as Specified in its Charter)

New York (State or other jurisdiction of incorporation)

East Aurora, New York (Address of Principal Executive Offices) Registrant's Telephone Number, Including Area Code: (716) 652-2000

16-0757636 (IRS Employer Identification Number)

> 14052-0018 (Zip Code)

Securities registered pursuant to Section 12(b) of the Act: None

Title of Each Class Class A Common Stock, \$1.00 Par Value Class B Common Stock, \$1.00 Par Value Securities registered pursuant to Section 12(g) of the Act: None

Name of Each Exchange on Which Registered New York Stock Exchange New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 Yes X No days.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant sknowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. X

The aggregate market value of the Common Stock outstanding and held by non-affiliates (as defined in Rule 405 under the Securities Act of 1933) of the registrant, based upon the closing sale price of the Common Stock on the New

York Stock Exchange on December 6, 2001 was approximately \$261 million.

The number of shares of Common Stock outstanding as of the close of business on December 6, 2001 was: Class A 12,915,523; Class B 2,167,922.

The documents listed below have been incorporated by reference into this Annual Report on Form 10-K:

(1) Portions of the Annual Report to Shareholders for the fiscal year ended September 29, 2001 (the "2001 Annual Report") are incorporated by reference into Part I of this Form 10-K.

(2) Portions of the January 2002 Proxy Statement to Shareholders (the "2002 Proxy") are incorporated by reference into Part III of this Form 10-K.

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#### **Cautionary Statement**

Information included herein or incorporated by reference that does not consist of historical facts, including statements accompanied by or containing words such as may, will, should, believes, expects, intends, plans, project predicts, potential, outlook. forecast, anticipates, presume and assume, are forward-looking statements. Su forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are not guarantees of future performance and are subject to several factors, risks and uncertainties, the impact or occurrence of which could cause actual results to differ materially from the expected results described in the forward-looking statements. These important factors, risks and uncertainties include (i) fluctuations in general business cycles and demand for capital goods, (ii) the Company s dependence on

government contracts that may not be fully funded or may be terminated, (iii) the Company s dependence on certain major customers, such as The Boeing Company, for a significant percentage of its sales, (iv) the Company s dependence on the commercial aircraft industry which is highly cyclical and sensitive to fuel price increases, labor disputes, and economic conditions and which is currently experiencing decreased demand for air travel following the September 11, 2001 terrorist attacks on the United States, (v) the possibility that advances in technology could reduce the demand for certain of the Company s products, specifically hydraulic-based motion controls, (vi) the use of electronic auctions by customers to award business, (vii) intense competition on the Company s business which, depending on product line, may require the Company to compete by lowering prices or by offering more favorable terms of sale, (viii) the Company s significant indebtedness which could limit its operational and financial flexibility, (ix) a write-off of all or part of the Company s goodwill or an adjustment to shorten its amortization period which could adversely affect the Company s operating results and net worth and cause it to violate covenants in its bank agreements, (x) the potential for substantial fines and penalties or suspension or debarment from future contracts in the event the regulations relating to defense industry contracting are not complied with, (xi) the potential for cost overruns on development jobs and fixed-price contracts and the risk that actual results may differ from estimates used in contract accounting, (xii) the Company s ability to successfully identify and consummate acquisitions and integrate the acquired businesses, (xiii) the possibility of a catastrophic loss of one or more of the Company s manufacturing facilities, (xiv) the impact of product liability claims related to the Company s products used in applications where failure can result in significant property damage, injury and death, (xv) foreign currency fluctuations in those countries in which the Company does business and other risks associated with international operations, (xvi) the cost of compliance with environmental laws, and (xvii) the effect of power outages in California where the Company has significant manufacturing operations. The factors identified above are not exhaustive. New factors, risks and uncertainties may emerge from time to time that may affect the forward-looking statements made herein. Given these factors, risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictive of future results. The Company disclaims any obligation to update the forward-looking statements made in this report.

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#### Part I

The Registrant, Moog Inc., a New York corporation formed in 1951, is referred to in this Annual Report on Form 10-K as "Moog," "the Company" or in the nominative "we" or the possessive "our."

#### **ITEM 1. Business.**

Certain information required herein is incorporated by reference to the 2001 Annual Report.

#### Description of the Company's Business. See pages 2 through 20 of the 2001 Annual Report.

**Distribution.** Moog s sales and marketing organization consists of individuals possessing highly specialized technical expertise. This expertise is required in order to effectively evaluate a customer s precision control requirements and to facilitate communication between the customer and Moog s engineering staff. Moog s sales staff is the primary contact with customers. Manufacturers representatives are used to cover certain domestic aerospace markets. Distributors are used selectively to cover certain industrial markets.

**Industry and Competitive Conditions.** The Company is a precision control specialist competing globally in the aircraft, space and industrial markets using all precision control technologies. The Company experiences considerable competition in each of these three markets.

Many of our competitors have greater financial and other resources. In Aircraft Controls, the Company's principal competitors include Parker Hannifin Corporation, Curtiss-Wright Corporation, Liebherr-Holding GmbH, Lucas Aerospace Power Equipment Corporation, a subsidiary of TRW Inc., and Teijin Seiki Co., Ltd. In Space Controls, the

Company's principal competitors include Valve Tech Inc., Vacco Industries, Inc., Honeywell International Inc. and Textron. In Industrial Controls, competitors include Bosch Rexroth AG, Barber-Colman, Siemens, Pacific Scientific Company and Yaskawa Electric Corporation.

Competition in each market served is based upon design capability, product performance and life, service, price and delivery time. The Company believes it competes effectively on all of these bases.

**Backlog.** Substantially all backlog will be realized as sales in the next twelve months. Also see the discussion in Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations, beginning on page 26 of this report.

**Raw Materials.** Materials, supplies and components are purchased from numerous suppliers. The Company believes the loss of any one supplier, although potentially disruptive in the short term, would not materially affect the Company s operations in the long term.

**Working Capital.** See the discussion on inventories in Note 1 of Item 8. Financial Statements and Supplementary Data on page 35 of this report.

Seasonality. Moog's business is generally not seasonal.

**Patents.** Moog has numerous patents and has filed applications for others. While the protection afforded by these is of value, the Company does not consider the successful conduct of any material part of its business to be dependent upon such protection. The Company s patents and patent applications, including U.S. and international patents, relate to electrohydraulic, electropneumatic and electromechanical actuation mechanisms and control valves, electronic control component systems and interface devices. The Company has trademark and trade name protection in major markets throughout the world.

**Research Activities.** Research and product development activity has been and continues to be significant to the Company. See Item 6. Selected Financial Data on page 25 of this report.

**Employees.** On September 29, 2001, the Company employed 4,901 full-time employees, compared to 4,463 full-time employees on September 30, 2000. The increase is attributable to recent acquisitions.

**Segment Financial Information.** See the discussion in Note 10 of Item 8. Financial Statements and Supplementary Data on pages 43 and 44 of this report.

**Customers.** The information required herein is incorporated by reference to pages 2 through 20 of the 2001 Annual Report. Also see pages 26 and 43 of this report. The Company s customers fall into three groups, OEM customers of its aerospace business, OEM customers of its industrial business and aftermarket customers. OEM-aerospace customers collectively represented 45% of fiscal 2001 sales. The majority of these sales are to a small number of large companies. Due to the long-term nature of many of the programs, many of the Company s relationships with OEM-aerospace customers are based on long-term agreements. The Company s sales of industrial controls are to a diversity of customers around the world and are normally based on lead times of 90 days or less. The Company also provides spare and replacement parts and repair and overhaul services for most of its products. The Company s major aftermarket customers include the U.S. government and the commercial airlines.

The Boeing Company represented approximately 18% of consolidated sales in 2001, including sales to the Boeing Commercial Airplane Group which represented 10% of fiscal 2001 sales. Sales to the U.S. Government and its primeor sub-contractors, including military sales to Boeing, were approximately 26% of sales. Sales to these customers are made primarily from Aircraft Controls and Space Controls.

**International Operations.** Operations outside the United States are conducted through wholly-owned foreign companies. The Company s international operations are located predominantly in Europe and the Asian-Pacific region. See pages 44 and 49 of this report. The Company s international operations are subject to the usual risks inherent in international trade, including currency fluctuations, local governmental foreign investment restrictions, exchange controls, regulation of the import and distribution of foreign goods, as well as changing economic and social conditions in countries in which such operations are conducted.

**Environmental Matters.** See the discussion in Note 12 of Item 8. Financial Statements and Supplementary Data on page 44 of this report.

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## **ITEM 2. Properties.**

The Company occupies approximately 2,286,000 square feet of space in the United States and countries throughout the world, distributed by segment as follows:

	S	Square Feet				
	Owned	Leased	Total			
Aircraft Controls Space Controls Industrial Controls Corporate Headquarters	920,000 216,000 492,000	165,000 108,000 347,000 38,000	1,085,000 324,000 839,000 38,000			
Total	1,628,000	658,000	2,286,000			

Aircraft Controls has principal manufacturing facilities located in New York, California, Utah, England and the Philippines. Space Controls has primary manufacturing facilities located in New York and California. Industrial Controls has principal manufacturing facilities located in New York, Germany, Italy, Ireland, Luxembourg and Japan. The Company s headquarters are located in East Aurora, New York.

The Company believes that its properties have been adequately maintained and are generally in good condition. The Company is adding approximately 63,000 square feet of manufacturing space at low cost manufacturing sites to support its expected future growth. Operating leases expire at various times from December 2001 through November 2013. Upon the expiration of its current leases, the Company believes that it will be able to either secure renewal terms or enter into leases for alternative locations at market terms.

#### **ITEM 3. Legal Proceedings.**

From time to time, the Company is named as a defendant in legal actions arising in the normal course of business. The Company is not a party to any pending legal proceedings which management believes will result in a material adverse effect on the Company s financial condition, liquidity or results of operations or to any pending legal proceedings other than ordinary, routine litigation related to its business.

#### ITEM 4. Submission of Matters to a Vote of Security Holders.

None.

#### Part II

#### ITEM 5. Market for the Registrant's Common Equity and Related Stockholder Matters.

Moog s two classes of common shares, Class A Common Stock and Class B Common Stock, are traded on the New York Stock Exchange (NYSE) under the ticker symbols MOG.A and MOG.B. Prior to August 27, 2001, Moog s two classes of common shares were traded on the American Stock Exchange (AMEX) under the same ticker symbols. The following chart sets forth, for the periods indicated, the high and low sales prices of the Class A Common Stock and Class B Common Stock on the NYSE beginning August 27, 2001 and on the AMEX prior to August 27, 2001. The prices have been restated to reflect the effect of the three-for-two split of the Company s Class A and Class B Common Stock effected in the form of a stock distribution on September 21, 2001.

Ouarterly Stock Prices

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Fiscal Year	Class	s B	Class	s A
Ended	High	Low	High	Low
Sept. 29, 2001				
1st Quarter	\$27.00	\$27.00	\$20.54	\$16.75
2nd Quarter	28.67	27.00	25.50	18.75
3rd Quarter	27.67	27.00	25.97	22.13
4th Quarter	27.67	27.00	24.93	21.49
Sept. 30, 2000				
1st Quarter	\$27.00	\$27.00	\$19.58	\$13.88
2nd Quarter	27.33	27.00	18.42	9.83
3rd Quarter	27.33	26.83	18.92	12.71
4th Quarter	27.29	27.00	23.00	17.58

# The number of shareholders of record of Class A Common Stock and Class B Common Stock was 1,334 and 634, respectively, as of December 6, 2001.

Dividend restrictions are detailed in Note 6 of Item 8. Financial Statements and Supplementary Data on page 38 of this report. The Company does not currently pay dividends on its Class A Common Stock or Class B Common Stock.

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#### ITEM 6. Selected Financial Data.

For a more detailed discussion of 1999 through 2001 refer to **Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations** on pages 26 through 30 of this report and **Item 8. Financial Statements and Supplementary Data, Notes to Consolidated Financial Statements** on pages 35 through 45 of this report.

(dollars	in	thousands	except	per	share	data)
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Fiscal Years	20	001(1)	2	2000	19	999(2)	1	998(3)	19	997(4)
RESULTS FROM OPERATIONS										
Net sales	\$70	)4,378	\$64	14,006	\$63	30,034	\$5	36,612	\$45	55 <b>,</b> 929
Net earnings	\$ 2	27,938	\$ 2	25,400	\$ 2	24,431	\$	19,268	\$ 1	13,606
Net earnings per share (5)										
Basic	\$	2.13	\$	1.92	\$	1.82	\$	1.55	\$	1.30
Diluted	\$	2.11	\$	1.90	\$	1.80	\$	1.51	\$	1.25
FINANCIAL POSITION										
Total assets	\$8!	56 <b>,</b> 541	\$7 <u>9</u>	91 <b>,</b> 705	\$79	98,476	\$5	59 <b>,</b> 325	\$49	90,563

Working capital	257,379	247,625	224,967	226,190	187,521
Indebtedness - senior	253,329	246,289	256,110	85,614	118,245
- senior subordinated	120,000	120,000	120,000	120,000	120,000
Shareholders' equity	235,828	222,554	211,770	191,008	114,191
Shareholders' equity per					
common share outstanding (5)	18.04	17.12	15.85	14.26	10.79
SUPPLEMENTAL FINANCIAL DATA					
Capital expenditures	\$ 26,955	\$ 23,961	\$ 26,439	\$ 22,688	\$ 13 <b>,</b> 713
Depreciation and amortization	31,693	30,443	30,602	22,665	21,267
R&D - Company funded	26,461	21,981	33,306	27,487	17,798
- customer funded	27,631	18,624	14,367	15,440	14,071
Twelve-month backlog	364,331	345,333	336,857	314,253	280,364
RATIOS					
Net return on sales	4.0%	3.9%	3.9%	3.6%	3.0%
Return on shareholders' equity	12.2%	11.7%	12.1%	12.6%	12.4%
Current ratio	2.38	2.59	2.24	2.87	2.75
Debt to shareholders' equity	1.58	1.65	1.78	1.08	2.09
Long-term senior debt to					
capitalization(6)	38.6%	39.8%	40.9%	20.4%	30.3%
Long-term debt to capitalization(6)	59.3%	60.9%	62.3%	51.1%	66.0%

(1) Includes the effects of the fiscal 2001 acquisitions. See Note 2 to the Consolidated Financial Statements.

