**Recent Financial Performance**

(Dollars and shares in millions, except per share data)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Sales</strong></td>
<td>$2,331</td>
<td>$2,114</td>
</tr>
<tr>
<td><strong>Net Earnings</strong></td>
<td>$136</td>
<td>$108</td>
</tr>
<tr>
<td><strong>Diluted Earnings Per Share</strong></td>
<td>$2.95</td>
<td>$2.36</td>
</tr>
<tr>
<td><strong>Equity Market Capitalization</strong></td>
<td>$1,476</td>
<td>$1,608</td>
</tr>
<tr>
<td><strong>Average Shares Outstanding</strong></td>
<td>46.0</td>
<td>45.7</td>
</tr>
</tbody>
</table>

*Measured as of fiscal year end*

**Financial Performance**

10 Year Compound Annual Growth Rate = 12%

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To Our Shareholders, Employees and Friends,

In last year’s letter, I announced that we were back on track in that we had resumed growth in sales, earnings and earnings per share. In 2011, it was a faster track. Sales grew 10% to $2.33 billion, net earnings were up $28 million to $136 million and earnings per share of $2.95 were up 25%. All-in-all, it was a very strong performance.

Individual sections of this report will discuss the achievements in each of our segments. In the segment reports we’ll talk about different products, different markets and different customers. To the casual observer it may seem that Moog Inc. is a combination of five different companies. One day last year I was asked by a prospective European investor why we want to manage a conglomerate. The question took me by surprise. I don’t think of our company as a conglomerate but I can appreciate that for many observers the connections between our five segments aren’t obvious. So I’d like to take this opportunity to describe the factors that we think tie our five segments together into one Moog company.

Our company was founded on Bill Moog’s development of the servovalve – a device that became the heart of very high-performance electrohydraulic motion control systems. At the time, Bill was a project engineer at a research institution that was part of Cornell University. Bill’s work began in the early days of the guided missile industry. His project was to develop a fast-acting, lightweight, high-pressure valve that would provide steering control in the severe environments anticipated in guided missile operation. It was a challenging technical assignment. Bill developed the product and was offered the opportunity to take a leave of absence and start a company to produce it. He formed the Moog Valve Company in 1951.

Over the 60 years since then, we have extended and elaborated our technology capabilities and we now think of our company as a designer and producer of customized, high-performance motion control and fluid flow systems and components. We’ve taken this capability to all the different markets where our particular expertise is needed. We continue in the tradition that Bill began in that we generally attack the most demanding technical challenges. In the aircraft industry, the requirement for very high-performance, precision motion control is easy to appreciate. If you’re moving the flight surfaces on a supersonic fighter or a commercial transport, you need precise control so that the aircraft goes where the pilot sends it and not someplace else. Similarly, steering the rockets that launch satellites, steering the Space Shuttle on its launch and steering the defensive missiles that can knock down attacking missiles obviously requires high-performance controls. It may be less obvious, but it is no less true, that the same degree of performance is required in various types of industrial machinery. Injection molding, blow molding and metal forming equipment all require the same degree of precision motion control that’s required in aircraft and rockets.

In some applications, the premium for performance is not in precision, but in the ability to operate effectively in hostile environments. Equipment used in oil exploration, which operates a mile below the earth’s surface, experiences temperatures of 400°F and pressures of 20,000 psi. The electronics that control the pitch of blades on wind turbines see extremes in temperature, humidity and vibration. These controls need to be reliable because they’re not easy to reach if they need repair. In medical devices, the premium for performance is less about precision and more about reliability. Patient safety requires that the infusion pumps that provide hydration and medication perform effectively and reliably.

As we see our company’s role, it goes beyond designing and building today’s products. Our challenge is to develop and maintain an organization of people and processes that can develop the technology and the products that our customers will need tomorrow. All of our products, whether electrohydraulic or electromechanical, respond to electronic commands. Generally, we’re dealing with digital controls in an increasingly complex software environment. In many applications, we provide those electronic controls as well as the actuation equipment they command. The laws of physics are the same in all the markets we address. As a result, a lot of our engineering talent is transferrable from one segment to another, depending on market opportunity.

Over the years we’ve developed a strategic planning process that lays out technology roadmaps for prioritizing the advancement of our technology. We’ve developed techniques for managing product design and development and the all-important reliability testing. Product cost is always an issue and, therefore, when designing high-performance and highly reliable products, it is crucially important that our folks consider the manufacturing process. For the most part, our manufacturing operations are dedicated and controlled by each of the segments. We do, however, have a number of intercompany process councils that include representatives from each of our segments. They focus attention on developing best practices
and an overall company approach to project management, to process orientation, to global supply chain management, and to the development of e-commerce and intra-company business networking.

All of the elements I’ve discussed are important in maintaining the connectivity in our company. Most important, however, is the culture that Bill Moog initiated. Its foundation is integrity, honesty and mutual trust. It values competence, extraordinary effort, individual responsibility, collaboration and open communication. It encourages the same behavior in all the different segments in our company and in all the different geographies in which we operate.

So, it’s true that we have a wide variety of products in different shapes and sizes that are delivered to a variety of different markets and perform a broad range of functions. But, in almost all cases, we’re providing state-of-the-art technology to customers who have challenging problems and demanding requirements. Generally, we’re providing products that are mission critical and products that customers use “when performance really matters.” We have the Moog approach to developing these products and the Moog culture which supports the delivery of these products in a cost effective, timely and customer friendly fashion.

We believe that our approach to managing our business is somewhat unique. Our exposure to opportunities in a variety of different markets has provided growth and relative stability. 1995 was an inflection point for our company. It was the first year after the acquisition of the Allied-Signal actuation division. Since that time, our compound annual growth in sales has been 12%. Our compound growth rate in earnings per share has been 16%. Over that 16 year period, we’ve had one down year in the recession of 2009. Otherwise, our EPS growth has been in double digits for each year except one. Over the last two years, our net earnings are up by 60%.

As we look to the future, there are different factors influencing our business in each of our markets. Our Aircraft segment is in the early phase of a substantial growth period as the F-35 and Boeing 787 go into production. The Space and Defense segment has a very strong position in both commercial and military satellites. In the near term, growth will be in the replenishment of the tactical missile inventory. In the longer term, we look for growth in the security and surveillance market. Our Industrial Systems segment has recovered from the market downturn in capital equipment that occurred in 2009 and is experiencing growth in simulation, specialized test equipment and the energy market, including conventional power generation, oil and gas exploration and wind energy. Our Components segment has adjusted to a reduction in military expenditures that had been stimulated by the Middle East conflicts and looks to its medical and industrial markets for growth. Our Medical Devices segment has weathered a couple of difficult years and is maturing into a promising business.

