

# Unlocking Value



**Barnes Group Inc.**  
**Annual Report to Stockholders**  
**2004**

*Barnes Group Inc.'s three business units, Barnes Distribution, Associated Spring, and Barnes Aerospace, continually strive to enhance their strategic positions and contributions to stockholder value. Together they operate under a corporate mission of "Balanced and Sustainable Profitable Growth." The mission has been advanced by a strategy of building lasting value for our stockholders through worldwide service, operational perfection, acquisitions and alliances, and employee development.*



# To Our Stockholders

Barnes Group Inc. (NYSE: B)

is a diversified international manufacturer of precision metal components and assemblies and a distributor of industrial supplies, serving a wide range of markets and customers.

Founded in 1857 and headquartered in Bristol, Connecticut, Barnes Group consists of three businesses: Associated Spring, one of the world's largest manufacturers of precision mechanical and nitrogen gas springs and a global supplier of retaining rings, reed valves and shock discs — speciality spring products, and injection-molded plastic components; Barnes Aerospace, a manufacturer and repairer of highly engineered assemblies and components for commercial and military aircraft engines, airframes, and land-based industrial gas turbines; and Barnes Distribution, an international, full-service distributor of maintenance, repair, operating, and production supplies.

During 2004, Barnes Group demonstrated our ability to react quickly and decisively to changing business conditions, maintain our commitment to deliver superior customer service, and execute business goals and objectives to position the Company for long-term profitable growth. Despite financial results that were below our expectations, we steadfastly maintained our strategic focus on generating balanced and sustainable profitable growth.



## 2004 Highlights

For the fifth consecutive year, we achieved record sales, reaching \$995 million, bolstered by organic sales growth within all three of our business units. Providing the right products and services to meet our customers' needs is a hallmark of building lasting value for you, our stockholders. Our businesses continued to generate strong cash flow from operations, which this year totaled \$54 million. This cash flow helped fund additional growth investments in our businesses. We acquired one of the world's leading companies in the design and manufacture of reed valves and shock discs, specialty spring products, for approximately \$18 million; funded \$32 million for new after-market programs for Barnes Aerospace; and increased our capital expenditures 55 percent. These capital expenditures focused on new distribution centers for Barnes Distribution in Dallas, Chicago, and Ontario, Canada and a new manufacturing plant for Associated Spring in Monterrey, Mexico, all necessary to support continued organic growth. In addition, Barnes Group's cash dividend was sustained at \$0.80 per share for the fourth consecutive year, extending our record of paying dividends to stockholders since 1934 — 70 consecutive years.



### Net Sales

dollars in millions



### Operating Income

dollars in millions



### Dividends Paid

dollars in millions





Over the past six years we have made significant investment and committed \$428 million to strategic acquisitions and aftermarket business alliances. Our strategy is focused on adding businesses and alliances whose products, services, capabilities, and market positions provide attractive opportunities to increase and leverage our core strengths. We strongly believe in "bolt-ons" for our three business segments, not new diversions.

In September 2004, as part of Associated Spring's growth strategy, we acquired the reed valve and

shock disc maker, DE-STA-CO Manufacturing, a world leader in the industry. The acquisition was a critical addition to our growing global specialty spring products business,

based in Brazil. We added three United States manufacturing locations, and one each in Thailand and the United Kingdom. This acquisition expanded our presence in the growing reed valve marketplace, while increasing our international manufacturing footprint for these products to include Asia. The strengths of both our Brazilian and DE-STA-CO operations include a broadened product line and deepened engineering resources, which now

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**Above, Associated Spring's acquisition of DE-STA-CO Manufacturing further expanded Barnes Group's worldwide service operations.**

**Right, customers in Canada are serviced by Barnes Distribution's newest state-of-the-art distribution center in Beamsville, Ontario.**

serve our global customer base from manufacturing operations worldwide. These operations now form our Barnes Precision Valve and Components unit within Associated Spring.

Barnes Aerospace continued to develop and solidify critical alliances as part of its overall aftermarket growth strategy. During 2004, we entered into three additional aftermarket Revenue Sharing Program "RSP" agreements. These agreements provide exclusive rights to supply designated service replacement parts for a particular family of aircraft engines for their remaining life. These arrangements have favorably positioned Barnes Aerospace for the growing aftermarket service and maintenance parts business.

Throughout Barnes Group, we are committed to capitalizing on global sourcing capabilities and have begun to reap benefits from them. Supported by our international manufacturing facilities, sourcing globally enhances our ability to negotiate the best prices and terms based on our needs, while also ensuring continued access to the raw materials necessary for our products. For example, Barnes Distribution opened a Far East purchasing facility that will enable us to more effectively buy commoditized products throughout Asia. Global sourcing enables us to offer our customers a choice of both domestic and imported products while maintaining the strictest of quality standards.

## **Review of Operations**

**Barnes Distribution** experienced dramatic changes during the year. Most of these were directed at servicing our customers more effectively and efficiently. In 2004 we reduced the



number of distribution centers in North America from 19 to 12 including three new large centers opened in Dallas, Chicago, and Ontario, Canada. We also implemented a comprehensive product expansion in another four of our main distribution centers. All of these changes are enabling us to better service our customers and provide the necessary supply network for future growth.