(2) Includes the effects of the fiscal 1999 acquisitions. See Note 2 to the Consolidated Financial Statements.

(3) Includes the effects of the Class A common stock offering and the acquisition of Schaeffer Magnetics completed in February 1998.

(4) Includes the effects of the October 1996 acquisition of the industrial hydraulic servocontrols business of International Motion Control Inc.

(5) Per share data has been restated to reflect the effect of the three-for-two split of the Company's Class A and Class B common stock effected in the form of a stock distribution on September 21, 2001.

(6) Capitalization is equal to the sum of total long-term debt, excluding current maturities, and shareholders equity.

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#### ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

#### **Overview**

Moog is a leading worldwide designer and manufacturer of a broad range of high performance precision motion and fluid controls and control systems for a broad range of applications in aerospace and industrial markets. The Company has three operating segments.

Aircraft Controls designs and manufactures technologically advanced flight and engine controls for manufacturers of military and commercial aircraft. Moog currently supplies flight controls for all major, in-production U.S. military aircraft, including the U.S. Navy s F/A-18 E/F Super Hornet fighter aircraft and V-22 Osprey tiltrotor aircraft. The Company supplied Lockheed Martin with flight controls for the Joint Strike Fighter concept demonstrator aircraft and is the contract lead for developing flight controls for the Engineering and Manufacturing Development phase of the program. This plane is the next generation fighter aircraft designed for use by all three branches of the U.S. military and several foreign governments. The Company is also a supplier to several large commercial aircraft manufacturers including The Boeing Company, Airbus Industrie, Raytheon Company and Bombardier Inc.

Space Controls designs and manufactures controls and systems that control the flight, positioning or thrust of tactical and strategic missiles, launch vehicles, satellites and NASA s Space Shuttle. Customers include Alliant Techsystems Inc., Lockheed Martin, Astrium Ltd., Raytheon and Boeing. Programs on which Moog participates include tactical missile programs such as TOW, Hellfire and AGM 142 Popeye, missile defense programs such as the National Missile Defense program, or NMD, and the Theater High Altitude Area Defense System, or THAADS, the Space Station and the Titan IV and Delta family of launch vehicles.

Industrial Controls designs and manufactures hydraulic and electric controls used in a variety of industrial applications. Product applications include plastic injection and blow molding machines, steam and gas turbines, steel rolling mills, fatigue testing machines, motion simulators and gun and turret positioning and ammunition-loading systems on combat vehicles.

In fiscal 2001, 40% of the Company s sales were accounted for by the percentage of completion (cost-to-cost) method of accounting for long-term contracts. Under this method, sales are recognized as the work progresses toward completion. For contracts with anticipated losses at completion, a provision is recorded when the loss becomes known. Loss reserves are more common on firm fixed-price contracts which involve, to varying degrees, the design and development of new and unique controls or control systems to meet the customers specifications. Amounts representing contract claims or change orders are included in the estimate of contract values only when they can be reliably estimated and realization is considered probable. The remainder of the Company s sales are principally recognized as units are shipped.

The Board of Directors of the Company approved a three-for-two stock split, effected in the form of a 50% stock distribution, of its Class A and Class B common stock to stockholders of record on September 7, 2001, distributed September 21, 2001. All share and per share amounts included in Management s Discussion and Analysis of Financial Condition and Results of Operations have been restated to show the effects of the stock split.

## **Recent Developments**

On October 25, 2001, the Company purchased the net assets of the satellite and space vehicle product lines of the Electro Systems Division of Tecstar, Inc. for \$8 million in cash. The acquired product lines of Tecstar s Electro Systems Division manufacture electromechanical equipment for spacecraft.

On November 20, 2001, the Company completed an offering of Class A common stock at \$21.00 per share. The offering included 1,980,000 previously unissued shares sold by the Company. The net proceeds to the Company of approximately \$39 million were used to repay outstanding debt.

## **Fiscal 2001 Acquisitions**

On June 8, 2001, the Company purchased the net assets of the space valve product line of PerkinElmer Fluid Sciences, a division of PerkinElmer, Inc., for \$6 million in cash. This business includes the design and manufacture of solenoid and pressure operated valves for satellites, launch vehicles and manned space flight applications. On February 1, 2001, the Company paid approximately \$6 million in cash for the net assets of the radial piston pump product line of Robert Bosch GmbH including \$2 million of unfunded pension liabilities. This business includes the design and manufacture of pumps used for a variety of industrial applications, in particular injection molding machinery. On January 19, 2001, the Company acquired the stock of Whitton Technology Limited in the U.K. and the industrial gas turbine assets of Whitton Technology, Inc. in the U.S. for approximately \$4 million in cash plus \$3 million in notes payable. Whitton is a designer and manufacturer of pumps and specialty products for producers of industrial power generating equipment. On November 15, 2000, the Company acquired the remaining 25% minority interest of Hydrolux SARL in Luxembourg and Moog-Hydrolux in the U.S., manufacturers and designers of hydraulic control systems for industrial machinery, for approximately \$1 million in cash. On October 31, 2000, the Company purchased the net assets of the Vickers Electrics Division, an Italian manufacturer of high-performance electric drives

previously owned by Aeroquip-Vickers S.p.A., an Eaton Corporation subsidiary, for approximately \$10 million in cash.

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MOOG INC. Results of Operations

		Fiscal Years Ended	
	September 29,	September 30,	September 25,
(dollars in millions)			
NET SALES			
Aircraft Controls	\$ 340	\$ 312	\$ 302
Space Controls	103	112	110
Industrial Controls	261	220	218
	 \$ 704	 \$ 644	\$ 630
Net sales	\$ 704 =====	\$ 644 =====	\$ 630
Operating profit and margi			
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Aircraft Controls	\$ 49	\$ 43	\$ 37
	14.5%	13.8%	12.2%
Space Controls	12	12	13
	11.9%	10.8%	11.7%
Industrial Controls	22	25	23
	8.3%	11.2%	10.8%
Total operating profit	\$ 83	\$ 80	\$ 73
	=====	=====	=====
	11.8%	12.4%	11.6%
BACKLOG			
Aircraft Controls	\$ 223	\$ 215	\$ 192
Space Controls	72	65	85
Industrial Controls	69	65	60
Total backlog	\$ 364	\$ 345	\$ 337
	=====	=====	=====

#### 2001 Compared with 2000

*Consolidated.* Net sales for 2001 increased 9% to \$704 million from \$644 million in 2000. Sales in Industrial Controls increased by \$41 million and sales in Aircraft Controls increased by \$28 million, while sales in Space Controls decreased by \$9 million. Excluding the impact of a stronger U.S. dollar in 2001 compared to foreign currencies, primarily the Euro, British Pound, and the Yen, sales would have increased by an additional \$16 million over 2000. During fiscal 2001, the Company completed the acquisitions described earlier which generated \$38 million of sales in the current year.

Cost of sales as a percentage of sales was 70.0% in 2001 compared with 69.7% in 2000. The increase is primarily due to lower margins in Industrial Controls.

In 2001, \$7 million of contract loss reserves were recorded, compared to \$8 million in 2000. Inventory valuation provisions were \$6 million in both 2001 and 2000.

Research and development expense increased by \$4 million in 2001 to \$26 million, or 3.8% of sales. The increase is attributable to a variety of aircraft initiatives.

Interest expense decreased \$1 million to \$32 million in 2001 due to a decline in interest rates, partially offset by the impact of the acquisitions.

The Company s effective tax rate for 2001 was 33.5% compared to 34.2% in 2000. The decrease resulted from higher U.S. tax incentives on export sales in 2001.

In 2001, net earnings increased 10% to \$28 million compared to \$25 million in 2000. Diluted EPS increased 11% to \$2.11 in 2001 from \$1.90 in 2000.

*Aircraft Controls.* Net sales in Aircraft Controls increased 9% to \$340 million in 2001 compared to \$312 million in 2000. Boeing commercial sales increased \$12 million due to higher production rates in 2001. Sales of controls for fighter aircraft, primarily the F/A-18 E/F for which production levels continued to increase, increased \$12 million. Sales also increased \$3 million for engine controls, \$3 million for aftermarket sales, and \$1 million for controls on business aircraft. These increases were partially offset by a \$3 million decrease in sales on the B-2 bomber program which has been completed.

Operating margins for Aircraft Controls were 14.5% in 2001 compared to 13.8% in 2000. The improvement in margins primarily resulted from favorable product mix and cost performance on production programs. Additions to contract loss reserves were \$6 million in both 2001 and 2000, primarily related to business jet development contracts.

Twelve-month backlog for Aircraft Controls was \$223 million at September 29, 2001 compared to \$215 million at September 30, 2000. The increase was due to increases in backlog for military programs including Blackhawk/Seahawk helicopters and F/A-18 E/F that outweigh decreases in backlog for commercial aircraft.

*Space Controls.* Net sales in Space Controls decreased 8% to \$103 million in 2001 from \$112 million in 2000. A \$23 million decrease in sales for launch vehicles, primarily the Titan IV program which was completed in fiscal 2001, was partially offset by an increase of \$13 million for satellite controls.

Operating margins for Space Controls increased to 11.9% in 2001 from 10.8% in 2000. The improvement in margins is primarily due to cost improvement on newer programs, including the Crew Return Vehicle and various tactical missile programs, as well as increased volume for satellite controls.

Twelve-month backlog for Space Controls increased to \$72 million at September 29, 2001 from \$65 million at September 30, 2000 primarily related to refurbishments on the Space Shuttle.

*Industrial Controls.* Net sales in Industrial Controls increased 19% to \$261 million in 2001 from \$220 million in 2000. Excluding the impact of a strong U.S. dollar relative to foreign currencies, primarily the Euro and the Yen, sales would have increased an additional \$13 million. The increase in net sales is primarily related to the acquisitions of the radial piston pump product line, Whitton and Vickers Electrics that generated \$37 million of incremental sales in 2001. Excluding the effects of the acquisitions, sales increased \$5 million for turbine controls, \$2 million for motion simulator controls, \$2 million within heavy industry and \$6 million for various other industrial applications, while sales to the plastics market decreased \$11 million due to softness in the injection molding machinery market, particularly in the Asian-Pacific region.

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Operating margins for Industrial Controls decreased to 8.3% in 2001 from 11.2% in 2000. The decline in the margins is primarily attributable to lower volume in the plastics markets and, to a lesser extent, pricing pressures in the turbines business.

Twelve-month backlog for Industrial Controls increased to \$69 million at September 29, 2001 from \$65 million at September 30, 2000 primarily due to the acquisitions.

#### 2000 Compared with 1999

*Consolidated.* Net sales for 2000 increased 2% to \$644 million as compared to \$630 million in 1999. Aircraft Controls represented \$10 million of the increase principally as a result of higher aftermarket sales, while Space Controls and Industrial Controls each increased \$2 million.

Cost of sales as a percentage of sales was 69.7% in 2000 compared with 68.6% in 1999. The increase was due primarily to the redeployment of resources in Aircraft Controls from research and development (R&D) activities to production and, to a lesser extent, lower margins in Space Controls as a result of the completion of the Standard Missile II program in 1999.

In 2000, \$8 million of contract loss reserves were recorded, compared to \$4 million in 1999. The increase in contract loss reserves primarily occurred within Aircraft Controls. Inventory valuation provisions were \$6 million in 2000 and \$4 million in 1999.

R&D expenses decreased by \$11 million in 2000 to \$22 million, or 3.4% of sales. The decrease was due primarily to reduced efforts for the development of next generation aircraft flight controls which peaked in fiscal 1999. A portion of the costs associated with those efforts has been redirected to either production or sales support.

Interest expense increased \$5 million in 2000 to \$33 million. Three-quarters of the increase was attributable to higher average outstanding borrowings on variable-rate indebtedness, resulting primarily from the financing of the 1999 first quarter acquisitions. The remainder of the increase was due primarily to the increase in interest rates in 2000.

Other income in 2000 included a \$0.3 million fourth quarter gain on the sale of a 26% ownership in a Russian controls manufacturer.

The Company s effective tax rate for 2000 was 34.2% compared to 33.5% for 1999. The increase resulted from lower U.S. tax incentives on export sales and proportionately lower earnings in certain low tax countries in 2000.

For 2000, net earnings increased 4% to \$25 million compared with \$24 million in 1999. Diluted EPS increased 6% to \$1.90 in 2000 compared to \$1.80 in 1999.

*Aircraft Controls.* Net sales in Aircraft Controls increased 3% to \$312 million in 2000 compared to \$302 million in 1999. Aftermarket sales, which grew to 40% of the segment s sales in 2000 compared to 33% in 1999, increased \$23 million over 1999. Sales also increased \$8 million related to development work for flight controls on the Bombardier BD 100. These increases were partially offset by anticipated declines of \$13 million in OEM sales to Boeing for commercial aircraft related to their reduced production rates and \$8 million on the F-15 fighter aircraft and \$4 million on the B-2 bomber as these programs were near completion in 2000.