Adding the segments together into one Moog, we project for 2012 an 8% increase in sales and a 12% increase in net earnings and earnings per share. We’re presuming that the U.S. economy maintains its current level and that the Europeans avoid an economic meltdown. Under these circumstances, we believe that this is a conservative projection. We also believe that our consistent focus on challenging applications in motion control and fluid flow will, over the long-term, provide growth in sales, earnings and earnings per share – just as it has over the last 16 years.

Our company will have a new leader in 2012. On November 30, 2011, our Board elected John Scannell as Chief Executive Officer. John was previously President and Chief Operating Officer. He joined our company 21 years ago in Ireland, and he’s worked for Moog in three different countries in both the industrial and aerospace businesses. He’s been an engineering manager and an operations manager as well as our Vice President of Contracts and Chief Financial Officer. Throughout his career, John has demonstrated extraordinary intelligence and a gift for leadership. We have great confidence that John will build on the company’s current strengths and lead us to a bigger and ever brighter future.

Having been CEO for over two decades, I can report that the experience was always interesting and most of the time really enjoyable. It’s been immensely rewarding to participate in the growth and development of our company and a privilege to be considered the leader. I want to thank everyone who has worked with and supported me over the years in the campaign to make Moog the company that it is today. I’m also happy to report that John and the Board have invited me to continue with the company in an advisory capacity until the completion of my term as Chairman in January of 2014.
OFFICERS AND DIRECTORS

ROBERT T. BRADY
Chairman of the Board
Chief Executive Officer

JOHN R. SCANNELL
President
Chief Operating Officer

WARREN C. JOHNSON
President
Aircraft Controls Group

JAY K. HENNING
President
Space and Defense Group

SEAN GARTLAND
President
International Group

LAWRENCE J. BALL
President
Components Group

 MARTIN J. BERARDI
President
Medical Devices Group

HARALD E. SEIFFER
Vice President
General Manager, Europe

SASIDHAR ERANKI
Vice President
Deputy General Manager
Aircraft Controls Group

JOE C. GREEN
Executive Vice President
Chief Administrative Officer
Director

RICHARD A. AUBRECHT
Vice Chairman of the Board
VP — Strategy and Technology
Director

DONALD R. FISHBACk
Vice President
Chief Financial Officer

TIMOTHY P. BALKIN
Treasurer
Assistant Secretary

JENNIFER WALTER
Controller
Principal Accounting Officer

JOHN B. DRENNING
Secretary
Partner
Hodgson Russ, LLP

RAYMOND W. BOUSHIE
Director
Retired President and CEO
Crane Aerospace

PETER J. GUINERMAN
Director
President and CEO
Astronics Corp.

JOHN D. HENDRICK
Director
Retired Chairman
Okuma America Corp.

KRAIG H. KAYSER
Director
President and CEO
Seneca Foods Corp.

BRIAN J. LIPKE
Director
Chairman and CEO
Gibraltar Industries

ROBERT H. MASKREY
Director
Retired Executive VP, COO
Moog Inc.

ALBERT F. MYERS
Director
Retired VP Strategy and Technology
Northrop Grumman

* Effective December 1, 2011, Robert T. Brady will hold the title of Executive Chairman and John R. Scannell will hold the title of Chief Executive Officer.
Our technology

Over the last 60 years, our engineers have developed the capability to design and manufacture the most advanced motion control products for aerospace, defense, industrial and medical applications — applications where precise control of velocity, force, acceleration and fluid flow are critical. Our motion control portfolio has expanded to include all forms of actuation technology, sophisticated control electronics and system software. The motion control products that our investors find most familiar are used for flight control actuation.

Our aircraft rendering displays the interconnectivity of the key products in a flight control system including cockpit controls, flight control computers, electronic controllers and the actuators that control the wing and tail surfaces. Control commands begin with the pilot interface — the stick or the yoke. Pilot commands are sent through the flight control computer to the corresponding electronic controllers mounted near or directly on the actuators that position a flight control surface. The actuator technology can be a mix of electrohydraulic, electromechanical, rotary-mechanical or electrohydrostatic.

Our strategy is to supply highly customized motion control solutions that are robust, reliable and supportable. With this strategy, we’ve grown from being a high technology components supplier to become a leading integrator of precision motion control systems. Our products reflect the culture that our people embrace — a culture where the opportunity to solve a really challenging control problem is always welcomed.
AIRCRAFT CONTROLS

Revenues from development, production and aftermarket support of our aircraft products accounted for $850 million in sales, a 12% increase, including $498 million in military, $314 million in commercial and $38 million in navigation aids. The year featured certifications, first deliveries and record aftermarket sales for the military and commercial businesses.

The 747-8 freighter, certified in July, provides cargo operators with the lowest operating costs and best economics of any freighter. Moog is providing proprietary flight control computers and flight critical software for the fly-by-wire ailerons and spoilers on the aircraft’s new aerodynamic wing. This is the first time Moog is providing this capability to Boeing for a commercial transport.

In late September, Boeing delivered the first 787 passenger airplane to All Nippon Airways (ANA). First delivery was celebrated at Moog facilities in the U.S., Europe and Asia, locations that contributed to the design, production, integration and certification for the Dreamliner. The Moog systems include more than 500 discrete parts, controlling all of the primary and secondary flight surfaces, horizontal stabilizer, leading edge slats and trailing edge flaps.

Our Wolverhampton, U.K. subsidiary, which was acquired two years ago, designs and manufactures primary and secondary flight control actuation for commercial and military programs, including the high lift actuation systems for the Boeing 777 and 787 and the Airbus A330 and A380 aircraft. Moog is also designing the Airbus A350 XWB primary flight control system and trailing edge flap actuation.

Ten years ago, we were selected by Lockheed Martin to design the F-35 Joint Strike Fighter flight controls. The program is moving into the production phase and six production aircraft were delivered to the 33rd Fighter Wing at Eglin Air Force Base during the year.

In June, Boeing awarded Moog the refueling boom actuation system on the KC-46 tanker aircraft to be flown by the U.S. Air Force. Moog will provide the design, integration and qualification for the complete actuation system used to extend, retract and guide the refueling boom during in-flight refueling operations. The KC-46 is based on Boeing’s 767, a platform that flew for the first time 30 years ago with Moog autopilot actuators.

During the third quarter, Moog acquired Crossbow Technology Inc., a designer and manufacturer of acceleration sensors that are integrated into inertial navigation and guidance systems. The technology is used in a variety of sensing products for aerospace, defense and transportation applications, including commercial solutions for shipment monitoring and high-value, real-time asset tracking.