During all of these changes, our highest priority was on maintaining customer service levels, but the related costs negatively impacted 2004 results. By year-end, as targeted customer service levels were achieved and key performance indicators improved, Barnes Distribution was able to generate record sales of \$425 million, including organic sales growth. Organic sales growth was driven mainly by strategic growth initiatives including national accounts, e-commerce platforms and Tier 2 relationships with industrial distributors.



**Associated Spring** reported record sales of \$374 million in 2004. This performance was driven in large part by robust growth in organic sales. Growth was achieved in all key market segments, most notably in the industrial markets which realized significant sales

growth driven primarily by the success of our reed valve products in Brazil. Additionally, the heavy truck, light vehicle, telecommunications and electronics, and nitrogen gas spring markets had positive year-over-year sales growth.

A significant challenge to our progress in 2004 was the sudden and extreme increase in raw material prices, particularly for steel, and the continued pricing pressure from our customers, especially in the transportation industry. Our efforts to

convince our key automotive Original Equipment Manufacturer (OEM) customers to share in raw material price increases were met with limited success and forced us to take rapid and decisive actions. As a result, we made the difficult but necessary decision to significantly reduce our workforce to mitigate the effects of the changing business conditions.

While these actions were necessary for the short term, we continue to focus our efforts on long-term profitability initiatives. Associated Spring continues to work aggressively to increase profitability through lean initiatives, developing alternate low cost supply sources, and increasing manufacturing capacity in low-cost environments. As part of these efforts, we established our newest Associated Spring production facility in Monterrey, Mexico.



At **Barnes Aerospace**, 2004 was a banner year as we achieved record profits, sales, orders, and our highest-ever backlog. Record operating profits of \$21 million and sales of \$206 million in 2004 reflect solid growth in both the OEM and aftermarket businesses. The order momentum we saw entering

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**Left, Nitrogen gas springs are used in high speed and broad industrial stamping operations for products such as washing machines, stoves, refrigerators, and automobiles.**

**Above, Barnes Aerospace is a major supplier of precision parts for the GE90-115B engine which powers the Boeing 777-300 ER.**

2004 drove total orders for the year to \$254 million. Orders for the GE90-115B commercial jet engine more than doubled, and direct and indirect military orders were up significantly from the prior year. This momentum was sustained throughout the year, allowing us to end 2004 with the exceptional backlog of \$194 million. To support its growth, Barnes Aerospace continued to globalize its manufacturing operations by opening a new manufacturing facility in Singapore that will help to meet the increasing demands of its worldwide customer base. The facility houses state-of-the-art manufacturing equipment for precision aerospace components to be used in a wide range of aircraft engine applications for both the OEM and aftermarket. Given our global customers' needs for highly critical components, where ready supply is essential, having manufacturing operations in Asia is vital to our continued success.

Barnes Aerospace's success in 2004 was a result of our commitment during the industry's steep downturn following the events of September 11, 2001, to maintain discipline and focus on executing our strategies and objectives. We remain confident that our portfolio mix and aftermarket investments have positioned us well for the expected recovery in the commercial aerospace market.

### **Organizational Changes**

Each of our business units has talented and dedicated employees who understand how to build lasting value, create a differentiated and sustainable competitive advantage, and achieve our objective of profitable growth. Our pipeline for talent is strong, as evidenced by promotions within each of our business segments during the year. Gregory F. Milzcik, previously President, Barnes Aerospace, was named President, Associated Spring. Patrick Dempsey, previously Vice President, Operations, Barnes Aerospace, was named President, Barnes Aerospace. And in an effort to provide laser-like focus on growing Barnes Distribution's North American businesses, which represent over 80 percent of the distribution business, Idelle K. Wolf, previously

Barnes Distribution's Chief Operating Officer, was named President, Barnes Distribution North America.

### **Corporate Governance**

For 2004, your Company achieved timely compliance with the internal control standards required by the Sarbanes Oxley Act of 2002. The implementation of Section 404 of the Act required documentation, testing and certification by management and attestation by public independent accountants that our internal controls over financial reporting are compliant with the law. We are pleased to report that our cross-disciplinary team has successfully demonstrated our full compliance with this section of the Act.



### **Unlocking Value**

2004 was a year in which we positioned the Company for sustainable, profitable growth. We effectively reacted to marketplace changes, demonstrated worldwide customer focus, implemented critical operational initiatives

to drive future performance, continued to be selectively acquisitive, and enhanced our leadership to focus on our greatest opportunities. As we look to the future with increased confidence, we remain committed to balanced and sustainable profitable growth through the execution of strategic initiatives to unlock the value we have created and generate wealth for you, our stockholders. We thank you for your continued support, and our employees for their loyalty and hard work.

Thomas O. Barnes  
Chairman of the Board

Edmund M. Carpenter  
President & C.E.O.





### **Worldwide Service**

Barnes Group strives to continually improve service to its global customer base through enhancements such as geographically dispersed greenfield manufacturing and distribution facilities, and strategic international alliances and acquisitions. Barnes Group is committed to providing precision manufactured components and assemblies and full-service distribution capabilities worldwide, and procuring raw material and products from global suppliers at competitive prices.