Operating margins for Aircraft Controls were 13.8% in 2000 compared to 12.2% in 1999. The improvement in margins was attributable to increased aftermarket sales that typically carry stronger margins and, to a lesser extent, reductions in R&D related to the development of next generation flight controls. Additions to contract loss reserves were \$6 million in 2000 and \$3 million in 1999 primarily relating to business jet development contracts. Inventory valuation provisions were \$3 million in 2000 and \$1 million in 1999.

Twelve-month backlog for Aircraft Controls was \$215 million at September 30, 2000 compared to \$192 million at September 25, 1999. The increase was due primarily to the Boeing 7-series commercial aircraft, the Bombardier BD 100, and the V-22 programs.

*Space Controls.* Net sales in Space Controls increased 2% to \$112 million in 2000 compared to \$110 million in 1999. Sales of flight controls for the Space Shuttle and Space Station Crew Return Vehicle increased \$3 million while sales on the Titan IV launch vehicle program increased \$2 million, primarily related to work performed earlier in 2000. Increased sales of tactical missile controls for the AGM 142 of \$5 million and Hellfire of \$2 million helped offset sales declines of \$9 million on the Standard Missile II program which was completed in 1999.

Operating margins for Space Controls decreased to 10.8% in 2000 from 11.7% in 1999. The decline in margins was attributable to the shift from more mature programs such as Standard Missile II to development programs such as National Missile Defense, Space Station Crew Return Vehicle and newer satellite propulsion and tactical missile programs.

Twelve-month backlog for Space Controls was \$65 million at September 30, 2000 compared to \$85 million at September 25, 1999. The decrease was primarily due to the Titan IV program nearing completion.

*Industrial Controls.* Net sales in Industrial Controls increased 1% to \$220 million in 2000 from \$218 million in 1999. Had foreign currencies not weakened against the U.S. dollar, sales would have translated into an additional \$9 million over 1999. Sales for turbine controls increased by \$12 million and sales of controls for plastics machinery increased by \$7 million. Partially offsetting these increases was a \$7 million decline in sales of combat controls and a \$4 million decrease for electric motion simulators due to the completion of Universal s Spiderman theme park attraction.

Operating margins increased to 11.2% in 2000 compared to 10.8% in 1999 due to improved operating efficiencies related to higher sales volume.

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Twelve-month backlog for Industrial Controls was \$65 million at September 30, 2000 compared to \$60 million at September 25, 1999. The increase primarily related to growth in the turbines and simulation businesses.

## **Financial Condition and Liquidity**

On October 24, 2000, the Company amended its \$340 million Corporate Revolving and Term Loan Agreement (Credit Facility). The term loan portion of the Credit Facility, which had a balance of \$48.75 million at September 30, 2000, was increased to \$75 million with the difference added to the unused borrowing capacity of the revolving portion of the facility. The Credit Facility expires in December 2005 and requires guarterly principal payments on the term loan of \$3.75 million. Interest on the Credit Facility continues at LIBOR plus a spread that was 200 basis points on September 29, 2001. The Credit Facility is secured by substantially all of the Company s U.S. assets. The Credit Facility contains various covenants that adjust over the term of the facility. As of September 29, 2001, the covenant for minimum Consolidated Net Worth, defined as the sum of capital stock and additional paid-in capital plus retained earnings (or minus accumulated deficits), was \$200.0 million; the covenent for the minimum Interest Coverage Ratio, defined as the ratio as of the last day of any fiscal quarter of EBITDA to total interest expense in each case for the four-fiscal quarter period then ended, was 2.60x; the covenant for the minimum Fixed Charge Coverage Ratio, defined as the ratio as of the last day of any fiscal quarter of (i) EBITDA minus capital expenditures in each case for the four fiscal quarter period then ended to (ii) the sum of interest expense, provision for taxes and regularly scheduled principal payments on debt for such four-fiscal quarter periods, was 1.10x; and the covenant for the maximum Leverage Ratio, defined as the ratio as of the last day of any fiscal quarter of total debt (including letters of credit) less aggregate cash balances to adjusted EBITDA in each case for the four-fiscal quarter period then ended, was 4.25x. Adjusted EBITDA as defined as (i) the sum for the period covered of net income, interest expense, provisions for taxes based on income, total depreciation expense, total amortization expense and other non-cash items reducing net income minus (ii) other non-cash items increasing net income for such period. Additionally, the Credit Facility limits capital expenditures to \$30.0 million in fiscal 2001 and restricts the payment of cash dividends to common

stockholders. As of September 29, 2001, the Company was in compliance with all covenants.

At September 29, 2001, the Company had \$103 million of unused borrowing capacity under short and long-term lines of credit, including \$86 million from the Credit Facility. Total debt increased to \$373 million at September 29, 2001 from \$366 million at September 30, 2000. Increased debt from acquisitions of \$30 million was partially offset by repayments of \$23 million.

Cash provided by operating activities was \$53 million in 2001 compared to \$45 million a year ago. The increase in cash from operations was primarily due to the increase in earnings adjusted for non-cash charges. The Company expects cash from operations in 2002 to be comparable with 2001.

Net property, plant and equipment was \$199 million at September 29, 2001 compared to \$189 million at September 30, 2000. Capital expenditures in 2001 were \$27 million compared with depreciation and amortization of \$32 million. Capital expenditures in 2000 were \$24 million compared with depreciation and amortization of \$30 million. Capital expenditures in 2002 are expected to be approximately \$25 million.

The Company believes its cash on hand, cash flows from operations and available borrowings under short and long-term lines of credit will continue to be sufficient to meet its operating needs.

## **Recent Accounting Pronouncements**

In August 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. SFAS No. 144 supercedes SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of, but retains its fundamental provisions for recognition and measurement of the impairment of long-lived assets to be held and used and those to be disposed of by sale. The Company must adopt this standard by fiscal 2003. The Company is evaluating the effect that this standard will have on its results of operations and financial condition.

In August 2001, the FASB issued SFAS No. 143, Accounting for Asset Retirement Obligations. Under SFAS No. 143, the fair value of a liability for an asset retirement obligation will be recorded in the period in which it is incurred, and the carrying amount of the related long-lived asset will be increased. Over time, the liability will be accreted to its present value each period, and the capitalized cost will be depreciated over the asset s useful life. A gain or loss will be recorded if necessary upon settlement of the liability. The Company must adopt this standard by fiscal 2003. The Company is evaluating the effect that this standard will have on its results of operations and financial condition.

In July 2001, the FASB issued SFAS No. 141, Business Combinations, and SFAS No. 142, Goodwill and Other Intangible Assets. Under SFAS No. 141, all business combinations are to be accounted for using the purchase method of accounting and identifiable intangible assets acquired in a business combination are to be recognized separately from goodwill. Under SFAS No. 142, goodwill will no longer be amortized, but will be reviewed for impairment at least annually at the reporting unit level. Identifiable intangible assets acquired in a business combination are to be amortized over their useful lives unless their useful lives are indefinite, in which case, those intangible assets will be tested for impairment annually and not amortized until their lives are determined to be finite. These standards are effective for all business combinations completed after June 30, 2001. With respect to goodwill and intangible assets acquired prior to July 1, 2001, companies are required to adopt SFAS No. 142 for fiscal years beginning after December 15, 2001, but early adoption is permitted. The Company expects to adopt SFAS No. 142 in the first quarter of fiscal 2002. The Company is evaluating the effect that adoption of these statements will have on its results of operations and financial condition.

The Company adopted Securities and Exchange Commission Staff Accounting Bulletin (SAB) No. 101, Revenue Recognition in Financial Statements, in the fourth quarter of fiscal 2001. The adoption of this SAB did not have a material impact on the Company s results of operations.

#### Outlook

Net sales in fiscal 2002 are forecasted to grow to \$743 million, a 6% increase over fiscal 2001. Sales are forecasted to increase in each of the Company s segments. Aircraft Controls sales are forecasted to increase to \$360 million, primarily as a result of increases in military business, particularly aftermarket sales and sales related to the Company s effort in the development phase of the new F-35 Joint Strike Fighter recently awarded to Lockheed Martin. Offsetting these increases within the Aircraft Controls segment will be a decline in commercial aircraft sales, particularly related to sales to Boeing and the related aftermarket sales, as a result of the September 11, 2001 terrorist attacks. Space Controls sales are forecasted to increase to \$111 million, primarily related to growth in the satellite business and increased activity on NASA s Space Shuttle. Industrial Controls sales are forecasted to increase to \$272 million, primarily due to having a full year of revenues from the radial piston pump product line, which was acquired in February 2001, and increases related to combat vehicles.

Operating margins for fiscal 2002 are expected to decline slightly to approximately 11.4% as a result of softness in the industrial plastics market and margin pressures in the turbines market. After consideration of the impact of the equity offering and eliminating the amortization of goodwill assuming the adoption of SFAS No. 142, fiscal 2002 earnings per share is estimated to be \$2.40.

On September 11, 2001, the United States was attacked by terrorists using hijacked commercial airline jets. The effect of these tragic events on general economic conditions and on the commercial airline industry, in particular, could be significant. For example, the events have resulted and could continue to result in a decreased demand for air travel due to fears regarding additional acts of terrorism. These events could also result in an increase in the price of jet fuel because of concerns regarding hostilities in the Middle East and airlines bearing increased costs or reducing operations due to new security directives adopted by the Federal Aviation Administration. At this time, the Company is unable to predict with certainty the impact that these events will have on its commercial aircraft business and thus on this outlook. The Company believes that its diverse revenue base and its global geographic presence will help to lessen the impact of any decrease in its commercial aircraft sales.

## Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The Company, in the normal course of business, has exposures to interest rate risks from its long-term debt obligations and foreign exchange rate risk with respect to its foreign operations and from foreign currency transactions. To minimize these risks, the Company may enter into derivative instruments such as interest rate swaps and forward contracts. The Company does not hold or issue financial instruments for trading purposes.

On October 1, 2000, the Company adopted SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, as amended, which requires companies to carry all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of a derivative instrument depends on whether is has been designated and qualifies as part of a hedging relationship and, if so, the reason for holding it. For the year ended September 29, 2001, the Company s exposure to derivatives was primarily limited to interest rate swaps that were designated and qualified as cash flow hedges. The adoption of this pronouncement did not have a material impact on the Company s financial condition or results of operations.

The Company s borrowings under variable interest rate facilities were \$246 million at September 29, 2001. In order to provide for interest rate protection, the Company has interest rate swap agreements totaling \$150 million, of which \$80 million matures at various times during fiscal 2002 and effectively converts this amount to fixed-rate debt at 8.3%. The remaining \$70 million matures at various times during fiscal 2003 and effectively converts this amount to

fixed-rate debt at 7.1%. If interest rates had increased by one percentage point, the impact on consolidated interest expense from the Company s variable-rate debt would have been approximately \$1 million in 2001.

The majority of the Company s sales, expenses and cash flows are transacted in U.S. dollars. The Company does have some market risk exposure with respect to changes in foreign currency exchange rates primarily as it relates to the value of the U.S. dollar versus the Euro, the Japanese Yen and the British Pound. If foreign exchange rates were to collectively weaken against the U.S. dollar by 10%, net earnings would be reduced by approximately \$1 million related to currency exchange rate translation exposures and \$1 million related to pressures on operating margins for products sourced in non-U.S. countries.

The Company occasionally uses forward contracts to reduce fluctuations in foreign currency cash flows related to third party raw material purchases, intercompany product shipments and intercompany loans and to reduce fluctuations in the value of foreign currency investments in, and long-term advances to, subsidiaries. At September 29, 2001, there were no significant contracts outstanding.

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#### ITEM 8. Financial Statements and Supplementary Data.

				F	iscal Years End	ded	
(dollars in thousands except per share data)		-			September 30, 2000	Sep	tember 25, 1999
NET SALES COST OF SALES	\$	704,378 493,235			644,006 448,702		630,034 432,033
GROSS PROFIT		211,143					198,001
Research and development Selling, general		26 <b>,</b> 461			21,981		33,306
and administrative		110,679			101,990		100,023
Interest		32,054			33,271		28,188
Other		(64)	)		(553)		(244)
EARNINGS BEFORE INCOME TAXI	ΞS	42,013			38,615		36,728
INCOME TAXES		14,075			13,215		12 <b>,</b> 297
NET EARNINGS	\$	27,938		\$	25,400		
JET EARNINGS PER SHARE						=	
Basic	\$	2.13		\$	1.92	\$	1.82
Diluted	\$	2.11		\$	1.90	\$	1.80

#### MOOG INC. Consolidated Statements of Earnings

See accompanying Notes to Consolidated Financial Statements.