Our Aircraft Controls segment was formed from several flight control actuation companies, each with a special heritage and book of business. Today, more than 70 different military and commercial aircraft fly with Moog hardware. In addition to providing maintenance programs with spares and repairs for these aircraft, we also provide fleet modernization support for aircraft including the C-5M, F-15 and B-2. On the commercial side, we offer global support for commercial and business jets including spare parts, repairs and hardware exchanges to airlines and maintenance firms.

Looking ahead, revenue guidance for 2012 is $944 million, consisting of $528 million for military aircraft, $373 million for commercial aircraft and $43 million for navigation aids. On the commercial side, we are expecting a 19% increase in sales with strength in all markets and our navigation aids business should be higher due to recently awarded military contracts.
F/A-18E/F Super Hornet

The carrier-based F/A-18C/D Hornets and F/A-18E/F Super Hornets fly with maneuvering leading edge flap and rotary mechanical wingfold systems. The program is one of the most successful fighter airplane production programs for Moog. The designs are produced at Moog’s Torrance, CA location. Other F/A-18 controls designed and built by Moog include the rudder directional control valve, leading edge extension spoiler and servovalves that control fuel flow and configuration for the engines. Today there are more than 1,000 F/A-18C/D Hornets and more than 500 F/A-18E/F Super Hornets flying and supported by our company.
PRODUCTS

- Integrated primary and secondary flight control systems
- Flight control computers and software
- Actuator control electronics
- Flight control actuators using hydraulic, mechanical, electromechanical and electrohydrostatic technologies
- Stabilizer trim controls and multi-axis feel and trim systems
- Wingfold, bladefold and weapons bay actuation systems
- Active vibration control systems
- Engine thrust vector control actuation systems
- Flight control servovalves
- Engine control actuators and servovalves
- Aircraft braking and steering selector manifolds and servovalves
- MEMS-based inertial sensors and inertial measurement units
- Ground-based navigation aids

MAJOR PROGRAMS

Military Aircraft:

Unmanned Aerial Systems:
- X-47B UCAS-D, Mantis, Hunter, Heron, Searcher

Large Commercial Airplanes:
- Boeing 737, 747, 767, 777, 787
- Airbus A320, A330, A340, A350, A380
- COMAC C919

Regional Aircraft:
- DHC-8-400

Business Jets:
- Bombardier Challenger 300, 604, 605 and Global Express, Cessna Citation X, Gulfstream G280, G350, G400, G450, G550, G650, Hawker 4000, Premier I

Military and Commercial Helicopters:

Military Engine Controls:
- F-404, F-414, F-110, F-135, EJ200, AE2100, T406, RTM322, T700

Commercial Engine Controls:
- CF-6, GE90, V2500, RB211 and Trent, Honeywell APUs, PW 901

Customer Support:
- All current production programs above plus legacy programs including A-6, A-7, A-10, A300, AH-64, AMX, B-1B, B-2, B-52, BAE-146, C-5, C-130, C-141, CH-46, CH-47, CH-53, DC-8, DC-9, DC-10, E-2C, EA-6B, F-2, F-4, F-100, FA-18CD, Hawk, KC-10, KC-135, MD-11, MD-80, MD-90, P-3, T-45, Tornado, U-2, VC-10, 757

COMPETITIVE ADVANTAGES

- Flight control system design and integration
- Complete actuation system integration capability
- Unparalleled experience in design of primary and secondary flight control systems, both in the U.S. and overseas
- State-of-the-art technology in flight controls, engine controls, navigation and guidance, and active vibration controls
- World-class manufacturing facilities staffed with a skilled, experienced and team-based workforce
- Focused, highly-responsive global aftermarket support organization

COMPETITORS

- Parker Hannifin, Nabtesco, Goodrich, Liebherr, Woodward Governor, Curtiss-Wright, Hamilton Sundstrand

FY’11 Sales

<table>
<thead>
<tr>
<th>Product Line</th>
<th>FY’11 Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Aircraft</td>
<td>$294.1M</td>
</tr>
<tr>
<td>Business Jets</td>
<td>$32.8M</td>
</tr>
<tr>
<td>Navigation Aids</td>
<td>$38.1M</td>
</tr>
<tr>
<td>Military Aftermarket</td>
<td>$204.1M</td>
</tr>
<tr>
<td>Commercial Aircraft</td>
<td>$181.2M</td>
</tr>
<tr>
<td>Commercial Aftermarket</td>
<td>$100.2M</td>
</tr>
</tbody>
</table>
**V-22 Osprey**

The Osprey tilt rotor aircraft combines vertical lift capabilities with fixed-wing aircraft speed and range. Used for both combat and humanitarian missions, V-22 variants can be rapidly deployed by the Navy, Air Force and Marine Corps. It has air-to-air refueling capability and with folding rotors and rotating wings it can be stored on an aircraft carrier or assault ship. Moog supplies the primary flight control actuation, vibration control actuation system, utility actuators and components for the V-22 fleet.

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*AW159*  
**Courtesy of AgustaWestland**

*F-35C*  
**Courtesy of Lockheed Martin**

*UH-60 Black Hawk*  
**Courtesy of U.S. Army, Pfc. Haszario Williams**

*Airbus Family*  
**Courtesy of Mark Kwiatkowski**

*Boeing Family*  
**Courtesy of Boeing, Inc.**

*Gulfstream Family*  
**Courtesy of Gulfstream Aerospace Corporation**
SPACE AND DEFENSE CONTROLS

Revenues in the Space and Defense segment accounted for $356 million of 2011 sales, or a 9% increase. We continue to be the premier precision motion and flow control solutions provider for the space, defense and security industries. The expertise of our engineering staff allows us to meet customer specifications for system design, production and integration in a wide array of markets.

Moog’s first product was a servovalve developed for tactical missile control systems and for 60 years we have provided fluid and steering controls for missiles and munitions including designs for fin control actuation, guidance and navigation, and divert and attitude control systems.

Long-term product and program support is part of our heritage. In the 1960’s, we produced the servoauctators that moved the rocket motor nozzles to steer the Saturn rocket into space as part of the Apollo program.

In 1974, Moog was awarded actuator contracts for the Space Shuttle program. The first Shuttle thrust vector control actuators were shipped from Moog’s East Aurora facility in 1979 and flew for the first time in April 1981. Program support for the Shuttle lasted for over 30 years and 132 missions. The program, once described as the meeting of Moog’s expertise in flight controls and in missile steering controls, provided over $200 million in revenues. It also provided designs that contributed to the control systems for the B-2 and F-35 airplanes.