### **Operational Perfection**

Barnes Group's culture is centered on enabling our people to deliver quality products, on time. Employees throughout all areas of our manufacturing and distribution operations use advanced technologies and state-of-the-art processes to deliver superior customer service. Working in an environment that encourages – and provides the tools to achieve – continuous improvement drives the Company toward zero-defect performance.



### **Acquisitions and Alliances**

Our acquisition strategy is focused on adding businesses with products, services, capabilities and markets that provide attractive opportunities to increase and leverage our core strengths. In each of the industries in which we operate, we seek to be a consolidator, through acquisitions and alliances that meet specific criteria. Factors include sales growth, capability augmentation, geographic expansion, and technology enhancements that increase our ability to service customers.



### **Employee Development**

To be the best supplier possible, Barnes Group emphasizes continually enhancing employees' abilities, skills and performance. We understand the need to anticipate, adapt and respond to business challenges and market changes. We maintain an environment that provides a clear and appropriate development plan for every employee. This enhances our ability to provide the highest level of service at the most competitive prices, and helps build lasting value for our stockholders.

# Unlocking Value

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 10-K**

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

For the fiscal year ended December 31, 2004

**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 1-4801

**BARNES GROUP INC.**

(Exact name of registrant as specified in its charter)

Delaware  
(State of incorporation)

06-0247840  
(I.R.S. Employer Identification No.)

123 Main Street, Bristol, Connecticut  
(Address of Principal Executive Office)

06011-0489  
(Zip Code)

(860) 583-7070

Registrant's telephone number, including area code

**Securities registered pursuant to Section 12(b) of the Act:**

Title of each class

Name of each exchange on which registered

Common Stock, \$0.01 Par Value  
Preferred Stock Purchase Rights

New York Stock Exchange  
New York Stock Exchange

**Securities registered pursuant to Section 12(g) of the Act:**

None

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 days. Yes  No

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 registrant's knowledge, 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.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting stock (Common Stock) held by non-affiliates of the registrant as of the close of business on June 30, 2004 was approximately \$625,418,597, based on the closing price of the Common Stock on the New York Stock Exchange on that date. The registrant does not have any non-voting common equity.

The registrant had outstanding 23,317,830 shares of common stock as of February 22, 2005.

**Documents Incorporated by Reference**

Portions of the registrant's definitive proxy statement to be delivered to stockholders in connection with the Annual Meeting of Stockholders to be held April 21, 2005 are incorporated by reference into Part III.

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**Index to Form 10-K**  
**Year Ended December 31, 2004**

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## PART I

### Item 1. Business

#### THE COMPANY<sup>(1)</sup>

The Company is a diversified international manufacturer of precision metal components and assemblies and distributor of industrial supplies, serving a wide range of markets and customers. Founded in 1857 and headquartered in Bristol, Connecticut, the Company was organized as a Delaware corporation in 1925. As of December 31, 2004, the Company had 6,047 employees at over 60 locations worldwide. The Company consists of three businesses:

Barnes Distribution, an international, full-service distributor of maintenance, repair, operating and production supplies;

Associated Spring, one of the world's largest manufacturers of precision mechanical and nitrogen gas springs and a global supplier of retaining rings, reed valves and injection-molded plastic components and assemblies; and

Barnes Aerospace, a manufacturer and repairer of highly engineered components and assemblies for aircraft engines, airframes, and land-based industrial gas turbines.

#### BARNES DISTRIBUTION

Barnes Distribution is an industry leader in the distribution of maintenance, repair, operating and production ("MROP") supplies. Since 1927, it has grown into one of the largest value-added MROP distributors in North America. Barnes Distribution also distributes products in 31 countries supported by distribution/sales centers in the United Kingdom, France, Ireland, Spain, Mexico, Singapore, Brazil and China. Barnes Distribution provides related inventory management and logistics services to its customers, too.

Barnes Distribution distributes over 50,000 stocked replacement parts and other products under the brand names of Bowman<sup>®</sup>, Curtis<sup>®</sup>, Kar Products<sup>®</sup>, Mechanics Choice<sup>®</sup>, Autoliaisons<sup>®</sup> and Motalink<sup>®</sup>. These parts and products include fasteners, electrical supplies, hydraulic components, chemicals and security products. Die springs and nitrogen gas springs, mechanical struts and standard parts, such as coil and flat springs, are distributed under the brand names of Raymond<sup>®</sup> and SPEC<sup>®</sup>. Most of the products sold under the Raymond and SPEC brand names are manufactured by Associated Spring. With the exception of the products from Associated Spring, the products sold by Barnes Distribution are obtained from outside suppliers.

Barnes Distribution faces active competition. The products sold by Barnes Distribution are not unique, and its competitors carry substantially similar products. Barnes Distribution competes based on service alternatives, timeliness and reliability of supply, price and product breadth and quality.