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#### MOOG INC. Consolidated Balance Sheets

(dollars in thousands except	As of September 29,	
share and per share data)	2001	2000
SSETS		
URRENT ASSETS		t 10 000
Cash and cash equivalents	\$ 14,273	
Receivables	236,229	
Inventories	158,798	147,546
Deferred income taxes	27,735	26,972
Prepaid expenses and other current assets	6,480	3,693
TOTAL CURRENT ASSETS	443,515	
PROPERTY, PLANT AND EQUIPMENT	198,707	188,584
GOODWILL AND INTANGIBLE ASSETS,		
net of accumulated amortization		
of \$29,660 in 2001 and		
\$22,126 in 2000	192,940	181,303
OTHER ASSETS	21,379	18,317
TOTAL ASSETS	\$ 856,541	\$ 791 <b>,</b> 705
TADILIMIES AND SUADEUOLDEDS! BOULT	========	
IABILITIES AND SHAREHOLDERS' EQUITY CURRENT LIABILITIES		
Notes payable	\$ 13 <b>,</b> 236	\$ 1,581
Current installments of long-term debt	16,463	18,609
Accounts payable	45,516	36,253
Accrued salaries, wages and commissions	46,067	35,191
Contract loss reserves	16,663	20,916
Accrued interest	11,640	9,066
Federal, state and foreign income taxes	9,878	8,030
Other accrued liabilities		18,213
Customer advances	6,331	
TOTAL CURRENT LIABILITIES	186,136	155,876
ONG-TERM DEBT, excluding current installmen	ts	
Senior debt	223,630	226,099
Senior subordinated notes	120,000	120,000
Senior subordinated notes	120,000	120,000
THER LONG-TERM LIABILITIES	90,947	67,176
TOTAL LIABILITIES	620,713	569,151
COMMITMENTS AND CONTINGENCIES (Note 12)	_	_
HAREHOLDERS' EQUITY		
9% Series B Cumulative, Convertible,		
	1.00	
Exchangeable Preferred stock - Par Value \$	shares. 100	100
Exchangeable Preferred stock - Par Value \$ Authorized 200,000 shares. Issued 100,000		
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00		
Authorized 200,000 shares. Issued 100,000	. 12,641	12,641
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000	. 12,641	12,641
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares.		12,641
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares. Convertible to Class A on a one for one b	asis.	
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares. Convertible to Class A on a one for one b Issued 3,692,343 shares in 2001 and 2000.	asis. 3,692	3,692
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares. Convertible to Class A on a one for one b Issued 3,692,343 shares in 2001 and 2000. Additional paid-in capital	asis. 3,692 97,430	3,692 97,195
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares. Convertible to Class A on a one for one b Issued 3,692,343 shares in 2001 and 2000. Additional paid-in capital Retained earnings	asis. 3,692 97,430 185,428	3,692 97,195 157,497
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares. Convertible to Class A on a one for one b Issued 3,692,343 shares in 2001 and 2000. Additional paid-in capital Retained earnings Treasury shares	asis. 3,692 97,430 185,428 (39,827)	3,692 97,195 157,497 (37,570)
Authorized 200,000 shares. Issued 100,000 Common Stock - Par Value \$1.00 Class A - Authorized 30,000,000 shares. Issued 12,640,707 shares in 2001 and 2000 Class B - Authorized 10,000,000 shares. Convertible to Class A on a one for one b Issued 3,692,343 shares in 2001 and 2000. Additional paid-in capital Retained earnings	asis. 3,692 97,430 185,428	3,692 97,195 157,497

TOTAL LIABILITIES A	AND SHAREHOLDERS'	EQUITY \$	856,541	\$ 791,705

See accompanying Notes to Consolidated Financial Statements.

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## MOOG INC. Consolidated Statements of Shareholders' Equity

	Fiscal Years Ended						
(dollars in thousands except share and per share data)		September 30, 2000	September 25, 1999				
PREFERRED STOCK	\$ 100	\$ 100	\$ 100				
COMMON STOCK	16,333	16,333	16,333				
ADDITIONAL PAID-IN CAPITAL Beginning of year Issuance of treasury shares	97,195	97,334	96,862				
at more (less) than cost Cancellation of fractional shares in stock split	251	(139)	(234)				
Tax benefits related to stoc option plan	(16) ck –	_	706				
End of year	97,430	97,195	97,334				
RETAINED EARNINGS Beginning of year Net earnings Preferred dividends	157,497 27,938	132,104 25,400	107,681 24,431				
(\$.09 per share in 2001, 2000 and 1999)	(7)	(7)	(8)				
End of year	185,428	157,497	132,104				
IREASURY SHARES, AT COST* Beginning of year Shares issued related to options (2001 - 52,950	(37,570)	(32,589)	(30,511)				
Class A shares; 2000 - 51,000 Class A share 1999 - 79,500 Class A share Shares purchased (2001 - 20, Class A shares and 78,999 Class B shares; 2000 - 173, Class A shares and 127,362 Class B shares; 1999 - 22,2	es) 247 193 967	408	636				
Class A shares and 97,673 Class B shares) Shares sold to Savings & Stock Ownership Plan (SSC (2001 - 3,903 Class A share 2000 - 1,155 Class A share	(2,589) DP) es;	(5 <b>,</b> 489)	(2,815)				

and 3,703 Class B shares 1999 - 4,286 Class B sha		100	101
End of year	(39,827)	(37,570)	(32,589)
ACCUMULATED OTHER			
COMPREHENSIVE INCOME (LOSS)			
Beginning of year	(11,001)	(1,512)	614
Adjustment from foreign currency translation	(1,784)	(9,489)	(2,126)
Minimum pension liability	(1,/04)	(9,409)	(2,120)
adjustment, net of			
\$4,611 of taxes	(8,061)	-	-
Accumulated loss on			
derivatives, net of			
\$1,674 of taxes	(2,790)	-	-
End of year	(23,636)	(11,001)	(1,512)
OAN TO SSOP			
Beginning of year	-	-	(71)
Payments received on loan			
to SSOP, net of advances	-	-	71
End of year			
-			
OTAL SHAREHOLDERS' EQUITY	\$ 235,828	\$ 222 <b>,</b> 554	\$ 211,770
COMPREHENSIVE INCOME			
Net earnings	\$ 27 <b>,</b> 938	\$ 25,400	\$ 24,431
Adjustment from foreign		(0, (0,0))	(0.100)
currency translation	(1,784)	(9,489)	(2,126)
Minimum pension liability adjustment, net of			
\$4,611 of taxes	(8,061)	_	_
Accumulated loss on	(0,001)		
derivatives, net of			
\$1,674 of taxes	(2,790)	_	-
Comprehensive income	\$ 15,303	\$ 15,911	\$ 22,305

\*Class A Common Stock in treasury: 1,737,279 shares as of September 29, 2001; 1,773,939 shares as of September 30, 2000; 1,652,127 shares as of September 25, 1999.

Class B Common Stock in treasury: 1,519,922 shares as of September 29, 2001; 1,440,923 shares as of September 30, 2000; 1,317,264 shares as of September 25, 1999.

Preferred Stock in treasury: 16,229 shares as of September 29, 2001, September 30, 2000 and September 25, 1999.

\*\*Accumulated other comprehensive loss through September 30, 2000 consists solely of cumulative foreign currency translation.

See accompanying Notes to Consolidated Financial Statements.

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## MOOG INC. Consolidated Statements of Cash Flows

	F	Fiscal Years Ended			
(dollars in thousands)		September 30, 2000	September 25, 1999		
CASH FLOWS FROM OPERATING ACTIVITIES					
Net earnings	\$ 27,938	\$ 25,400	\$ 24,431		
Adjustments to reconcile net earnings	. ,		· •		
to net cash provided by operating act	ivities:				
Depreciation and amortization	31,693	30,443	30,602		
Provisions for non-cash losses on					
contracts, inventories and receivable	s 14,659	13,867	8,466		
Deferred income taxes	100	3,934	2,110		
Other	1,380	278	(71)		
Change in assets and liabilities					
providing (using) cash, excluding					
the effects of acquisitions:					
Receivables	(17,729)	(5,270)	(736)		
Inventories	(11,077)	(5,636)			
Other assets	(4,880)	(3,129)			
Accounts payable and					
accrued liabilities	4,492	(20,309)	(5,531)		
Other liabilities	8,358	5,149	63		
Customer advances	(1,675)	214	(2,023)		
NET CASH PROVIDED BY					
OPERATING ACTIVITIES	53,259	44,941	42,677		
	, 	, 	, 		
CASH FLOWS FROM INVESTING ACTIVITIES					
Acquisitions, net of cash acquired	(25,977)	(1,450)	(171,710)		
Acquisition of minority interest	(1,354)	(1,051)	(2,133)		
Purchase of property, plant	., ,		.,,,		
and equipment	(26,955)	(23,961)	(25,866)		
Proceeds from sale of assets	53	392	3,379		
Payments received, net of advances,			-,		
on loan to Savings and Stock					
Ownership Plan	_	_	71		
NET CASH USED IN INVESTING ACTIVITIES	(54,233)	(26,070)	(196,259)		
CASH FLOWS FROM FINANCING ACTIVITIES					
Net proceeds from (repayments of)					
notes payable	461	(5,622)			
Proceeds from revolving lines of credi		158,000	258,700		
Payments on revolving lines of credit		(141,000)			
Proceeds from issuance of long-term de	bt 39,523	-	77,219		
Payments on long-term debt	(24,724)	(20,084)	(15,329)		
Purchase of outstanding shares					
for treasury	(2,589)	(5,489)	(2,815)		
Proceeds from sale of treasury stock	583	369	503		
Other	(22)	(8)	(8)		
NET CASH PROVIDED (USED) BY FINANCING ACTIVITIES	2 2 2 2	(12 024)	152,051		
BI FINANCING ACTIVITIES	2,232	(13,834)	152,051		
Effect of exchange rate changes on					
cash and cash equivalents	(812)	(990)	(314)		
caon and caon equivarence	(0±2)	(550)	(514)		
INCREASE (DECREASE) IN CASH					
AND CASH EQUIVALENTS	446	4,047	(1,845)		
· · · · · · · · · · · · · · · · · · ·		-, • - ·	(=, 010)		

Cash and cash equivalents at			
beginning of year	13,827	9,780	11 <b>,</b> 625
Cash and cash equivalents at end o	of year \$ 14,273	\$ 13,827	\$9 <b>,</b> 780

See Note 11 for Supplemental Cash Flow Information.

See accompanying Notes to Consolidated Financial Statements.

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#### **Notes To Consolidated Financial Statements**

(dollars in thousands except share and per share data)

#### **Note 1 - Summary of Significant Accounting Policies**

**Consolidation:** The consolidated financial statements include the accounts of Moog Inc. and all of its U.S. and foreign subsidiaries (the Company). All significant intercompany balances and transactions have been eliminated in consolidation.

**Fiscal Year:** The Company's fiscal year ends on the last Saturday in September. The consolidated financial statements include 52 weeks for each of the years ended September 29, 2001 and September 25, 1999 and 53 weeks for the year ended September 30, 2000. The Company believes this convention does not have a material effect on the comparability of the financial statements for the periods presented.

**Cash and Cash Equivalents:** All highly liquid investments with an original maturity of three months or less are considered cash equivalents.

**Sales Recognition:** Sales under long-term contracts, representing 40% of fiscal 2001 sales, are accounted for by the percentage of completion (cost-to-cost) method of accounting. Under this method, sales are recognized as the work progresses toward completion. For contracts with anticipated losses at completion, a provision is recorded when the loss becomes known. Loss reserves are more common on firm fixed-price contracts which involve, to varying degrees, the design and development of new and unique controls or control systems to meet the customers specifications. Amounts representing contract claims or change orders are included in the estimate of contract values only when they can be reliably estimated and realization is considered probable. The remainder of the Company s sales are principally recognized as units are shipped.

**Inventories:** Inventories are stated at the lower-of-cost-or-market with cost determined primarily on the first-in, first-out (FIFO) method of valuation. Consistent with industry practice, aerospace related inventories include amounts relating to contracts having long production and procurement cycles, portions of which are not expected to be realized within one year.

**Foreign Currency Translation:** Foreign subsidiaries assets and liabilities are translated using rates of exchange as of the balance sheet date and the statements of earnings are translated at the average rates of exchange for the year.

**Depreciation and Amortization:** Plant and equipment are depreciated principally using the straight-line method over the estimated useful lives of the assets. Leasehold improvements and assets under capital leases are amortized on a straight-line basis over the term of the lease or the estimated useful life of the asset, whichever is shorter.

Intangibles, including goodwill, associated with acquisitions are amortized on a straight-line basis over periods up to 40 years. Long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in

circumstances indicate that the carrying amount of those assets may not be recoverable. The Company uses undiscounted cash flows to determine whether impairment exists and measures any impairment loss using discounted cash flows.

**Financial Instruments:** Effective October 1, 2000, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 133, Accounting for Derivative Instruments and Hedging Activites, as amended, which requires companies to carry all derivatives on the balance sheet at fair value. The Company determines the fair value of derivatives by reference to quoted market prices. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and, if so, the reason for holding it. The Company s use of derivative instruments is limited to cash flow hedges, as defined in SFAS No. 133, of certain interest rate risks and, to a much lesser extent, foreign currency risks.

**Use of Estimates:** The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates and assumptions.

Earnings Per Share: Basic and diluted weighted-average shares outstanding are as follows:

	2001	2000	1999
Basic weighted-average shares outstanding Stock options Convertible preferred stock	13,095,770 143,559 10,788	13,242,966 109,182 10,788	
Diluted weighted-average shares outstanding	13,250,117	13,362,936	13,571,186

Share and per share data have been restated to reflect the effect of the three-for-two stock split of the Company's Class A and Class B common stock distributed on September 21, 2001 (See Note 9).

Preferred stock dividends are deducted from net earnings to calculate income available to common stockholders for basic earnings per share.

In November 2001, the Company completed an offering of Class A common stock (See Note 9).

**Stock-Based Compensation:** The Company measures compensation cost for stock options under the intrinsic value method as prescribed by Accounting Principles Board Opinion No. 25.

## Note 2 - Acquisitions

All of the Company s acquisitions are accounted for under the purchase method and, accordingly, the operating results for the acquired companies are included in the consolidated statements of earnings from the dates of acquisition.

On June 8, 2001, the Company purchased the net assets of the space valve product line of PerkinElmer Fluid Sciences, a division of PerkinElmer, Inc., for \$6,000 in cash. This product line has annual sales of approximately \$3,000 in the design and manufacture of solenoid and pressure-operated valves for satellites, launch vehicles and manned space flight applications. Goodwill and other intangible assets resulting from this acquisition are approximately \$5,800 and are being amortized over periods not exceeding 20 years.