In June, we introduced an Integrated Stores Management and Delivery System (ISMDS) at Le Bourget, the 49th International Paris Air Show. The Moog-designed system is targeted to contractors developing new military and paramilitary aircraft as well as governments interested in refurbishing and retrofitting both rotary and fixed-wing aircraft. The system is in service on a turboprop light attack aircraft for surveillance and precision strike missions.

Moog space products position commercial and military satellite antennas, control propellant flow to rocket engines, provide vibration isolation and steer launch and space vehicles. During the year, a High-Performance Green Propulsion (HPGP) system with Moog valves achieved flight-proven status, demonstrating that it is safer and can perform better than a hydrazine system. The two systems were integrated on the satellite Mango, which is part of the Prisma mission.

Our electromechanical actuation system designs and upgrade solutions operate turrets, aiming and stabilization systems on more than 30 armored vehicles including the U.S. Army Stryker, Bradley Fighting Vehicle, Abrams, LAV-25 and European CV90. Since 2007, more than 31,000 Moog QuickSet night vision camera pan and tilt systems have been deployed on U.S. military MRAP vehicles.

Products in our surveillance portfolio include rugged cameras and precision positioning systems, web-based remotely operated systems, and integrated surveillance systems for commercial, civil and military applications. Pieper GmbH, a 2010 acquisition, manufactures video products and integrated vision systems for extreme industrial environments including steel and glass manufacturing furnaces. Utilizing their expertise in video image processing, Pieper recently designed and built a complete, interactive live-fire training installation for the Dortmund, Germany Police Department.

We expect 2012 Space and Defense segment sales of $374 million including strong contributions from development work on NASA’s Space Launch System and tactical missile production orders. Our heritage proves we are committed to providing full life cycle support for our products – even those that have been performing for decades.
Space Shuttle
On the morning of July 21, 2011, Atlantis landed at NASA’s Kennedy Space Center. STS-135 was the final mission and flight for the Space Shuttle Program. The first Shuttle thrust vector control actuators were shipped from Moog’s East Aurora facility in 1979 and flew for the first time in April 1981. Moog supported the Shuttle program for over 30 years and all 132 missions. The program, once described as the meeting of Moog’s expertise in flight controls and in missile steering controls, is an important part of our company’s heritage.
Moog

SPACE AND DEFENSE CONTROLS

SATELLITE CONTROLS • LAUNCH VEHICLES • MISSILE STEERING • VIBRATION CONTROL • DEFENSE CONTROLS • NAVAL SYSTEMS • SURVEILLANCE

PRODUCTS

- Thrust vector control actuation systems, avionics, propulsion controls and structures for missiles and launch vehicles
- Chemical and electric propulsion systems, subsystems and components for satellites and missiles
- Solar array drives, antenna pointing mechanisms and electronics for satellites
- Fin actuation systems, divert and attitude control thruster valves for tactical missiles and interceptors
- Guidance, navigation and control units for unmanned thruster systems
- Electromechanical actuators, controllers and slip rings for armored vehicle turrets, ammunition handling and radar systems
- Data and power management for military vehicles
- Electromechanical and hydraulic actuation products for naval ships and submarines
- Ruggedized camera housings, electromechanical positioners and systems integration for cameras and sensors
- Vibration suppression for aerospace, defense and commercial applications

MAJOR PROGRAMS

Satellite Structures and Propulsion and Motion Controls:

Launch Vehicle and Strategic Missile Motion, Vibration and Propulsion Controls:
- Trident D-5, Minuteman III Service Life Extension, Atlas V, Delta II/IV, Ariane 5, Vega, Taurus® I and II, H-IIA, Space Shuttle, GMD, Pegasus, Minotaur, Falcon 1e, NASA’s Space Launch System and Multi-Purpose Crew Vehicle

Missile Steering Controls:
- HELLFIRE®️, TOW, EKV, Low-Cost Kill Vehicle

Defense Controls:
- Stryker Mobile Gun System, LAV-25 and CV90 family, FLW 100/200 remote mount weapon system, 30ELR and G/ATOR radar, Mine Resistant Ambush Protected (MRAP) military vehicle

Naval Systems:
- Virginia Class submarines, USS Gerald R. Ford aircraft carrier

Surveillance:
- Precision pointing mechanisms, ruggedized housings and accessories for military, critical infrastructure, commercial installations and industrial process control installations

COMPETITIVE ADVANTAGES

- Multi-tier provider capable of components, systems and/or prime level integration
- Unmatched fluid and motion control heritage for launch vehicles, spacecraft, combat vehicles, submarines, missiles and surveillance
- Global network of sales, technical and manufacturing resources
- A flexible and responsive workforce willing to adapt our processes to support evolving customer requirements
- Focus on world-class project management
- Highly flexible, cost-effective, cellular manufacturing for families of products
- High reliability electronics design and assembly and test facilities

COMPETITORS

Satellite Controls:
- Propulsion Controls: Vacco, ValveTech, Aerojet
- Motion Controls: Sierra Nevada, Aeroflex, RUAG, CDA InterCorp

Strategic Missile and Launch Vehicle Steering and Propulsion Controls:
- Honeywell, Woodward Governor, Parker Hannifin, SABCA, Marotta, Vacco, Valcor

Vibration Control:
- AIA Engineering, Honeywell, Lord Corp.

Defense Control Systems:
- Curtiss-Wright, ESW, Woodward Governor

Naval Systems:
- Honeywell, Hamilton Sundstrand, Limitorque, Sargeant Industries

Surveillance:
- RVision, Directed Perception, Videotec
HELLFIRE®

In use by 14 nations, the HELLFIRE missile can be launched from multiple air, sea and ground platforms. Helicopters and unmanned aerial vehicles equipped for HELLFIRE missiles include the U.S. Navy’s Seahawk (SH-60) helicopter, U.S. Army Apache and Kiowa Warrior helicopters and the U.S. Air Force Predator UAV. The missile has multi-mission and multi-target capability and provides field commanders with maximum operational flexibility. For more than 30 years, Moog has supplied Lockheed Martin with electropneumatic fin steering controls for the program.
2011 Industrial Systems sales were $629 million, 15% higher for the year, with sales of legacy products and sales to capital equipment manufacturers accounting for $497 million. Wind energy products accounted for $132 million in sales. Sales of systems and products for simulators, metal forming and presses, oil and gas and steel mills showed considerable gains.

Early in the year, our Japanese operation celebrated its 40th anniversary. Moog Japan develops, manufactures, distributes and services Moog products in Hiratsuka, Yokohama, and Tomioka, Gunma. It is a development center for our operations in the Asia Pacific region and offers unique engineering capabilities for large servomotors, gas and steam turbine actuation, sway/tilt controls for trains and valves for orbit and attitude control on satellites and spacecraft. The March earthquake did not have a noticeable impact on the results for the year and the business experienced strong demand for products used in gas and steam power generating equipment. Moog on-site technical support was also in high demand.