Barnes Distribution offers an array of service options, built around a vendor-managed inventory business model, which are designed to improve the productivity of its customers while substantially reducing procurement and transaction costs. Barnes Distribution has a well-diversified customer base ranging from small repair shops to the largest railroads, utilities, food processors, chemical producers, and vehicle fleet operators. Barnes Distribution's products are sold through its sales force of approximately 1,500 employees and through distributors.

#### ASSOCIATED SPRING

Associated Spring is the largest manufacturer of precision mechanical and nitrogen gas springs in North America, and one of the largest precision spring manufacturers in the world. Associated Spring is equipped to

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<sup>(1)</sup> As used in this annual report, "Company" refers to the registrant and its consolidated subsidiaries except where the context requires otherwise, and "Barnes Distribution," "Associated Spring," and "Barnes Aerospace," refer to the above-defined businesses, but not to separate corporate entities.

produce virtually every type of precision spring, from fine hairsprings for electronics and instruments to large heavy-duty springs for machinery. Associated Spring also manufactures nitrogen gas manifold systems used to precisely control stamping presses; retaining rings that position parts on a shaft or other axis; reed valves that are custom-engineered critical components used in compressors; and injection-molded plastic-on-metal and metal-in-plastic components and assemblies used in electronics, medical devices and consumer products.

Associated Spring provides complete engineering solutions from concept to manufacturing. These include product design and development, product and material testing, rapid prototyping and reduction of manufacturing cycle times. Associated Spring's products are sold globally to manufacturers in many industries, chiefly for use as components in their own products. Products are sold primarily through Associated Spring's direct sales force and through the Raymond division of Barnes Distribution.

Nearly all of Associated Spring's products are highly engineered custom solutions. These products are purchased primarily by durable goods manufacturers in industries such as transportation, consumer products, farm equipment, telecommunications, medical devices, home appliances, and electronics.

Associated Spring has a global and diverse customer base. The customers are primarily durable goods manufacturers in industries such as transportation, consumer products, farm equipment, telecommunications, medical devices, home appliances and electronics. In the transportation industry, the customers include both original equipment manufacturers ("OEMs") and their suppliers. Sales by Associated Spring to its three largest customers accounted for approximately 25% of its business in 2004.

Associated Spring has manufacturing operations in the United States, Brazil, Canada, China, Germany, Mexico, Singapore, Sweden, Thailand and the United Kingdom, and has retained a minority interest of 15% in its former subsidiary in Argentina.

Associated Spring competes with many large and small companies engaged in the manufacture and sale of custom metal components and assemblies. Associated Spring competes on the basis of quality, service, reliability of supply, technology, innovation, design and price.

Associated Spring owns a 45% interest in a joint venture corporation in the United States with NHK Spring Co., Ltd. of Japan. The joint venture corporation, NHK-Associated Spring Suspension Components Inc. ("NASCO"), manufactures suspension springs at its facility in Bowling Green, Kentucky.

## **BARNES AEROSPACE**

Barnes Aerospace produces precision machined and fabricated components and assemblies for OEM turbine engine, airframe and industrial gas turbine builders throughout the world and the United States military. Barnes Aerospace also provides jet engine component overhaul and repair services for many of the world's major commercial airlines and the United States military. Barnes Aerospace participates in Revenue Sharing Programs with a large aerospace manufacturer under which Barnes Aerospace receives the exclusive right to supply designated aftermarket parts for the life of the related aircraft engine program. Barnes Aerospace products and services are sold primarily through its sales force. Sales by Barnes Aerospace to General Electric Co. and four other manufacturers in the aerospace industry accounted for approximately 72% of its business.

Barnes Aerospace's machining and fabrication operations, with facilities in Arizona, Connecticut, Michigan, Ohio, Utah and Singapore, produce critical engine and airframe parts through processes such as creep feed grinding, multi-axis milling and turning, and electrical discharge machining, and specialize in hot and cold forming of complex parts made from titanium and other aerospace alloys. Additional capabilities include superplastic forming and diffusion bonding, machining of high temperature superalloys and various automated and manual welding processes. Customers include airframe and gas turbine engine manufacturers for commercial and military jets, business jets, and land-based industrial gas turbines.

Barnes Aerospace's OEM business competes primarily with both the leading jet engine OEMs and a large number of machining and fabrication companies. Competition is based mainly on quality, engineering and technical capability, product breadth, service and price.

Barnes Aerospace's aftermarket facilities, located in Connecticut, Ohio and Singapore, specialize in the refurbishment of jet engine components such as cases, rotating air seals, honeycomb air seals and housings. Processes performed at these facilities include electron beam welding, plasma coating, vacuum brazing, and water jet cleaning. Customers include airlines and engine overhaul businesses throughout the world and the United States military.

Competition for the repair and overhaul of turbine engine components comes from three principal sources: OEMs, major commercial airlines and other independent service companies. Some major commercial airlines own and operate their own service centers and sell repair and overhaul services to other aircraft operators. OEMs also maintain service centers that provide repair and overhaul services for the components that they manufacture. Other independent service organizations also compete for the repair and overhaul business of other users of aircraft components. Turnaround time, technical capability, price, quality and overall customer service are important competitive factors.