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On February 1, 2001, the Company acquired the net assets of the radial piston pump product line of Robert Bosch GmbH, including \$1,500 of unfunded pension liabilities, for approximately \$5,600 in cash. This product line has annual sales of approximately \$20,000 in the design and manufacture of hydraulic pumps used for a variety of industrial applications, in particular, injection molding machinery. Goodwill and other intangible assets resulting from this acquisition are approximately \$1,900 and are being amortized over periods not exceeding 20 years.

On January 19, 2001, the Company acquired the stock of Whitton Technology Limited in the U.K. and the industrial gas turbine assets of Whitton Technology Inc. in the U.S. for approximately \$4,000 in cash and \$3,000 in notes payable. Whitton is a designer and manufacturer of pumps and specialty products for producers of industrial power generating equipment and has annual sales of approximately \$7,000. Goodwill and other intangible assets resulting from this acquisition are approximately \$4,600 and are being amortized over periods not exceeding 20 years.

On October 31, 2000, the Company purchased the net assets of the Vickers Electrics Division, an Italian manufacturer of high-performance electric drives with annual sales of approximately \$20,000 from Aeroquip-Vickers S.p.A., an Eaton Corporation subsidiary, for approximately \$10,300 cash. Goodwill and other intangible assets resulting from this acquisition are approximately \$1,700 and are being amortized over periods not exceeding 20 years.

The following summary, prepared on a proforma basis, combines the consolidated results of operations of the Company with those of the radial piston pump product line, Whitton, Vickers Electrics and the space valve product line for the years ended September 29, 2001 and September 30, 2000 as if the acquisitions had taken place at the beginning of each period presented. The pro forma consolidated results include the impact of certain adjustments, including amortization of intangibles and increased interest expense on acquisition debt, and related income tax effects.

(unaudited)	 2001	 2000
Net sales	\$ 720,346	\$ 694 <b>,</b> 457
Net earnings	\$ 28,183	\$ 25,063
Basic earnings per share	\$ 2.15	\$ 1.89
Diluted earnings per share	\$ 2.13	\$ 1.88

The pro forma results are not necessarily indicative of what actually would have occurred if the acquisitions had been in effect for the periods presented. In addition, they are not intended to be a projection of future results.

On August 11, 2000, the Company purchased the net assets of the industrial servovalve business of Schenck Pegasus Corporation for \$1,900, of which \$1,450 was paid in cash. The related annual sales of this business were approximately \$2,000.

On June 15, 2000, the Company purchased the remaining 33-1/3% minority interest of Microset Srl, an Italian manufacturer and designer of electronic controls for industrial machinery, for \$1,051 in cash. On December 3, 1998, the Company had acquired a 66-2/3% shareholding in Microset Srl for \$3,500 in cash.

On December 28, 1998, the Company purchased the remaining 10% minority interest of Moog Japan Ltd. for \$2,133 in cash.

On November 30, 1998, the Company completed the acquisition of all the outstanding common stock of Raytheon Aircraft Montek Company (Montek) for approximately \$160,000 in cash. The acquisition resulted in intangible assets of approximately \$123,900, the majority of which is being amortized over 40 years. In addition to the customary business assets and liabilities, contract loss reserves of \$24,700 related to development contracts on certain business jet programs were recorded. At September 29, 2001, the balance of these reserves was \$2,500. The Company initially established a \$3,800 reserve for severance costs associated with expected involuntary termination of employees. The balance of the liability was \$20 at September 29, 2001, \$620 at September 30, 2000 and \$2,870 at September 25, 1999. Activity during fiscal 2001 included \$179 of payments and a \$421 reduction to the liability with a corresponding adjustment to goodwill. Activity during fiscal 2000 included \$990 of payments and a \$1,260 reduction to the liability with a corresponding adjustment to goodwill. Activity during fiscal 1999 after establishing the reserve consisted of \$930 of payments.

On October 30, 1998, the Company acquired a 75% shareholding of Hydrolux SARL, a Luxembourg manufacturer and designer of hydraulic power control systems for industrial machinery, and increased its ownership to 75% of Moog-Hydrolux Hydraulic Systems, Inc. (Moog-Hydrolux). The purchase price was \$8,200 in cash, plus the assumption of \$6,400 of debt. The acquisition resulted in goodwill and other intangible assets of approximately \$3,300, which are being amortized over 20 years. On November 15, 2000, the Company acquired the remaining 25% minority interest of Hydrolux SARL and Moog-Hydrolux for \$1,354 in cash.

On October 25, 2001, the Company purchased the net assets of the satellite and space vehicle product lines of the Electro Systems Division of Tecstar, Inc. for \$7,800 in cash. The acquired product lines of Tecstar s Electro Systems Division manufacture electromechanical equipment for spacecraft.

In July 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 141, Business Combinations, and SFAS No. 142, Goodwill and Other Intangible Assets. Under SFAS No. 141, all business combinations are to be accounted for using the purchase method of accounting and identifiable intangible assets acquired in a business combination are to be recognized separately from goodwill. Under SFAS No. 142, goodwill will no longer be amortized, but will be reviewed for impairment at least annually at the reporting unit level. Identifiable intangible assets acquired in a business combination are to be amortized over their useful lives unless their useful lives are indefinite, in which case, those intangible assets will be tested for impairment annually and not amortized until their lives are determined to be finite. These standards are effective for all business combinations completed after June 30, 2001. With respect to goodwill and intangible assets acquired prior to July 1, 2001, companies are required to adopt SFAS No. 142 for fiscal years beginning after December 15, 2001, but early adoption is permitted. The Company expects to adopt SFAS No. 142 in the first quarter of fiscal 2002. The Company is evaluating the effect that adoption of these statements will have on its results of operations and financial condition.

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## Note 3 - Receivables

Receivables consist of:

5	September 29, 2001	September 30, 2000
Long-term contracts:		
Amounts billed	\$ 57,016	\$ 48,984
Unbilled recoverable costs and profits	104,519	102,267
Total long-term contract receivables	161,535	151,251
Trade	77,028	61,125
Refundable income taxes	103	37
Other	878	1,306

Total receivables	239,544	213,719
Less allowance for doubtful accounts	(3,315)	(2,256)
Receivables	\$ 236,229	\$ 211,463

The long-term contract amounts are primarily associated with the U.S. Government and its prime- and sub-contractors and major commercial aircraft manufacturers. Substantially all unbilled amounts are expected to be collected within one year. In situations where billings exceed revenues recognized, the excess is included in customer advances.

Concentrations of credit risk with respect to billed receivables on long-term contracts and trade receivables are limited to those from significant customers, which are believed to be financially sound. Receivables from the U.S. Government and its prime- or sub-contractors, which represented 26% of sales in 2001 and 29% of sales in 2000, were \$31,727 as of September 29, 2001 and \$28,593 as of September 30, 2000. Receivables from the Boeing Commercial Airplane Group, which represented 10% of sales in 2001 and 9% of sales in 2000, were \$4,946 as of September 29, 2001 and \$3,600 as of September 30, 2000. The Company performs periodic credit evaluations of its customers financial condition and generally does not require collateral.

#### **Note 4 - Inventories**

Inventories consist of the following:

	September 29, 2001	September 30, 2000
Raw materials and purchased parts Work in process Finished goods	\$ 53,254 78,793 26,751	\$ 49,868 74,430 23,248
Inventories	\$ 158,798	\$ 147,546

#### Note 5 - Property, Plant and Equipment

Property, plant and equipment consists of:

Sep	otember 29, 2001	September 30, 2000
Land	\$ 10,743	\$ 10,609
Buildings and improvements	130,563	121,648
Machinery and equipment	293,245	282,620
Property, plant and equipment, at cost	434,551	414,877
Less accumulated depreciation		
and amortization	(235,844)	(226,293)
Property, plant and equipment	\$ 198 <b>,</b> 707	\$ 188,584

Assets under capital leases included in property, plant and equipment are summarized as follows:

Assets under capital leases, at cost Less accumulated amortization	Ş	6,643 (4,580)	\$ 6,439 (3,994)
Net assets under capital leases	\$	2,063	\$ 2,445

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#### Note 6 - Indebtedness

Long-term debt consists of the following:

September 29, 2001	September 30, 2000
\$ 176,000	\$ 187,000
60,000	48,750
3,296	7,495
797	1,463
240,093	244,708
120,000	120,000
360,093	364,708
(16,463)	(18,609)
\$ 343,630	\$ 346,099
	\$ 176,000 60,000 3,296 797  240,093 120,000  360,093 (16,463)

On October 24, 2000, the Company amended its \$340,000 Corporate Revolving and Term Loan Agreement (Credit Facility). The term loan portion of the Credit Facility, which had a balance of \$48,750 at September 30, 2000, was increased to \$75,000 with the difference added to the unused borrowing capacity of the revolving portion of the facility. The Credit Facility expires in December 2005 and requires quarterly principal payments on the term loan of \$3,750. Interest on the amended agreement continues at LIBOR plus a spread based on leverage which was 200 basis points at September 29, 2001. In order to provide for interest rate protection, the Company has entered into interest rate swap agreements totaling \$150,000 which effectively converts this amount to fixed-rate debt at 7.8%.

The Credit Facility is secured by substantially all of the Company s U.S. assets. The loan agreement contains various covenants which, among others, specify minimum interest and fixed charge coverage, limit capital expenditures, specify minimum net worth, limit leverage and restrict payment of cash dividends on common stock.

International and other U.S. term loan agreements of \$3,296 at September 29, 2001 consist principally of financing provided by various banks to certain foreign subsidiaries. These term loans are being repaid through 2009 and carry interest rates ranging from 1.3% to 11.4%.

The 10% Senior Subordinated Notes (the Notes) are due on May 1, 2006. The Notes are redeemable at the option of the Company, in whole or in part, at any time on or after May 1, 2001 initially at 105% of their principal amount, plus accrued interest, declining to 102.5% of their principal amount, plus accrued interest, on or after May 1, 2002 and to 100% of their principal amount, plus accrued interest, on or after May 1, 2003. The Notes are unsecured, general obligations of the Company subordinated in right of payment to all existing and future senior indebtedness. The indenture includes certain covenants limiting, subject to certain exceptions, the incurrence of additional indebtedness, payment of dividends, redemption of capital stock, asset sales and certain mergers and consolidations.

Maturities of long-term debt are \$16,463 in 2002, \$17,072 in 2003, \$15,309 in 2004, \$15,160 in 2005, \$296,037 in 2006 and \$52 thereafter.

At September 29, 2001, the Company had pledged assets with a net book value of \$483,236 as security for long-term debt.

The Company has both short-term lines of credit and long-term credit facilities with various banks throughout the world. The short-term credit lines are principally demand lines and subject to revision by the banks. These short-term lines of credit, along with \$86,499 available on the Credit Facility, provided credit availability of \$102,691 at September 29, 2001. Commitment fees are charged on some of these arrangements based on a percentage of the unused amounts available and are not material.

At September 29, 2001, the Company had \$13,236 of notes payable to banks at an average rate of 5.3%. During 2001, notes payable outstanding averaged \$7,915 with an average interest rate of 4.2%.

See Note 13 for fair values of indebtedness and interest rate swaps.

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#### Note 7 - Employee Benefit Plans

The Company maintains a number of defined benefit plans covering substantially all employees. The changes in projected benefit obligations and plan assets and the funded status of the U.S. and non-U.S. defined benefit plans for 2001 and 2000 are as follows:

	U.S.	Non-	Non-U.S. Plans		
	September 29, 2001	September 30, 2000	September 2 2001	9, Septemb 2000	
Change in projected benefit obligation: Projected benefit obligation at beginning					
of year	\$ 178,168	\$ 163,989	\$ 34,097	\$ 36 <b>,</b> 22	
Service cost	7,294	6,750	1,344	1,43	
Interest cost	13,136	12,086	1,966	2,03	
Contributions by plan participants	-	-	184	20	
Actuarial losses (gains), primarily					
discount rate changes in 2001	12,027	1,779	1,031	(45	
Foreign currency exchange impact	-	-	(45)	(4,67	
Benefits paid from plan assets	(7,110)	(6,331)	(486)	(57	
Benefits paid by Company	(110)	(105)	(426)	(9	
Projected benefit obligation at end of year	\$ 203,405	\$ 178,168	\$ 37,665	\$ 34,09	
Change in plan assets:					
Fair value of assets at beginning of year	\$ 171,863	\$163,854	\$ 16,675	\$ 15 <b>,</b> 57	
Actual return on plan assets	(18,565)	13,340	(2,586)	1,96	
Employer contributions	2,000	1,000	1,156	1,29	
Contributions by plan participants	-	-	184	20	
Benefits paid	(7,110)	(6,331)	(486)	(57	
Foreign currency exchange impact	-	-	(187)	(1,78	
Fair value of assets at end of year	\$ 148,188	\$ 171,863	\$ 14 <b>,</b> 756	\$ 16,67	
Funded status: Unrecognized net actuarial losses (gains)		\$ (6,305) (17,103)		\$(17,42 (1,29	

Unrecognized prior service cost Unrecognized initial transition (asset) obliga	5,428 tion (199)	6,223 (504)	463 18	12 50
Net amount recognized	\$ (21,573)\$	(17,689)	\$(19,107)	\$(18,08
Amounts recognized in the balance sheet consist	 t of:			
Prepaid benefit cost	\$ -	\$ -	\$ 729	\$ 1,03
Accrued pension liability	(36,414)	(18,176)	(23,286)	(19,11
Intangible asset	5,491	487	128	
Accumulated other comprehensive loss	9,350	_	3,322	
Net amount recognized	\$ (21,573)\$	(17,689)	\$(19,107)	\$(18,08