In more than 25 countries worldwide—including automotive manufacturing centers in the United States, Japan, China, India, Korea, France, Italy and Germany—Moog technical teams provide high-performance systems and leading-edge solutions for high-performance testing. In April, we were awarded a contract to supply structural and fatigue test systems for the National Automotive Testing and Research and Development Infrastructure Project (NATRiP) in India. Moog’s advanced test systems will enable automotive OEMs and component manufacturers to have the most modern test facilities to meet international standards and significantly reduce the development time for new vehicles.

Airbus ordered Moog test systems to increase test capacity as part of a 10-year framework contract with Moog for the exclusive supply of multi-channel test systems for structural testing of aircraft. In selecting Moog to supply multi-channel test systems, Airbus has a single platform across all of its structural testing facilities in Germany, the United Kingdom and France. The Moog test controllers and software are used for both static and dynamic structural tests and can support civil and military aircraft and technology projects. One of the systems will be used for A350 XWB vertical tail structural testing.

Collaboration with customers allows us to design motion control solutions for applications where high-performance control is critical, especially in harsh environments. During 2011, we opened a Wind Training Center in Unna, Germany. This facility provides technical training programs to Moog’s global wind energy customer base. A dedicated team of expert trainers leads customer training programs and focused engineering courses on Moog products and systems. Hands-on technical training in Moog pitch systems focuses on maintenance, performance analysis, repair and retrofits.

Moog hydraulic, electric and hybrid systems are recognized as world-class, energy efficient and suitable for the most demanding applications. As our customers continue to challenge us with their difficult motion control problems, we’ll support them with high-performance products that are innovative and reliable.

Our $680 million forecast for 2012 anticipates 9% growth in total sales for legacy products, forecasted at $540 million, and sales of $140 million for wind energy products. Growth will be driven by new products in a variety of specialty applications including test systems, power generation and simulation.
Volkswagen Suspension Test Rig
Automotive test applications require flexible, high-performance equipment and innovative approaches for more productivity and maximum safety. The suspension test system designed for Volkswagen AG features two of Moog’s 6 degree-of-freedom (6DOF) hexapods, 12 servo hydraulic actuators and a 16-channel test controller, all controlled by our latest test software. It has full-range steering motion control, allows for additional loads on axles or sub-frames and offers improved test efficiency. This is the third suspension test rig Moog has supplied to Volkswagen.
SOLUTIONS

Motion control products and systems incorporating a wide variety of world-class electric and hydraulic components

Products:
• Wide range of hydraulic servovalves, ranging from valves for miniature Formula 1™ race cars to large valves for industrial applications and valves with embedded intelligence for motion control and life cycle management
• Broad portfolio of electric servo motors used in applications ranging from light industrial automation to large machinery
• Controllers, servo drives and software for a broad range of motion control applications
• A wide range of high-performance servo pumps for high-end industrial applications

Systems:
• Hydraulic and electric solutions specifically designed and tailored to perform with precision control in harsh environments and demanding applications
• Electric hexapod motion systems for flight simulation and automotive test systems
• Control loading and 6-axis solutions for flight training simulators
• Integrated hydraulic manifold systems incorporating servovalves, pumps, manifolds, sensors and power units for industrial machinery applications
• Electric pitch control and load sensing systems for wind turbines

Turnkey Systems:
• Multi-axis simulation tables, suspension test systems, kinetics and compliance machines, 4 and 8-poster test rig systems and other products for automotive testing
• Driving simulators to aid R&D engineers in automotive development and train test and motorsport drivers

Aftermarket:
• Moog Global Support™ offers world-class repair and maintenance services and flexible programs for upgrades, preventative maintenance and annual/multi-year contracts

MAJOR APPLICATIONS

Energy Production and Generation:
• Wind turbines: Pitch systems, rotor monitoring and blade sensing systems and products, offering efficient operation, increased safety and extended life of the turbine
• Gas and steam turbines: Products and solutions for precise control and greater safety of fuel metering and guide vane positioning applications
• Oil and gas exploration and production: Products and solutions for downhole drilling, topside automation and subsea applications, offering high reliability for harsh environments

Industrial Automation:
• Plastic injection and blow molding machines: Hydraulic and electric products for improved speed, performance and energy efficiency of high-performance machines
• Steel mills: Servovalves, servoactuators and servocontrollers for improved dimensional accuracy and surface finish of mill output
• Metal forming machinery and hydraulic presses: Products and solutions to improve performance and productivity in a wide range of machines

Simulation and Test Equipment:
• Flight simulation: Six-degrees-of-freedom motion bases, control loading systems and control cabinets for realistic pilot training
• Automotive testing systems: Turnkey systems and products for structural and performance testing for rapid set-up and efficient data capture and analysis
• Aerospace testing: Turnkey systems and products for iron bird, structural and component testing for the highest reliability and efficiency

COMPETITIVE ADVANTAGES
• Ability to improve our customer’s machine performance with high-performance motion control solutions and world-class products
• Significant domain expertise in our customers’ machines, industry applications and design challenges
• Global organization focused on collaborating with customers to meet their requirements
• Rich experience and strong capabilities in the design and application of products and system solutions for use in challenging environments
• Worldwide aftermarket support and services provided by Moog employees

COMPETITORS

Servovalves:
• Bosch Rexroth, Parker Hannifin

Electric servodrives, servomotors, servoactuation:
• Danaher, Baumueller, Siemens, Exlar

Simulation and Test Systems
• Hydraudyne, MTS Systems Corp.

Wind Energy:
• SSB, Suzhou ReEnergy

FY ’11 Sales

Wind Energy $132.3M
Metal Forming $41.6M
Simulation $69.5M
Plastics $66.4M

Power Generation $53.5M
Test $42.8M
Distribution $41.7M
Aftermarket $63.8M
Heavy Industry/Steel Mills $35.8M
Other $81.9M
Wind Energy Turbine Controls
With over 25,000 systems in the field at offshore and onshore installations, Moog wind turbine solutions offer reliability and maximum safety for 24/7 operations. Pitch control systems allow operators to adjust the pitch of each blade in real-time to optimize the loading of the rotor and deliver maximum efficiency and greater productivity. Moog’s rotor monitoring products provide remote monitoring of turbines for the early detection of operational and maintenance issues.
Components revenues for 2011 were $353 million for products sold in markets also supported by Moog’s other business segments. Weaker military aircraft and defense sales were offset by strong industrial, marine and medical sales which were up 20%. The Components segment specializes in solving motion, power, data transmission and air movement challenges in the world’s harshest environments with high-performance slip rings, fiber optics, motors and actuators.