## **FINANCIAL INFORMATION**

The backlog of the Company's orders believed to be firm at the end of 2004 equaled \$280 million as compared with \$210 million at the end of 2003. Of the 2004 year-end backlog, \$194 million was attributable to Barnes Aerospace and all of the balance was attributable to Associated Spring. \$56 million of Barnes Aerospace's backlog is not expected to be shipped in 2005. Substantially all of the remainder of the Company's backlog is expected to be shipped during 2005.

General Electric Co. and its affiliates, accounted for 12% of the Company's total sales in 2004. For an analysis of the Company's revenue from sales to external customers, operating profit and assets by business segment as well as revenues from sales to external customers and long-lived assets by geographic area, see Note 16 of the Notes to the Consolidated Financial Statements of this Annual Report on Form 10-K ("Annual Report").

## **ACQUISITIONS**

On September 17, 2004, the Company completed the acquisition of DE-STA-CO Manufacturing ("DE-STA-CO"), a world leader in the design and manufacture of specialty spring products--reed valves and shock discs. For more information regarding the acquisition, see Note 2 of the Notes to the Consolidated Financial Statements of this Annual Report.

## **RAW MATERIALS**

The principal raw materials used by Associated Spring to manufacture its products are high-grade steel spring wire and flat rolled steel. The principal raw materials used by Barnes Aerospace to manufacture its products are titanium and inconel; however, Barnes Aerospace also requires special materials such as cobalt and other complex aerospace alloys. Prices for steel, titanium and inconel, as well as other specialty materials, have been rising due to increased demand and in some cases reduction of the availability of materials used to make the raw materials. If this combination of events continues, the availability of certain raw materials used by the Company may be negatively impacted.

## **RESEARCH AND DEVELOPMENT**

Although most of the products manufactured by the Company are custom parts made to customers' specifications, the Company is engaged in continuing efforts aimed at discovering and implementing new



knowledge that is useful in developing new products or services or significantly improving existing products or services. In particular, Associated Spring's Product Development Center is focused on design, development, and prototype work and testing of new products and material. The Company spent approximately \$6 million on research and development activities in 2004, as compared to expenditures of approximately \$5 million in 2003 and \$4 million in 2002.

## **PATENTS AND TRADEMARKS**

Patents, trademarks, licenses, franchises and concessions are not significant to any of the Company's businesses.

## **EXECUTIVE OFFICERS OF THE COMPANY**

For information regarding the Executive Officers of the Company, see Part III, Item 10 of this Annual Report.

## **ENVIRONMENTAL**

Compliance with federal, state, and local laws which have been enacted or adopted regulating the discharge of materials into the environment or otherwise relating to the protection of the environment has not had a material effect, and is not expected to have a material effect, upon the capital expenditures, earnings, or competitive position of the Company.

## **AVAILABLE INFORMATION**

The Company's Internet address for its website is [www.barnesgroupinc.com](http://www.barnesgroupinc.com). The Company makes its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports available without charge on its website as soon as reasonably practicable after they are filed with, or furnished to, the Securities and Exchange Commission. In addition, the Company has posted on its website, and will make available in print to any stockholder who makes a request, its corporate governance guidelines, its code of business ethics and conduct and the charters of the Audit Committee, Compensation and Management Development Committee and Corporate Governance Committee (the responsibilities of which include serving as the nominating committee) of the Company's Board of Directors.

## **FORWARD-LOOKING STATEMENTS**

This Annual Report may contain certain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those contained in the statements. Investors are encouraged to consider these risks and uncertainties as described within the Company's periodic filings with the Securities and Exchange Commission, including the following: the ability of the Company to integrate newly acquired businesses and to realize acquisition synergies on schedule; changes in market demand for the types of products and services produced and sold by the Company; the Company's success in identifying, and attracting customers in new markets; the Company's ability to develop new and enhanced products to meet customers' needs timely; the effectiveness of the Company's marketing and sales programs; uninsured claims; increased competitive activities that could adversely affect customer demand for the Company's products; the availability of raw material at prices that allow the Company to make and sell competitive products; changes in economic, political and public health conditions worldwide and in the locations where the Company does business; interest and foreign exchange rate fluctuations; and regulatory changes. The Company assumes no obligation to update any forward-looking statements contained in this report.

## Item 2. Properties

As shown on the following table, at December 31, 2004, the Company had 60 manufacturing, sales, and distribution sites worldwide. Ten of the manufacturing sites are leased. The majority of the distribution centers are leased.

<u>Type of Facility</u>	<u>U.S. &amp; Canada</u>	<u>Europe</u>	<u>Mexico &amp; South America</u>	<u>Asia</u>	<u>Total</u>
<b>Barnes Distribution</b>					
Distribution and support centers . . . . .	18	6	2	3	29
<b>Associated Spring</b>					
Manufacturing . . . . .	11	3	3	3	20
Sales & development . . . . .	2	—	—	—	2
<b>Barnes Aerospace</b>					
Manufacturing . . . . .	6	—	—	2	8
Sales . . . . .	—	1	—	—	1
<b>Total</b> . . . . .	<u>37</u>	<u>10</u>	<u>5</u>	<u>8</u>	<u>60</u>

The above table does not include the Corporate Office of the Company, which is owned, or the headquarters for each of the businesses, one of which is owned and the other two of which are leased.