The following table provides aggregate information for pension plans with accumulated benefit obligations in excess of plan assets:

	September 29, 2001	September 30, 2000
Projected benefit obligation	\$ 239,155	\$ 26,228
Accumulated benefit obligation	215,934	22,344
Fair value of plan assets	159,846	2,200

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Fiscal 2001 plan assets consist primarily of publicly traded stocks, bonds, mutual funds, and \$13,574 in Company stock, based on quoted market prices. The Company s funding policy is to contribute at least the amount required by law in the respective countries. The principal actuarial assumptions weighted for all defined benefit plans are:

	U.S. P	lans	Non-U.S.	Plans
	2001	2000	2001	2000
Discount rate Return on assets Rate of compensation increase	7.0% 9.5% 3.7%	7.5% 9.5% 3.6%	5.3% 5.3% 3.3%	5.7% 5.6% 3.1%

In addition, the Company maintains various defined contribution plans. Pension expense for all plans for 2001, 2000 and 1999 is as follows:

		U.S. Plans		Non-U.	S. Plans
	2001	2000	1999	2001	2000
Service cost Interest cost on projected	\$ 7,294	\$ 6,750	\$ 6,441	\$ 1,344	\$ 1 <b>,</b> 437 \$
benefit obligation	13,136	12,086	11,052	1,966	2,031
Expected return on plan assets	(14,973)	(13,459)	(11,855)	(781)	(1,962)
Amortization of prior service cost	794	794	794	7	8
Amortization of transition (asset) obligati	on (305)	(305)	(305)	(258)	(287)
Amortization of actuarial loss (gain)	47	11	242	(85)	976
Pension expense for defined benefit plans	5,993	5,877	6 <b>,</b> 369	2,193	2,203

Pension expense for defined							
contribution plans	587	583	510	716	5	48	
Total pension expense	\$ 6,580	\$ 6,460	\$ 6,879	\$ 2,909	\$2 <b>,</b> 7	51	\$

Employee and management profit share plans provide for the discretionary payment of profit share based on the financial performance of the Company. Profit share expense was \$5,300, \$0 and \$5,334 in 2001, 2000 and 1999, respectively.

The Company has a Savings and Stock Ownership Plan (SSOP) which includes an Employee Stock Ownership Plan. As one of the investment alternatives, participants in the SSOP can acquire Company Stock at market value, with the Company providing a 25% share match. Shares are allocated and compensation expense is recognized as the employer share match is earned. At September 29, 2001, the participants in the SSOP owned 627,348 Class A shares and 707,633 Class B shares.

The Company provides postretirement health care benefits to certain retirees. The change in the accumulated benefit obligation and the funded status of the plan for 2001 and 2000 are shown below. There are no plan assets. The transition obligation is being recognized over 20 years.

	 Septembe	r 29, 2001	September 30, 2000
Change in Accumulated Postretirement Obligation (APBO):	Benefit		
APBO at beginning of year	\$	14,270	\$ 10,662
Service cost		195	183
Interest cost		1,019	1,027
Plan participants' contributions		359	281
Benefits paid		(1,798)	(1,668)
Actuarial losses		2,114	879
Plan amendments		_	2,906
APBO at end of year	\$	16,159	\$ 14,270
Funded status		(16,159)	\$ (14,270)
Unrecognized transition obligation		4,732	5,127
Unrecognized prior service cost		2,507	2,793
Unrecognized losses		4,674	2,675
Accrued postretirement benefit liabi	 lity \$	(4,246)	\$ (3,675)

The cost of the postretirement benefit plan is as follows:

	2001	2000	1999
Service cost	\$ 195	\$ 183	\$ 183
Interest cost	1,019	1,027	710
Amortization of transitional obligation	394	394	396
Amortization of prior service cost	286	286	19
Amortization of actuarial loss	115	134	62
Net periodic postretirement benefit cost	\$2,009	\$2,024	\$1,370

The plan was amended during 2000 to extend the health care benefits available to a certain group of retirees.

The assumed discount rate used in the accounting for the plan was 7.0% in 2001 and 7.5% in 2000.

For measurement purposes, a 10% annual rate of increase in the per capita cost of covered health care benefits was assumed for 2001, gradually decreasing to 5% for 2006 and remaining at that level thereafter. A one percentage point increase in this rate would increase the postretirement benefit obligation as of September 29, 2001 by \$526, while a one percentage point decrease in this rate would decrease the postretirement benefit obligation by \$477.

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#### Note 8 - Income Taxes

The reconciliation of the provision for income taxes to the amount computed by applying the U.S. federal statutory tax rate to earnings before income taxes is as follows:

	2001	2000	1999
Earnings before income taxes: Domestic Foreign		\$ 23,672 14,864	•
Eliminations	(486)	79	(44)
Total	\$ 42,013	\$ 38,615	\$ 36,728
Computed expected tax expense Increase (decrease) in income taxes resulting from:	\$ 14,704	\$ 13,515	\$ 12,855
Foreign tax rates	322	532	297
Nontaxable export sales	(1,700)	(622)	(943)
State taxes net of federal benefit	422	412	403
Foreign tax credits Change in beginning of the year	(722)	(688)	(646)
valuation allowance	748	(226)	128
Other	301	292	203
Income taxes	\$ 14,075	\$ 13,215	\$ 12,297
Effective income tax rate	33.5%	34.2%	33.5%

At September 29, 2001, certain foreign subsidiaries had net operating loss carryforwards totaling \$15,441. These loss carryforwards do not expire and can be used to reduce current taxes otherwise due on future earnings of those subsidiaries.

No provision has been made for U.S. federal or foreign taxes on that portion of certain foreign subsidiaries undistributed earnings (\$65,639 at September 29, 2001) considered to be permanently reinvested. It is not practicable to determine the amount of tax that would be payable if these amounts were repatriated to the Company.

The components of income taxes are as follows:

		2001	 2000	 1999
Current: Federal Foreign State	Ş	5,898 7,497 580	\$ 3,880 5,105 296	\$ 4,518 5,487 182

Total current	13,975	9,281	10,187
Deferred: Federal Foreign	514 (483)	4,498 (931)	2,471 (715)
State Total deferred	69  100	367  3,934	354 2,110
Total income taxes	\$ 14,075	\$ 13,215	\$ 12,297

The tax effects of temporary differences that generated deferred tax assets and liabilities are detailed in the following table. Realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers projected future taxable income and tax planning strategies in making its assessment of the recoverability of deferred tax assets.

	September 29, 2001	September 30, 2000
Deferred tax assets:		
Benefit accruals	\$ 25,369	\$ 15,823
Contract loss reserves		
not currently deductible	6,475	6,462
Tax benefit carryforwards	6,711	6,707
Inventory	6,206	5,043
Other accrued expenses	3,305	4,610
Total gross deferred tax assets	48,066	38,645
Less: Valuation reserve	(1,125)	(377)
Net deferred tax assets	46,941	38,268
Deferred tax liabilities: Differences in bases and depreciat	ion	
of property, plant and equipment	37,200	34,910
Other	234	36
Total gross deferred tax liabili	ties 37,434	34,946
Net deferred tax assets	\$ 9,507	\$ 3,322

Net deferred tax assets are included in the balance sheet as follows:

	September 29, 2001	September 30, 2000
Current assets Other assets Other long-term liabilities	\$ 27,735 5,723 (23,951)	\$ 26,972 3,216 (26,866)
Net deferred tax assets	\$ 9,507	\$ 3,322

#### Note 9 - Shareholders' Equity

Class A and Class B Common Stock share equally in the earnings of the Company, and are identical with certain exceptions. Class A shares have limited voting rights, with each share of Class A being entitled to one-tenth of a vote

on most matters, and each share of Class B being entitled to one vote. Class A shareholders are entitled, subject to certain limitations, to elect at least 25% of the Board of Directors (rounded up to the nearest whole number) with Class B shareholders entitled to elect the balance of the directors. No cash dividend may be paid on Class B unless at least an equal cash dividend is paid on Class A. Class B shares are convertible at any time into Class A on a one-for-one basis at the option of the shareholder. The number of common shares issued reflects conversion of Class B to Class A of 0 in 2001, 227 in 2000 and 255 in 1999.

The Board of Directors of the Company approved a three-for-two stock split, effected in the form of a 50% stock distribution, of its Class A and Class B Common Stock to stockholders of record on September 7, 2001, distributed September 21, 2001. As a result, the number of shares of Class A Common Stock outstanding increased from 7,269,276 to 10,903,428 and the number of shares of Class B common stock outstanding increased from 1,449,380 to 2,173,922 on the distribution date. All share and per share amounts included in the financial statements have been restated to show the effects of the stock split.

On November 20, 2001, the Company completed an offering of Class A common stock at \$21.00 per share. The offering included 1,980,000 previously unissued shares sold by the Company. The net proceeds to the Company were approximately \$39,000 and were used to repay outstanding debt.

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The Company is authorized to issue up to 10,000,000 shares of preferred stock. Series B Preferred Stock is 9% Cumulative, Convertible, Exchangeable Preferred Stock with a \$1.00 par value. Series B Preferred Stock consists of 100,000 issued shares and 83,771 outstanding shares at September 29, 2001, and is convertible into Class A Common Stock (.128775 shares of Class A Common Stock per share of Series B Preferred Stock). In fiscal 1999, 11,112 Series B Preferred shares were converted to 1,431 Class A common shares. The Series B Preferred Stock is owned by officers of the Company. With respect to any matters on which the Series B Preferred Stock is entitled to vote, all shares will be voted in a manner determined by a majority of such shares. The Series B Preferred Stock is entitled to vote as a class on certain takeover transactions. The Series B Preferred Stock has a liquidation preference over Class A and Class B Common Shares equal to \$1.00 per share. The Board of Directors may authorize, without further shareholder action, the issuance of additional preferred stock which ranks senior to both classes of Common Stock of the Company with respect to the payment of dividends and the distribution of assets on liquidation. The preferred stock, when issued, would have such designations relative to voting and conversion rights, preferences, privileges and limitations as determined by the Board of Directors. Any outstanding shares of Series B Preferred Stock on January 1, 2004 will automatically exchange into Class A common shares using the conversion ratio.

In February 1998, the shareholders of the Company approved the 1998 Stock Option Plan (1998 Plan) authorizing the issuance of options for 900,000 shares of Class A stock to directors, officers and key employees. Under the terms of the plan, options may be either incentive or non-qualified. All options issued as of September 29, 2001 were incentive options. The exercise price, determined by a committee of Board of Directors, may not be less than the fair market value of the Class A stock on the grant date. The options have a term of ten years. Options become exercisable over periods not exceeding six years.

Had compensation expense for stock options been determined based on the fair value of the options at the grant date, pro forma net earnings, basic earnings per share and diluted earnings per share would have been \$27,082, \$2.07 and \$2.04, respectively, for 2001, \$24,569, \$1.85 and \$1.84, respectively, for 2000 and \$23,753, \$1.77 and \$1.75, respectively, for 1999. The weighted-average fair value of options granted during 2001, 2000 and 1999 was \$8.46, \$7.88 and \$9.35 per option, respectively. Fair value was estimated at the date of grant using the Black-Scholes option-pricing model and the following weighted-average assumptions: risk-free interest rates of 5.8%, 5.9% and 5.1% for 2001, 2000 and 1999, respectively, expected volatility of 33%, expected life of 7.5 years and expected dividend yield of 0%.

The 1983 Incentive Stock Option Plan (1983 Plan) granted options on Class A shares to officers and key employees. The Plan terminated on December 31, 1992 and outstanding options expire no later than ten years after the date of grant. At September 29, 2001, 88,500 options were outstanding under the 1983 Plan.

Class A shares reserved for issuance at September 29, 2001 are as follows:

	Shares
Conversion of Class B to Class A shares 1983 Plan 1998 Plan	2,172,421 88,500 885,300
Conversion of Series B Preferred Stock to Class A shares	10,787
	3,157,008

Shares under option are as follows:

	Class A Stock Option Plans	Weighted Average Exercise Price
Outstanding at September 26, 1998	490,500	\$ 13.19
Granted in fiscal 1999	98,250	19.63
Cancelled or expired in fiscal 1999	(7,500)	22.58
Exercised in fiscal 1999	(79,500)	4.97
Outstanding at September 25, 1999	501,750	\$ 15.62
Granted in fiscal 2000	104,250	15.92
Cancelled or expired in fiscal 2000	(9,000)	22.32
Exercised in fiscal 2000	(51,000)	5.01
Outstanding at September 30, 2000	546,000	\$ 16.55
Granted in fiscal 2001	87,000	17.08
Cancelled or expired in fiscal 2001	(9,750)	21.83
Exercised in fiscal 2001	(52,950)	9.22
Outstanding at September 29, 2001	570,300	\$ 17.23

The weighted-average remaining lives of the Class A options as of September 29, 2001 are as follows: 1983 Plan - 0.8 years; 1998 Plan - 7.5 years.

As of September 29, 2001, prices of options outstanding under the 1983 Plan ranged from \$3.75 to \$5.00, with a weighted-average exercise price of \$4.34. The price of the options outstanding under the 1998 Plan ranged from \$15.92 to \$22.58, with a weighted-average exercise price of \$19.59.

Options to purchase 88,500 Class A shares under the 1983 Plan were exercisable at September 29, 2001 at a weighted-average exercise price of \$4.34. Options to purchase 198,511 Class A shares under the 1998 Plan were exercisable at September 29, 2001 at a weighted-average price of \$22.17.

The Company s reportable segments are Aircraft Controls, Space Controls and Industrial Controls. The determination of the Company s reportable segments is based on an analysis of the organizational structure of the Company and the markets it serves.