Our motor technology engineers solve thermal, airflow, acoustic and efficiency problems for the telecommunications, electronic storage and medical markets. We ship thousands of brushless DC motors a day to manufacturers of sleep disorder breathing systems and lightweight portable oxygen therapy concentrators.

Moog’s slip ring line has more than 10,000 designs for use in rotating electromechanical systems. As the largest slip ring supplier in the world, we have a slip ring solution that can improve mechanical performance on any rotary system. Our products transfer power and data for de-icing, flight control and blade position on the V-22 Osprey rotorcraft and Apache, Black Hawk, Seahawk and Jayhawk helicopters. Moog slip rings are also installed on tank turrets, commander stations, infrared sights, underwater and subsea vehicles, and closed circuit television systems.

In the medical imaging market, Computed Tomography (CT) scanners are subject to increased clinical usage and difficult diagnostic cases. In 2011, we saw higher demand for more basic imaging scanners, especially in Asia. Our products rapidly transmit image data across rotating interfaces.

The Components Group has produced fiber optic rotary joints for close to 30 years. These joints pass optical signals across rotating interfaces to transmit large amounts of data. Our fiber optic products are used on military vehicles, security systems, wind turbines and robots.

Deep water oil drilling operations require rugged equipment and maximum up-time and performance. Our Halifax operation designs and manufactures Floating Production, Storage and Off-Loading (FPSO) swivels used in buoys, turret moorings and offshore loading towers that meet the vessel specific requirements of offshore operators worldwide. During the year, Moog designs were incorporated on the swivel for the Lewek ENAS FPSO vessel. These heavily customized systems are designed using electric slip rings, hydraulic utility swivels and fiber optic rotary joints.

During 2011, we acquired the Animatics Corporation, a leading supplier of SmartMotor™ servomotors and linear actuators. The company’s products are used on a variety of industrial, medical and defense applications including factory automation, flight simulation and weapons stabilization. Known for its strong worldwide distribution network, the acquisition adds hundreds of new customers and challenging motion control applications to Moog’s customer base.

In 2012, we have forecasted sales of $372 million, with higher sales in our industrial markets, in part due to the Animatics acquisition. We continue to expand our product offerings into new markets and to grow our customer base worldwide.
Remotely Operated Vehicle (ROV)
The Schilling Heavy Duty Work Class ROV System (HD™) provides flexibility and high-performance across all key subsea markets including inspection, repair, maintenance, drill support and medium-duty construction market applications. As the development of deepwater oil and gas fields increases in complexity, consistent and effective ROV intervention is critical. The HD™ system is optimized for installation onboard drilling rigs and ROV support vessels. Moog supplies the slip ring and fiber optic rotary joint used in the cable reel as part of the tether management system, along with the 30 Series servovalves and brushless resolvers on the manipulator arms.
COMPONENTS
MILITARY AIRCRAFT • COMMERCIAL AIRCRAFT • SPACE CONTROLS • DEFENSE CONTROLS • INDUSTRIAL • WIND ENERGY • MEDICAL • MARINE

PRODUCTS

Motion Technology:
- Slip ring assemblies: electromechanical devices that allow the transfer of power and data signals from a stationary to a rotating structure
- Brush and brushless DC torque and servomotors
- High-performance fractional horsepower brush and brushless DC motors and drives
- Linear servomotors
- Resolver, synchro and RVDT position sensors
- Electromechanical servo and utility actuators – rotary and linear
- Fluid rotary unions
- Solenoids
- Integrated electromechanical mechanisms
- Air moving systems
- Aircraft displays and avionic instruments
- Alternators
- Subsea navigation and control systems
- SmartMotor™ integrated servo systems and linear actuators

Fiber Optics:
- Fiber optic rotary joints, fiber optic multiplexers, transmitters and receivers
- Fiber optic modems, switches, media converters and tactical cable assemblies

MAJOR APPLICATIONS

Military/Aerospace:
- Brush and brushless DC motors for electro-optic / infrared sensors and gimbaled systems, missile seeker and fin control actuation systems, aircraft servos and instruments, space applications, radar and launcher pedestals
- Electromechanical servo and utility actuators for secondary flight controls, primary flight controls for UAVs and target drones, Forward-Looking Infrared (FLIR) and radar applications
- Slip ring assemblies for armored vehicle and naval pedestal turrets, FLIR and gimbaled systems, missile de-roll, radar, rotorcraft de-ice, space mechanisms, aircraft instrument applications and antenna and launcher pedestals
- Air moving products for air-to-air heat exchangers and military vehicles
- Integrated mechanisms for missile defense, radar, FLIR and space applications
- Solenoids for airborne armament equipment and aircraft applications
- Fiber optic modems and multiplexers for tactical communication and data transmission

Commercial/Industrial:
- Brushless DC motors and blowers for sleep disorder medical devices, critical care non-invasive ventilators and portable oxygen concentrators
- Large diameter slip rings for medical imaging and luggage scanning
- Motors for medical and laboratory centrifuges
- Slip rings for video security and surveillance equipment
- Motors and slip rings for robotics and material handling
- Slip rings for blade pitch control in wind turbines
- Air moving products for cooling telecommunications and computer equipment
- Pressure compensated slip rings and fiber optic rotary joints for subsea applications
- Explosion-proof slip ring assemblies for hazardous environments
- Mux/Demux electronics for the marine market

COMPETITIVE ADVANTAGES

- Market leader in slip rings and fractional horsepower brushless DC motors
- Strong engineering and manufacturing capability with a reputation for highly reliable, technically differentiated products
- Multi-component and system level engineering knowledge and applications support
- Extensive material science and analytical capability
- Market leader in marine marketplace for rotary power and data transfer
- Ability to integrate components into sub-systems providing higher value, higher level solutions

COMPETITORS

Slip Rings:
- Stemmann, Schleifring, Airflyte

Commercial Motors:
- Danaher Motion, Allied Motion, Ametek

Military Motors:
- Danaher Motion, Woodward MPC, Axsys

Actuators:
- Smiths, MPC, Kearfott

FY ‘11 Sales

<table>
<thead>
<tr>
<th>Category</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Aircraft</td>
<td>$105.3M</td>
</tr>
<tr>
<td>Commercial Aircraft</td>
<td>$25.5M</td>
</tr>
<tr>
<td>Medical</td>
<td>$57.4M</td>
</tr>
<tr>
<td>Space Controls</td>
<td>$19.0M</td>
</tr>
<tr>
<td>Defense Controls</td>
<td>$39.9M</td>
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<tr>
<td>Marine</td>
<td>$41.1M</td>
</tr>
<tr>
<td>Industrial</td>
<td>$64.9M</td>
</tr>
</tbody>
</table>
Multi-Spectral Targeting System (MTS)
Produced by Raytheon, the Multi-Spectral Targeting System is integrated on more than 16 manned and unmanned aircraft including C-130 airplanes, MH-60 Black Hawk helicopters and the Predator and Reaper drones. Its turreted, or forward looking pod, offers a full-motion video camera system for long-range surveillance and high-altitude acquisition, tracking and laser designation for guided weapons. The system provides real-time critical intelligence and reconnaissance for battlefield soldiers, special operations forces and border protection. Moog supplies the slip ring and resolver assembly, twist capsule slip ring, slip ring brush block and resolver.
Our core capabilities in fluid and motion control and our design engineering approach are helping us expand our offerings and bring new products to the marketplace.