## Item 3. Legal Proceedings

The Company is subject to litigation from time to time in the ordinary course of business. There are no material pending legal proceedings to which the Company or any of its subsidiaries is a party, or of which any of their property is the subject.

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

No matters were submitted to a vote of security holders during the fourth quarter of 2004.

## PART II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

### (a) Market Information

The Company's common stock is traded on the New York Stock Exchange under the symbol "B". The following table sets forth, for the periods indicated, the low and high closing prices per share, as reported by the New York Stock Exchange.

	2004		
	<u>Low</u>	<u>High</u>	<u>Dividends</u>
Quarter ended March 31 . . . . .	\$26.01	\$33.57	\$0.20
Quarter ended June 30 . . . . .	25.73	29.58	0.20
Quarter ended September 30 . . . . .	24.20	29.14	0.20
Quarter ended December 31 . . . . .	24.80	28.46	0.20
	2003		
	<u>Low</u>	<u>High</u>	<u>Dividends</u>
Quarter ended March 31 . . . . .	\$18.55	\$22.07	\$0.20
Quarter ended June 30 . . . . .	19.32	21.85	0.20
Quarter ended September 30 . . . . .	21.95	26.11	0.20
Quarter ended December 31 . . . . .	26.45	33.85	0.20

## Stockholders

As of February 22, 2005, there were 6,712 holders of record of the Company's common stock and approximately 13,000 holders, which includes holders of record, brokers and other institutions.

## Dividends

Payment of future dividends will depend upon the Company's financial condition, results of operations and other factors deemed relevant by the Company's Board of Directors, as well as any limitations resulting from financial covenants on net worth under the Company's credit facilities. See table above for dividend information for 2004 and 2003.

## (c) Issuer Purchases of Equity Securities

<u>Period</u>	<u>(a) Total Number of Shares (or Units) Purchased</u>	<u>(b) Average Price Paid Per Share (or Unit)</u>	<u>(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs</u>	<u>(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs <sup>(2)</sup></u>
October 1-31, 2004 .....	8,700	\$26.19	—	421,978
November 1-30, 2004 .....	233,033	\$26.41	11,000	410,978
December 1-31, 2004 .....	<u>4,392</u>	\$26.56	<u>—</u>	410,978
Total .....	<u>246,125<sup>(1)</sup></u>	\$26.41	<u>11,000</u>	

- (1) Other than 11,000 shares purchased in the fourth quarter of 2004 which were purchased as part of the Company's publicly announced plan, all acquisitions of equity securities during the fourth quarter of 2004 were the result of the operation of the terms of the Company's stockholder-approved equity compensation plans and the terms of the equity grants pursuant to those plans to pay through attestation of ownership for the exercise price and related income tax upon the exercise of options. The purchase price of a share of stock used for tax withholding is the market price on the date of the exercise of the option.
- (2) The program was publicly announced on April 12, 2001 authorizing repurchase of up to 1 million shares of its common stock. During the fourth quarter of 2004, the Company continued to repurchase shares of its common stock in the open market.

## Item 6. Selected Financial Data

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001<sup>(3)</sup></u>	<u>2000<sup>(3)</sup></u>
<b>Per common share</b> <sup>(1)</sup>					
Net income					
Basic . . . . .	\$ 1.45	\$ 1.54	\$ 1.45	\$ 1.03	\$ 1.92
Diluted . . . . .	1.40	1.49	1.42	1.01	1.90
Dividends paid . . . . .	0.80	0.80	0.80	0.80	0.79
Stockholders' equity (at year-end) . . . . .	14.72	14.07	10.98	10.77	10.82
Stock price (at year-end) . . . . .	26.51	32.31	20.35	23.99	19.88
<b>For the year</b> (in thousands)					
Net sales . . . . .	\$994,709	\$890,818	\$784,036	\$768,821	\$740,032
Operating income . . . . .	55,914	52,000	44,840	40,320	62,949
As a percent of sales . . . . .	5.6%	5.8%	5.7%	5.2%	8.5%
Income before income taxes . . . . .	\$ 41,359	\$ 38,368	\$ 33,111	\$ 23,459	\$ 48,590
Income taxes . . . . .	7,958	5,353	5,960	4,338	12,925
Net income . . . . .	33,401	33,015	27,151	19,121	35,665
As a percent of average stockholders' equity . . . . .	10.0%	12.1%	13.0%	9.5%	19.1%
Depreciation and amortization . . . . .	\$ 34,177	\$ 34,571	\$ 33,626	\$ 37,045	\$ 35,871
Capital expenditures . . . . .	28,509	18,397	19,367	24,857	28,042
Average common shares outstanding - basic . . . . .	23,106	21,475	18,750	18,506	18,568
<b>Year-end financial position</b> (in thousands)					
Working capital . . . . .	\$111,497	\$119,621	\$106,558	\$ 72,931	\$114,502
Current ratio . . . . .	1.5 to 1	1.6 to 1	1.8 to 1	1.4 to 1	1.9 to 1
Property, plant and equipment . . . . .	\$166,284	\$154,088	\$159,440	\$152,943	\$163,766
Total assets . . . . .	928,323	830,820	652,530	636,505	636,941
Long-term debt and notes payable . . . . .	268,045	241,017	220,962	231,441	233,678
Stockholders' equity . . . . .	341,885	321,739	208,220	198,837	201,333
Debt as a percent of total capitalization <sup>(2)</sup> . . . . .	43.9%	42.8%	51.5%	53.8%	54.1%
<b>Year-end statistics</b>					
Employees . . . . .	6,047	6,026	5,172	5,150	5,471

(1) All per share data, other than net income and dividends per common share, are based on actual common shares outstanding at the end of each year. Net income per common share is based on weighted average common shares outstanding during each year.