Aircraft Controls designs and manufactures technologically advanced flight and engine controls for manufacturers of military and commercial aircraft. Moog currently supplies flight controls for all major, in-production U.S. military aircraft, including the U.S. Navy s F/A-18 E/F Super Hornet fighter aircraft and V-22 Osprey tiltrotor aircraft. The Company supplied Lockheed Martin with flight controls for the Joint Strike Fighter concept demonstrator aircraft and is the contract lead for developing flight controls for the Engineering and Manufacturing Development phase of the program. This plane is the next generation fighter aircraft designed for use by all three branches of the U.S. military and several foreign governments. The Company is also a supplier to several large commercial aircraft manufacturers including The Boeing Company, Airbus Industrie, Raytheon Company and Bombardier Inc.

Space Controls designs and manufactures controls and systems that control the flight, positioning or thrust of tactical and strategic missiles, launch vehicles, satellites and NASA s Space Shuttle. Customers include Alliant Techsystems Inc., Lockheed Martin, Astrium Ltd., Raytheon and Boeing. Programs on which Moog participates include tactical missile programs such as TOW, Hellfire and AGM 142 Popeye, missile defense programs such as the National Missile Defense program, or NMD, and the Theater High Altitude Area Defense System, or THAADS, the Space Station and the Titan IV and Delta family of launch vehicles.

Industrial Controls designs and manufactures hydraulic and electric controls used in a variety of industrial applications. Product applications include plastic injection and blow molding machines, steam and gas turbines, steel rolling mills, fatigue testing machines, motion simulators and gun and turret positioning and ammunition-loading systems on combat vehicles.

Segment information for the years ended 2001, 2000 and 1999 and reconciliations to consolidated amounts are as follows:

		2001	2000	1999
Net sales:			 	 
Aircraft Controls	\$	339,840	\$ 311,846	\$ •
Space Controls		103,253	112,410	109 <b>,</b> 987
Industrial Controls		261,285	219,750	217,939
Net sales	\$	704,378	\$ 644,006	\$ 630,034
Operating profit and margins:			 	 
Aircraft Controls	\$	49,154	\$ 42,982	\$ 36,960
		14.5%	13.8%	12.2%
Space Controls		12,327	12,185	12,833
		11.9%	10.8%	11.7%
Industrial Controls		21,720	24,643	23,595
		8.3%	11.2%	10.8%
Total operating profit		83,201	 79,810	 73,388
		11.8%	12.4%	11.6%
Deductions from operating profit:				
Interest expense		32,054	33,271	28,188
Corporate and other expenses, net		9,134	7,924	8,472
Earnings before income taxes	\$	42,013	\$ 38,615	\$ 36,728
Depreciation and amortization expen	se	:	 	 
Aircraft Controls	\$	16,621	\$ 16,955	\$ 16,185

Space Controls Industrial Controls	3,546 9,917		3,040 8,040	3,555 8,639
Corporate	 30,084 1,609	_	28,035 2,408	 28,379 2,223
Total depreciation and amortization	\$ 31,693	\$	30,443	\$ 30,602
Identifiable assets: Aircraft Controls Space Controls Industrial Controls	\$ 435,700 122,659 266,801	\$	427,532 119,150 217,111	429,914 119,108 220,621
Corporate	825,160 31,381		763,793 27,912	769,643 28,833
Total assets	\$ 856,541	\$	791,705	\$ 798,476
Capital expenditures: Aircraft Controls Space Controls Industrial Controls	\$ 13,293 2,135 9,577	\$	11,261 3,790 6,952	9,722 6,195 8,241
Corporate	 25,005 1,950		22,003 1,958	 24,158 2,281
Total capital expenditures	\$ 26,955	\$	23,961	\$ 26,439

Operating profit is net sales less cost of sales and other operating expenses. The deductions from operating profit are directly identifiable to the respective segment or allocated on the basis of sales or manpower.

Sales to Boeing were \$128,032, \$112,698 and \$123,254 in 2001, 2000 and 1999, respectively, including sales to the Boeing Commercial Airplane Group of \$71,940, \$59,785 and \$72,768 in 2001, 2000, and 1999, respectively. Sales to the U.S. Government and its prime- or sub-contractors, including military sales to Boeing, were \$180,720, \$184,388 and \$187,795 in 2001, 2000 and 1999, respectively. Sales to Boeing and to the U.S. Government and its prime- or sub-contractors are made primarily from the Aircraft Controls and Space Controls segments.

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Sales, based on the customer's location, and property, plant and equipment by geographic area are as follows:

		2001	2000	1999
Net sales:				
United States	\$	405,853	\$ 380,728	\$ 372,346
Germany		50,709	37,892	46,467
Japan		38,366	46,574	38,046
Italy		34,784	18,619	17,165
Other		174,666	160,193	156,010
Net sales	\$	704,378	\$ 644,006	\$ 630,034
Property, plant	and equipm	ent:	 	 
United States	\$	145,895	\$ 146,992	\$ 144,583
Philippines		15,889	14,958	15,013
Japan		11,217	11,629	11,152
Other		25,706	15,005	18,170

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Total property,			
plant and equipment	\$ 198,707	\$ 188,584	\$ 188,918

#### Note 11 - Supplemental Cash Flow Information

	2001	2000	1999
Cash paid for:	 	 	 
Interest	\$ 32,030	\$ 34,330	\$ 25,332
Income taxes	11,932	9,517	12,014
Non-cash investing and			
financing activities:			
Leases capitalized,			
net of terminations	\$ _	\$ _	\$ 573
Acquisitions of businesses:			
Fair value of assets acquired	\$ 41,534	\$ 1,714	\$ 226,381
Net cash paid	25,977	1,450	171,710
Liabilities assumed	\$ 15,557	\$ 264	\$ 54,671

#### Note 12 - Commitments and Contingencies

The Company is engaged in administrative proceedings with governmental agencies and legal proceedings with governmental agencies and other third parties in the normal course of its business, including litigation under Superfund laws, regarding environmental matters. The Company believes that adequate reserves have been established for its share of the estimated cost for all currently pending environmental administrative or legal proceedings and does not expect that these environmental matters will have a material adverse effect on the financial condition, liquidity or results of operations of the Company.

From time to time, the Company is named as a defendant in legal actions arising in the normal course of business. The Company is not a party to any pending legal proceedings which management believes will result in a material adverse effect on the Company s financial condition, liquidity or results of operations, or to any pending legal proceedings other than ordinary, routine litigation related to its business.

The Company leases certain facilities and equipment under operating lease arrangements. These arrangements may include fair market renewal or purchase options. Rent expense under operating leases amounted to \$11,738 in 2001, \$12,110 in 2000 and \$11,494 in 1999. Future minimum rental payments required under noncancelable operating leases are \$11,775 in 2002, \$9,550 in 2003, \$7,210 in 2004, \$5,774 in 2005, \$4,698 in 2006, and \$5,292 thereafter.

At September 29, 2001, the consolidated financial statements reflect contract value increases for contract claims of approximately \$3,600.

The Company has \$2,501 in open letters of credit at September 29, 2001. Purchase commitments outstanding at September 29, 2001 are \$7,858 for machinery and equipment.

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#### Note 13 - Fair Value of Financial Instruments

The carrying amount and the estimated fair value of the Company s financial instruments as of September 29, 2001

	20	 )01	20	 00
Asset (Liability)	Carrying	Fair	Carrying	Fair
	Amount	Value	Amount	Value
Interest rate swaps	\$ (4,360)	\$ (4,360)	\$ 238	\$ 984
Long-term debt	(360,093)	(363,804)	(364,708)	(364,708)

and September 30, 2000 for financial instruments where the carrying amount differs from the fair value are as follows:

The fair value of interest rate swaps is the estimated amount that the Company would receive or pay to terminate the swap agreements at the end of the year, taking into account current interest rates.

The fair value of long-term debt was estimated based on quoted market prices.

The Company principally uses derivative financial instruments to manage the risk that changes in interest rates will affect the amount of its future interest payments. The Company uses, to a much lesser extent, derivative financial instruments to reduce fluctuations in foreign currency cash flows related to third party raw material purchases, intercompany product purchases and intercompany loans. There were no material foreign currency contracts outstanding during fiscal 2001.

Interest rate swaps are used to adjust the proportion of total debt that is subject to variable and fixed interest rates. The interest rate swaps provide for the Company to pay an amount equal to a specified fixed rate of interest times a notional principal amount and to receive in return an amount equal to a variable rate of interest times the same notional amount. The notional amounts are not exchanged. No other cash payments are made unless the contract is terminated prior to its maturity, in which case the contract would likely be settled for an amount equal to its net present value. The Company enters into interest rate swaps with a number of major financial institutions to minimize counterparty credit risk.

The interest rate swaps qualify and are designated as hedges of the amount of future cash flows related to interest payments on variable-rate debt. Therefore, the interest rate swaps are recorded in the consolidated balance sheet at fair value and the related gains or losses are deferred in shareholders equity as a component of Accumulated Other Comprehensive Loss (AOCL). These deferred gains and losses are amortized into interest expense during the period or periods in which the related interest payments affect earnings. However, to the extent that the interest rate swaps are not perfectly effective in offsetting the change in the value of the interest payments being hedged, the ineffective portion of these contracts is recognized in earnings immediately. Ineffectiveness was immaterial in fiscal 2001.

Of the \$150,000 of interest rate swaps outstanding at September 29, 2001, \$80,000 matures at various times during fiscal 2002 and effectively converts this amount of variable-rate debt to fixed-rate debt at 8.3%. The remaining \$70,000 matures at various times during fiscal 2003 and effectively converts this amount of variable-rate debt to fixed-rate debt at 7.1%.

Activity in AOCL related to derivatives held by the Company during the period from October 1, 2000 through September 29, 2001 is summarized below:

	 	er-Tax ount
Cumulative effect of adopting SFAS No. 133 \$ Net decrease in fair value of derivatives (5 Net reclassification from AOCL into earnings	(====)	351 ,388) 247

		-	
Accumulated loss on derivatives	\$(4,464)	\$1 <b>,</b> 674	\$(2 <b>,</b> 790)

Of the \$2,790 accumulated loss on derivatives reported in AOCL at September 29, 2001, \$2,437 of net losses are expected to be reclassified to earnings in the next twelve months. Amounts are expected to be reclassified from AOCL into earnings as settlements occur. The fair value of derivatives at September 29, 2001 was a net \$4,136 liability, most of which is included in accrued interest.

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#### Note 14 - Quarterly Data - Unaudited Net Sales and Earnings

	Year Ended September 29, 2001											Sept		r Endec r 30, 2		
		 1st Qtr.		2nd Qtr.		3rd Qtr.		4th Qtr.	T	otal		 st tr.		2nd Qtr.		3rd Qtr.
Net sales Gross profit		 7,709 6,672		 2,544 3,114		 79,252 53,943		 84,873 57,414		04,378 11,143		 7,284 8,249		51,061 19,294		9,769 7,986
Net earnings Per share data:		6 <b>,</b> 523		6,812		7,159		7,444	2	27 <b>,</b> 938		6,318		6,255		6,326
Basic Diluted	\$ \$	.50 .49	•	.52 .51	•	.55 .54	•	.57 .56	•	2.13 2.11	\$ \$	.47 .47	•	.47 .47	•	.48 .48

Note: Quarterly amounts may not add to the total due to rounding.

Per share data has been restated to reflect the effect of the three-for-two stock split of the Company's Class A and Class B Common Stock distributed on September 21, 2001.

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#### REPORT OF INDEPENDENT AUDITORS

Shareholders and Board of Directors of Moog Inc.:

We have audited the consolidated financial statements of Moog Inc. and subsidiaries listed in Item 14(a)(1) of the annual report on Form 10-K for the fiscal year ended September 29, 2001. In connection with our audits of the consolidated financial statements, we also have audited the financial statement schedule listed in Item 14(a)(2) of the annual report on Form 10-K for the fiscal year ended September 29, 2001. These consolidated financial statements and financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements or schedule of Moog GmbH, a wholly owned consolidated subsidiary of the Company. The financial statements of Moog GmbH, which we have not audited, reflect total assets constituting 11% and 7% as of September 29, 2001 and September 30, 2000, respectively, and total net sales constituting 14%, 10% and 11% of the related consolidated totals for the years ended September 29, 2001. September 30, 2000 and September 25, 1999, respectively. Those statements and schedule were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for Moog GmbH for the applicable fiscal years, is based solely on the reports of the other auditors.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We

believe that our audits and the reports of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the reports of the other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Moog Inc. and subsidiaries as of September 29, 2001 and September 30, 2000 and the results of their operations and their cash flows for each of the years in the three-year period ended September 29, 2001, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

Buffalo, New York November 6, 2001

## KPMG LLP

#### ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Part III

## ITEM 10. Directors and Executive Officers of the Registrant.

The information required herein with respect to directors of the Company and certain information required herein with respect to the executive officers of the Company is incorporated by reference to Election of Directors in the 2002 Proxy.

## **Executive Officers of the Registrant.**

The executive officers of Moog are listed on the following page.

Other than John B. Drenning, the principal occupations of the following officers for the past five years have been their employment with the Company. Mr. Drenning s principal occupation is partner in the law firm of Hodgson Russ LLP.

On October 1, 1999, Robert H. Maskrey was named Executive Vice President and Chief Operating Officer. Previously he was a Vice President of the Company.

On February 25, 2000, Martin J. Berardi was named Vice President and continues as a General Manager in the Industrial Controls segment.

On February 25, 2000, Warren C. Johnson was named Vice President and continues as General Manager of the Aircraft Group, a position he assumed in October 1999. Previously he was Chief Engineer of the Aircraft Group.

On June 1, 2000, Timothy P. Balkin was named Treasurer. Previously he was Director of Financial Planning and Analysis.