We support intravenous (IV) therapy and enteral nutrition delivery with our medical pump technology, fluid delivery systems and components. In 2011, our pumps, disposables and associated products accounted for $142 million in sales, which included strong pump and administration set sales in the second half of the year. More than 14 million administration sets were produced in our two year old Costa Rica facility. We increased our regional distribution network for IV, enteral and associated products sold in the U.S. and Canada. This direct sales force manages strategic business development, key accounts, upgrade programs and new product opportunities.

The Medical Devices segment includes five companies acquired since 2006 and integrated into a single operating unit. During the year, these businesses experienced a shift in the regulatory environment in the U.S. which resulted in a product recall. The decision to conduct a recall on certain Curlin devices was due to a software anomaly which caused an error code and a subsequent shutdown of the pump. We believe our proactive efforts to correct the software issue minimized any customer impact, but it did affect pump shipments in the first half of the year.

The year over year sales increase of 12% was aided by both the introduction of an enteral feeding pump sold internationally and by additional sales of sensors to original equipment medical device manufacturers. Our ambulatory and stationary feeding pumps deliver nutrition for direct gastrointestinal feeding. Products include the EnteraLite® Infinity® and Infinity® Orange™ feeding pumps. The Orange pump provides small volume feedings – the only pump on the market designed specifically for infants.

Our sensor products are used in a variety of medical devices to protect patients from air bubble infusion in order to ensure accurate fluid delivery and fluid monitoring. Moog’s engineers work with multiple OEM device manufacturers to design precision sensors for control of fluids in medical applications.

Curlin infusion therapy pumps provide intravenous, intra-arterial, subcutaneous or epidural flow of fluids or medications. AutoFuser® and AutoSelector® single patient, or disposable, pumps deliver post-operative pain medicine directly to surgical sites, allowing patients to self-administer medication. Chemotherapy, pain management, antibiotic applications and regional anesthesia are administered using beeLINE® single patient pumps. AITECS syringe pumps are used in anesthesia and general ward applications.

Ethox International produces disposable medical devices which are used in operating room, anesthesia, emergency and infection control applications. Contract manufacturing capabilities cover the product life cycle from design, development and prototyping to fully validated production processes and products. Toxicology and microbiology services are also available from our life sciences laboratories.

In 2012, we expect total sales of $145 million. We have restructured the supply chain for the administration sets manufactured in Costa Rica and have built a direct sales force for IV products. An increase in our research and development investments should lead to new product launches, product improvements and greater profitability.
Moog’s EnteraLite® Infinity® feeding pump is smaller and more accurate than any other feeding pump on the market. It incorporates a proprietary sensing technology that enables accurate delivery of prescribed nutritional feedings at nearly any activity level. This makes the technology ideal for children and helps all patients lead healthier, more active lifestyles. The EnteraLite® Infinity® pump was engineered with customer input during the design stage—a significant reason for the pump’s success. Portable pumps, disposable sets and carrying accessories make it easy for patients to get the nutrition they need even when they are on the go.
MAJOR APPLICATIONS
• Post-operative pain management (PCA and PCEA)
• Regional anesthesia
• Neonatal and critical care
• Intensive Care
• Oncology
• Total Parenteral Nutrition (TPN)
• Enteral feeding (ECN)
• Cataract Removal
• Ultrasonic sensing technology

PRODUCTS AND SERVICES
• Electronic ambulatory and acute care infusion pumps and safety software
• Enteral feeding pumps for acute care, long-term care and ambulatory care for specialized clinical nutrition
• Administration sets specifically designed and patented for our infusion and enteral feeding pumps
• Syringe infusion pumps and safety software that reduce drug administration errors
• Single patient infusion pumps for post-op and regional pain management
• Sensors used in infusion pump systems for bubble detection and air-in-line sensing
• Surgical handpieces used primarily in cataract surgery for lens removal
• Disposable pressure infuser bags used for quick, easy, low-cost infusion
• Disposable blood pressure cuffs and accessories sized for infants to obese adults
• Full-service contract manufacturing of disposable medical devices
• Sterilization and comprehensive lab services

SALES CHANNELS
• Infusion pumps, Protocol Library Safety System™ software, administration sets and accessories: Moog Medical direct
• International distribution of enteral products: Major global clinical nutrition companies
• Domestic distribution of enteral feeding products, sensors and surgical handpieces, single patient/single use pumps and syringe devices for anesthesia, cardiovascular, orthopedic, general care, neonatal and pediatric critical care, intensive care, general and plastic surgery applications: Moog Medical direct
• Distributors and dealers worldwide

COMPETITIVE ADVANTAGES
• Niche market focus and strong position in homecare
• We are specialized in our markets, concentrating on pumps and their respective administration sets, creating a market solution focus
• Extremely versatile for all areas in hospitals with enhanced safety and ease of use from neonates to adult patients
• Moog manufactures many of the critical component technologies that go into infusion therapy pumping devices
• Ethox increases key capabilities in development and distribution including biocompatibility analysis, microbiology expertise, manufacturing and in-house sterilization
• Ultrasonic technology expertise allows us to develop sensors and surgical tools in a fast and flexible manner
• Full range of products from low end/cost effective to high-end, including single and double syringe pumps, PCA, pumps, stand alone and stackable pumps

COMPETITORS
Infusion Devices:
• B. Braun, CareFusion, Smiths Medical, Hospira, Baxter International, CME, Covidien

Single Patient Pumps:
• I-Flow

Syringe Pumps:
• CareFusion, Smiths Medical

Enteral Feeding Pumps:
• Covidien, Ross (Abbott)