(2) Debt includes all interest-bearing debt and total capitalization includes interest-bearing debt and stockholders' equity.

(3) For periods prior to January 1, 2002 (the effective date of Statement of Financial Accounting Standards No. 142, Goodwill and Intangible Assets), goodwill was amortized on a straight-line basis. As such, the 2001 and 2000 financial data includes \$3,449 and \$2,899, respectively, of goodwill amortization expense, net of taxes.



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

### **OVERVIEW**

#### **2004 Highlights**

The Company achieved record sales of \$994.7 million and 7.5% growth in operating income, to \$55.9 million in 2004. The record sales year was driven by organic growth in all of the Company's operating groups with the most significant growth in Barnes Aerospace.

During 2004, Barnes Aerospace entered into three new aftermarket Revenue Sharing Programs ("RSPs"), committing approximately \$64.0 million with a major aerospace company, securing long-term relationships for aftermarket sales of engine parts with attractive financial returns. These programs had a positive impact on 2004 results and are expected to continue to have a positive impact going forward.

Profit shortfalls at Associated Spring and Barnes Distribution were attributed to increases in raw material prices and efforts to improve customer service, respectively. As of year end, Barnes Distribution customer service levels, as measured by fill rate, have returned to their targeted range and the integration efforts that contributed to these service issues have been completed. In late 2004, the Company incurred discrete charges of approximately \$4.5 million, or \$0.12 per share, related to actions to offset higher raw material costs going forward at Associated Spring and enable the realization of benefits from the Kar Products integration and improved customer service levels at Barnes Distribution. These charges included \$3.5 million related to personnel reductions, which are estimated to generate annual savings of approximately \$5.5 million, and \$1.0 million in inventory and facility charges. These charges were partially offset by \$0.7 million of benefits related to the reduction of lease obligations on idle facilities within Barnes Distribution.

#### **Management Objectives**

Management has embraced a corporate culture within Barnes Group that has as its common goals the generation of sustainable, profitable growth and building lasting value for its stockholders. The Company's strategies for generating growth include organic growth from new products and services, markets and customers; and growth from strategic acquisitions, of which nine have been completed since 1999.

#### **Our Business**

Barnes Group consists of three operating segments: Barnes Distribution, an international distributor of industrial MROP supplies; Associated Spring, one of the world's largest manufacturers of precision mechanical and nitrogen gas springs, and a global supplier of retaining rings, specialty spring products--reed valves and shock discs, and injection-molded plastic components; and Barnes Aerospace, a manufacturer and repairer of highly engineered assemblies and products for aircraft engines, airframes, and land-based industrial gas turbines.

In each of these businesses, Barnes Group is among the leaders in the market niches it serves, and has highly recognized brands for many of the products it sells or manufactures.

#### **Key Performance Indicators**

Management evaluates the performance of its reportable segments based on the operating profit of the respective businesses, which includes net sales, cost of sales, selling and administrative expenses and certain components of other income and other expenses, as well as the allocation of corporate overhead expenses. Management also uses an internal measurement tool called PPAT, or Performance Profit After Tax. PPAT is an economic value added ("EVA<sup>®</sup>")-like metric that calculates operating profit after tax, less a charge for the capital employed by the business. Management utilizes PPAT in economic decision making, such as capital expenditures, investments in growth initiatives, customer pricing decisions, and evaluation of acquisitions. The goal of utilizing PPAT is to create a mindset among all employees to use capital in the most efficient way possible and to link decisions to stockholder value creation.

In addition to PPAT, which is a measurement tool common among each of the operating groups, each business has its own key performance indicators (“KPIs”), a number of which are focused on customer satisfaction.

In Barnes Distribution, KPIs include daily sales average, or DSA; average order size; fill rate, which is the percentage of order lines filled on the first pass from the distribution center assigned to that customer; and order turnaround, which tracks the time between order receipt and shipment to the customer.

At Associated Spring, KPIs include sales and orders per day, which together provide visibility on sales in the next 60 days. Management tracks inventory turns and sales per employee to gauge efficiency, and measures on-time delivery and the number of defective parts per million as means of evaluating customer service levels.

At Barnes Aerospace, important KPIs are customer orders and backlog, which are utilized to forecast how sales will develop over the next 12 months. In the OEM operations, management closely tracks quality measurements and on-time delivery to its customers. In the aftermarket operations, management measures turnaround time of overhauled or repaired parts returned to the customers.