	Elected Officer
Robert T. Brady	
Chairman of the Board;	
President; Chief Executive Officer;	
Director; Member, Executive Committee	1967
Richard A. Aubrecht	
Vice Chairman of the Board;	
Vice President - Strategy and Technology;	
Director; Member, Executive Committee	1980
Joe C. Green	
Executive Vice President;	
Chief Administrative Officer;	
Director; Member, Executive Committee	1973
Robert H. Maskrey	
Executive Vice President;	
Chief Operating Officer	
Director; Member, Executive Committee	1985
Robert R. Banta	
Executive Vice President;	
Chief Financial Officer; Assistant Secretary;	
Director; Member, Executive Committee	1983
Philip H. Hubbell	
Vice President - Contracts and Pricing	1988
Stephen A. Huckvale	
Vice President	1990
Vice riesident	1990
Martin J. Berardi	
Vice President	2000
Warren C. Johnson	
Vice President	2000
Timothy P. Balkin	
Treasurer	2000
John D. Ducaning	
John B. Drenning	1000
Secretary	1989
Donald R. Fishback	
Controller	1985

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## ITEM 11. Executive Compensation.

The information required herein is incorporated by reference to the 2002 Proxy.

## ITEM 12. Security Ownership of Certain Beneficial Owners and Management.

The information required herein is incorporated by reference to the 2002 Proxy.

#### ITEM 13. Certain Relationships and Related Transactions.

The information required herein is incorporated by reference to the 2002 Proxy.

#### Part IV.

#### ITEM 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K.

- (a) Documents filed as part of this report:
- 1. Index to Financial Statements.

The following financial statements are included:

- (i) Consolidated Statements of Earnings for each of the three years ended September 29, 2001.
- (ii) Consolidated Balance Sheets as of September 29, 2001 and September 30, 2000.
- (iii) Consolidated Statements of Shareholders' Equity for each of the three years ended September 29, 2001.
- (iv) Consolidated Statements of Cash Flows for each of the three years ended September 29, 2001.
- (v) Notes to Consolidated Financial Statements.
- (vi) Report of Independent Auditors.
- 2. Index to Financial Statement Schedules. The following Financial Statement Schedule as of and for each of the three years ended September 29, 2001, is included in this Annual Report on Form 10-K: II. Valuation and Qualifying Accounts. Schedules other than that listed above are omitted because the conditions requiring their filing do not exist, or because the required information is provided in the Consolidated Financial Statements, including the Notes thereto.
- 3. Exhibits The exhibits required to be filed as part of this Annual Report on Form 10-K have been included as follows:
- (2) (i) Stock Purchase Agreement between Moog Inc., Moog Torrance Inc. and AlliedSignal Inc., incorporated by reference to exhibit 2.1 of the Company's report on Form 8-K dated June 15, 1994.
  - (ii) Asset Purchase Agreement dated as of September 22, 1996 between Moog Inc., Moog Controls Inc., International Motion Control Inc., Enidine Holdings, L.P. and Enidine Holding Inc., incorporated by reference to exhibit 2.1 of the Company's report on Form 8-K dated October 28, 1996.
  - (iii) Stock Purchase Agreement dated October 20, 1998 between Raytheon Aircraft Company and Moog Inc., incorporated by reference to exhibit 2(i) of the Company's report on Form 8-K dated November 30, 1998.
- (3) Restated Certificate of Incorporation and By-laws of the Company, incorporated by reference to exhibit (3) of the Company s Annual Report on Form 10-K for its fiscal year ended September 30, 1989.
- (4) Form of Indenture between Moog Inc. and Fleet National Bank, as Trustee, dated May 10, 1996 relating to the 10% Senior Subordinated Notes due 2006, incorporated by reference to exhibit (iv) to Form 8-K dated May 10, 1996.
- (9) (i) Agreement as to Voting, effective October 15, 1988, incorporated by reference to exhibit (i) of October 15, 1988 Report on Form 8-K dated November 30, 1988.
  - (ii) Agreement as to Voting, effective November 30, 1983, incorporated by reference to exhibit (i) of November 1983 Report on Form 8-K dated

December 9, 1983.

- (10) Material contracts.
  - (i) Management Profit Sharing Plan, incorporated by reference to exhibit 10(i) of the Company s Annual Report on Form 10-K for the fiscal year ended September 30, 1991.
  - (ii) Deferred Compensation Plan for Directors and Officers, incorporated by reference to exhibit (i) of November 1985 Report on Form 8-K, dated December 3, 1985.
  - (iii) Incentive Stock Option Plan, incorporated by reference to exhibit 4(b) of the Registration Statement on Form S-8, File No. 33-36721, filed with the Securities and Exchange Commission on September 7, 1990.
  - (iv) Savings and Stock Ownership Plan, incorporated by reference to exhibit 4(b) of the Company s Annual Report on Form 10-K for its fiscal year ended September 30, 1989.
  - (v) Indemnity Agreement, incorporated by reference to Annex A to 1988 Proxy Statement dated January 4, 1988.
  - (vi) 1998 Stock Option Plan, incorporated by reference to exhibit A to 1998 Proxy Statement dated January 5, 1998.
  - (vii) Form of Employment Termination Benefits Agreement between Moog Inc. and Robert T. Brady, Richard A. Aubrecht, Joe C. Green, Robert H. Maskrey, Robert R. Banta, Phillip H. Hubbell and Richard C. Sherrill, incorporated by reference to exhibit 10(vii) of the Company's Annual Report on Form 10-K for the fiscal year ended September 25, 1999.
- (viii) Supplemental Retirement Plan, as amended and restated, effective October 1, 1978 - amended August 30, 1983; May 19, 1987; August 30, 1988 and November 11, 1999, incorporated by reference to exhibit 10(viii) of the Company s Annual Report on Form 10-K for the fiscal year ended September 25, 1999.
  - (ix) Corporate Revolving and Term Loan Agreement among certain lenders, HSBC Securities, Inc., as arranger, Marine Midland Bank, as agent, and Moog Inc. dated as of November 30, 1998, incorporated by reference to exhibit 10(i) of the Company's report on Form 10-Q for the quarter ended December 31, 2000.

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- (x) Amendment No. 1 to Corporate Revolving and Term Loan Agreement among certain lenders, HSBC Securities, Inc., as arranger, HSBC Bank USA, formerly known as Marine Midland Bank, as agent, and Moog Inc. dated as of October 24, 2000, incorporated by reference to exhibit 10(ii) of the Company's report on Form 10-Q for the quarter ended December 31, 2000.
- (xi) Amendment No. 2 to Corporate Revolving and Term Loan Agreement among certain lenders, HSBC Securities, Inc., as arranger, HSBC Bank USA, formerly known as Marine Midland Bank, as agent, and Moog Inc. dated as of February 23, 2001. (Filed herewith)
- (xii) Amendment No. 3 to Corporate Revolving and Term Loan Agreement among certain lenders, HSBC Securities, Inc., as arranger, HSBC Bank USA, formerly known as Marine Midland Bank, as agent, and Moog Inc. dated as of September 17, 2001. (Filed herewith)
- (13) 2001 Annual Report to Shareholders. (Except for those portions which are expressly incorporated by reference into this Annual Report on Form 10-K, this exhibit is furnished for the information of the Securities and Exchange Commission and is not deemed to be filed as part of this report.)
- (21) Subsidiaries of the Company. Subsidiaries of the Company are listed below:
  - Moog Hydrolux S.a.r.l., Incorporated in Luxembourg, wholly-owned subsidiary
  - (ii) Microset S.r.l., Incorporated in Italy, wholly-owned subsidiary
  - (iii) Moog AG, Incorporated in Switzerland, wholly-owned subsidiary with branch operation in Ireland
  - (iv) Moog Australia Pty. Ltd., Incorporated in Australia, wholly-owned subsidiary
  - (v) Moog do Brasil Controles Ltda., Incorporated in Brazil, wholly-owned

subsidiary

(a) Moog de Argentina Srl, Incorporated in Argentina, wholly-owned subsidiary of Moog do Brasil Controles Ltda.

- (vi) Moog Buhl Automation, a branch office of Moog Inc. operating under Danish law
- (vii) Moog Controls Corporation, Incorporated in New York, wholly-owned subsidiary with branch operation in the Republic of the Philippines
- (viii) Moog Controls Hong Kong Ltd., Incorporated in Hong Kong, wholly-owned subsidiary
  - (ix) Moog Controls (India) Private Ltd., Incorporated in India, wholly-owned subsidiary
  - (x) Moog Controls Ltd., Incorporated in the United Kingdom, wholly-owned subsidiary with a branch operation in India
    - (a) Moog Norden A.B., Incorporated in Sweden, wholly-owned subsidiary of Moog Controls Ltd.
    - (b) Moog OY, Incorporated in Finland, wholly-owned subsidiary of Moog Controls Ltd.
    - (c) Moog Whitton Ltd., Incorporated in the United Kingdom, wholly-owned subsidiary of Moog Controls Ltd.
- (xii) Moog FSC Ltd., Incorporated in the Virgin Islands, wholly-owned subsidiary
- (xiii) Moog GmbH, Incorporated in Germany, wholly-owned subsidiary(a) Moog Italiana S.r.l., Incorporated in Italy, wholly-owned subsidiary, 90% owned by Moog GmbH; 10% owned by Moog Inc.
- (xiv) Moog-Hydrolux Hydraulic Systems, Inc., Incorporated in New York, wholly-owned subsidiary
- (xv) Moog IFSC Ltd., Incorporated in the United Kingdom, wholly-owned subsidiary
- (xvi) Moog Industrial Controls Corporation, Incorporated in New York, wholly-owned subsidiary
- (xvii) Moog Japan Ltd., Incorporated in Japan, wholly-owned subsidiary
- (xviii) Moog Korea Ltd., Incorporated in South Korea, wholly-owned subsidiary
  - (xix) Moog Properties, Inc., Incorporated in New York, wholly-owned subsidiary (xx) Moog Sarl, Incorporated in France, wholly-owned subsidiary, 95% owned by
  - Moog Inc.; 5% owned by Moog GmbH
  - (xxi) Moog Singapore Pte. Ltd., Incorporated in Singapore, wholly-owned subsidiary
- (23) (i) Consent of KPMG LLP. (Filed herewith)

(23) (ii) Consent and Audit Report of PricewaterhouseCoopers GmbH.

- (Filed herewith)
- (99) Additional Exhibits. Information, Financial Statements and Exhibits required by Form 11-K for the Moog Inc. Savings and Stock Ownership Plan (to be filed by amendment).
  - (b) Reports on Form 8-K No reports on Form 8-K have been filed in the three month period ended September 29, 2001.

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MOOG INC.

Schedule II

Valuation and Qualifying Accounts - Three Years ended September 29, 2001 (dollars in thousands)

	Additions				
Balance at	charged to			Foreign	Balance
beginning	costs and			Exchange	at end
of period	expenses	Deductions	Acquisitions	Impact	of perio

Year ended 1999:						
Contract loss reserves \$	11,660	\$ 3 <b>,</b> 676	\$ 15 <b>,</b> 198	\$ 24,603	\$ -	\$ 24,7
Allowance for doubtful accounts	2,900	876	1,777	473	(55)	2,4
Reserve for inventory valuation	14,687	3,914	4,286	2,204	(529)	15,9
Year ended 2000:						
Contract loss reserves \$	24,741	\$ 7,521	\$ 14 <b>,</b> 321	\$ 3,000	\$ (25)	\$ 20,9
Allowance for doubtful accounts	2,417	719	759	-	(121)	2,2
Reserve for inventory valuation	15,990	5,627	2,836	_	(854)	17,9
Year ended 2001:						
Contract loss reserves \$	20,916	\$ 6,594	\$ 12,250	\$ –	\$1,403	\$ 16,6
Allowance for doubtful accounts	2,256	1,584	502	_	(23)	3,3
Reserve for inventory valuation	17,927	6,481	4,382	-	116	20,1

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#### Signatures

Pursuant to the requirements of Section 13, or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

#### Moog Inc. (Registrant)

Date: December 17, 2001

By <u>ROBERT T. BRADY</u> Robert T. Brady Chairman of the Board, President, Chief Executive Officer, and Director (Principal Executive Officer)

#### By <u>ROBERT R. BANTA</u> Robert R. Banta

Executive Vice President, Chief Financial Officer, and Director (Principal Financial Officer)

#### By <u>DONALD R. FISHBACK</u> Donald R. Fishback Controller (Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant.

By	RICHARD A. AUBR	ECHT			By	ROBERT MASKREY
	Richard A. Aubr	echt				Robert H. Maskrey
	Director					Director
By	JAMES L. GRAY				By	KRAIG H. KAYSER
	James L. Gray					Kraig H. Kayser
	Director					Director
By	JOE C. GREEN				By	JOHN D. HENDRICK
	Joe C. Green					John D. Hendrick
	Director					Director
		By	ALBERT H	. MYER	S	

Albert F. Myers Director

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#### Exhibit Index

- 10(xi) Amendment No. 2 to Corporate Revolving and Term Loan Agreement among certain lenders, HSBC Securities, Inc., as arranger, HSBC Bank USA, formerly known as Marine Midland Bank, as agent, and Moog Inc. dated as of February 23, 2001.
- 10(xii)Amendment No. 3 to Corporate Revolving and Term Loan Agreement among certain lenders, HSBC Securities, Inc. as arranger, HSBC Bank USA, formerly known as Marine Midland Bank, as agent, and Moog Inc. dated as of September 17, 2001.
- 13 2001 Annual Report to Shareholders.
- 23(i) Consent of KPMG LLP.
- 23(ii) Consent and Audit Report of PricewaterhouseCoopers GmbH.