Phacoemulsification:
• Alcon

Sensors:
• Etalon, Introtek

FY '11 Sales

Administration Sets $ 52.2M
Sensors and Handpieces $ 23.0M
Intravenous (IV), Enteral Feeding Pumps and Single Patient Pumps $ 40.4M
Other $ 26.4M
Moog Family of Pumps

Our products are designed to simplify procedures, increase patient safety and enhance patient and caregiver outcomes. Curlin® infusion therapy pumps combine advanced medication safety software with a rugged, yet simple design that’s intuitive and simple to operate. AutoFuser® single patient pumps are used post-operatively, allowing patients to self administer medication. Infinity® feeding pumps deliver nutrition for direct gastrointestinal feeding for infants, children and adults. Our internal sales and distribution network sells our family of pump products, administration sets and accessories in the United States and Canada.
## Financial Highlights

### Stock Price Comparison
(Moog Class A and Class B Stock)

<table>
<thead>
<tr>
<th>MOOG A/B</th>
<th>HIGH</th>
<th>LOW</th>
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<tbody>
<tr>
<td>1ST QUARTER</td>
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<tr>
<td>A</td>
<td>$40.67</td>
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<td>B</td>
<td>$40.27</td>
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<tr>
<td>2ND QUARTER</td>
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<td>3RD QUARTER</td>
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<td>B</td>
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<td>$39.29</td>
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<td>4TH QUARTER</td>
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<tr>
<td>A</td>
<td>$45.45</td>
<td>$30.45</td>
</tr>
<tr>
<td>B</td>
<td>$45.00</td>
<td>$31.95</td>
</tr>
</tbody>
</table>

Source: Bloomberg

### Revenue by Segment
- **Aircraft Controls**: 37%
- **Medical Devices**: 6%
- **Space and Defense Controls**: 15%
- **Industrial Systems**: 27%
- **Components**: 15%

### Revenue by Market
- **Aircraft**: 42%
- **Medical**: 9%
- **Space and Defense**: 18%
- **Industrial**: 31%

### Geographic Distribution
- **United States**: 55%
- **International**: 45%

Moog’s military and government funded revenue is 41% and commercial revenue is 59%.
## Financial Review

(Dollars in millions, except per share data)

<table>
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</thead>
<tbody>
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<td>Aircraft Controls</td>
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<td>$757</td>
<td>$663</td>
<td>$673</td>
<td>$587</td>
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<td>Space and Defense Controls</td>
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<td>$275</td>
<td>$253</td>
<td>$185</td>
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<td>Components</td>
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<td>$156</td>
<td>$130</td>
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<tr>
<td>Medical Devices</td>
<td>$142</td>
<td>$127</td>
<td>$111</td>
<td>$103</td>
<td>$68</td>
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<tr>
<td>Net Sales</td>
<td>$2,331</td>
<td>$2,114</td>
<td>$1,849</td>
<td>$1,903</td>
<td>$1,558</td>
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<td>$755</td>
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<td>Pre-Tax Profit</td>
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<td>$168</td>
<td>$144</td>
<td>$120</td>
<td>$95</td>
<td>$83</td>
<td>$58</td>
<td>$53</td>
<td>$42</td>
</tr>
<tr>
<td>Net Earnings</td>
<td>$136</td>
<td>$108</td>
<td>$85</td>
<td>$119</td>
<td>$101</td>
<td>$81</td>
<td>$65</td>
<td>$57</td>
<td>$43</td>
<td>$38</td>
<td>$28</td>
</tr>
<tr>
<td>Net Return on Sales</td>
<td>5.8%</td>
<td>5.1%</td>
<td>4.6%</td>
<td>6.3%</td>
<td>6.5%</td>
<td>6.2%</td>
<td>6.1%</td>
<td>5.7%</td>
<td>5.2%</td>
<td>4.0%</td>
<td>—</td>
</tr>
</tbody>
</table>

### Earnings Per Share:

- **Basic:**
  - $2.99 | $2.38 | $2.00 | $2.79 | $2.38 | $2.01 | $1.68 | $1.48 | $1.24 | $1.13 | $0.95 |
- **Diluted:**
  - $2.95 | $2.36 | $1.98 | $2.75 | $2.34 | $1.97 | $1.64 | $1.45 | $1.22 | $1.11 | $0.94 |

**Diluted Weighted-Average Shares Outstanding** (in millions):

- 46.0 | 45.7 | 42.9 | 43.3 | 43.1 | 41.2 | 39.5 | 39.6 | 34.9 | 33.8 | 29.8 |

### Research and Development:

- $106 | $103 | $100 | $110 | $103 | $69 | $44 | $30 | $30 | $33 | $26 |

### Capital Expenditures:

- $84 | $66 | $82 | $92 | $97 | $84 | $41 | $34 | $28 | $27 | $27 |

### Depreciation and Amortization:

- $96 | $91 | $76 | $63 | $52 | $47 | $36 | $36 | $30 | $26 | $32 |

### At Year End:

- **Total Assets:**
  - $2,843 | $2,712 | $2,634 | $2,227 | $2,006 | $1,608 | $1,303 | $1,125 | $992 | $886 | $857 |
- **Working Capital:**
  - $834 | $813 | $764 | $713 | $617 | $420 | $313 | $322 | $341 | $276 | $257 |
- **Indebtedness:**
  - $725 | $765 | $833 | $671 | $618 | $387 | $349 | $311 | $257 | $316 | $373 |
- **Shareholders’ Equity:**
  - $1,192 | $1,121 | $1,065 | $994 | $877 | $763 | $521 | $472 | $424 | $300 | $236 |
- **Return on Shareholders’ Equity:**
  - 11.4% | 9.8% | 8.3% | 12.7% | 12.3% | 12.9% | 12.8% | 12.6% | 12.5% | 13.3% | 12.2% |
- **Shareholders’ Equity Per Common Share Outstanding:**
  - $26.38 | $24.70 | $23.53 | $23.30 | $20.63 | $18.04 | $13.48 | $12.23 | $10.93 | $8.80 | $8.02 |
- **Backlog (12 month):**
  - $1,325 | $1,181 | $1,098 | $862 | $775 | $645 | $539 | $450 | $368 | $365 | $364 |
- **Number of Full-Time Employees:**
  - 10,320 | 10,117 | 10,005 | 8,844 | 8,364 | 7,237 | 6,662 | 5,781 | 4,744 | 4,817 | 4,901 |

Please Note: Amounts may not add to the total due to rounding.
For 60 years, an extraordinary group of people have come together and devoted their time and energy to building the best product of its type anywhere in the world and to delivering that product to the most demanding customers everywhere in the world. These customers can be assured that the product bearing Moog’s name is the best that mankind can make and that it will be better next month, next year and in 60 years.