### **Key Industry Data**

In each business, management also tracks a variety of economic and industry data as indicators of the health of a particular sector.

At Barnes Distribution, these data include the Institute for Supply Management’s PMI Composite Index (the “PMI”) and the Federal Reserve’s Industrial Production Index (the “IPI”), which are monthly indicators of the health of U.S. manufacturing activity. Management tracks similar indices in Canada, France and the United Kingdom and also utilizes the Business Conditions Report of the Precision Metalforming Association, which correlates well with demand for Barnes Distribution’s Raymond products.

For Associated Spring, key data include the production of light vehicles, both in the U.S. and globally; new vehicle platform, engine and transmission programs; durable goods orders; handset purchases for cell phones; and capital investments in the telecommunications and electronics industries.

At Barnes Aerospace, for its OEM operations, management regularly tracks orders and deliveries for each of the major aircraft manufacturers, as well as engine purchases made for new aircraft. In the aftermarket operations, management monitors the number of aircraft in the active fleet, the number of planes temporarily or permanently taken out of service, and aircraft utilization rates for the major airlines. Management also monitors annual appropriations for the U.S. military related to new aircraft purchases and maintenance.

### **Acquisitions**

Acquisitions have been a key growth driver for the Company in each of its three business segments. The Company acquired a number of businesses during the past three years, the most recent of which is DE-STA-CO, described more fully below. The Company continues to look for acquisitions that will broaden product line offerings and expand geographic reach, and that provide synergistic opportunities.

In September 2004, the Company acquired DE-STA-CO, formerly an operating division of Dover Resources, Inc., a subsidiary of Dover Corporation. DE-STA-CO is a world leader in the design and manufacture of specialty spring products--reed valves and shock discs. This acquisition expands the presence of the Associated Spring segment in these markets, internationally and domestically. The purchase price of this acquisition was \$17.8 million.

In February 2003, the Company acquired Kar Products, LLC and certain assets of a related company, A.&H. Bolt & Nut Company Ltd. (“Kar”), which was a leading full-service distributor of maintenance, repair and operating (“MRO”) supplies to industrial, construction, transportation and other markets. The consideration

for the acquisition was \$76.1 million. This acquisition expanded both the geographic scope and product line reach of the Barnes Distribution segment. Kar had a diversified customer base operating in all 50 states of the U.S., Puerto Rico, and Canada, further enhancing Barnes Distribution's leadership position within the MROP market and its international presence. In connection with the acquisition, management had approved and committed to certain activities aimed at achieving a number of post-acquisition cost savings and other synergies through headquarters and infrastructure consolidation. This plan included combining the headquarters functions and consolidating warehousing and distribution networks. The Kar integration was completed during 2004, within 15 months of the acquisition.

In 2002, the Company completed two acquisitions for a total purchase price of \$34.0 million. In February 2002, the Company acquired substantially all of the manufacturing assets of Seeger-Orbis GmbH & Co. OHG of Germany ("Seeger-Orbis") from TransTechnology Corporation. Seeger-Orbis is a leading manufacturer of retaining rings used in a number of transportation and industrial applications. The Seeger-Orbis acquisition expanded Associated Spring's product line and geographic reach, particularly into the automotive and industrial manufacturing markets of Western Europe. In April 2002, the Company acquired Spectrum Plastics Molding Resources, Inc. of Ansonia, Connecticut ("Spectrum"). Spectrum is a manufacturer of plastic injection-molded components and assemblies that are used primarily in the telecommunications, electronics, medical and consumer goods industries. Spectrum, which is included in the Associated Spring segment, provides Associated Spring with the capability of providing more complete product solutions with discrete or continuous metal-in-plastic and plastic-on-metal injection-molded components.

For a further description of acquisitions made over the past three years, refer to Notes 2 and 7 of the Notes to the Consolidated Financial Statements of this Annual Report.

## RESULTS OF OPERATIONS

### Sales

<i>(\$ in millions)</i>	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Barnes Distribution . . . . .	<b>\$424.8</b>	\$400.7	\$ 24.1	6.0%	\$286.7
Associated Spring . . . . .	<b>373.5</b>	333.1	40.4	12.1%	321.7
Barnes Aerospace . . . . .	<b>205.9</b>	165.7	40.2	24.2%	183.0
Intersegment sales . . . . .	<b>(9.5)</b>	(8.7)	(0.8)	(8.2)%	(7.4)
Total . . . . .	<b><u>\$994.7</u></b>	<u>\$890.8</u>	<u>\$103.9</u>	11.7%	<u>\$784.0</u>

Barnes Group reported record net sales of \$994.7 million in 2004, an increase of \$103.9 million, or 11.7%, over 2003 net sales of \$890.8 million. The sales increase was driven mainly by organic sales growth of \$69.3 million; \$6.9 million at Barnes Distribution, \$23.0 million at Associated Spring and \$40.2 million at Barnes Aerospace which was offset in part by an increase of \$0.8 million in intersegment sales. The Company's recent acquisitions contributed \$10.4 million to Barnes Distribution's sales and \$8.5 million to Associated Spring's sales. Additionally, the strengthening of foreign currencies against the U.S. dollar, primarily in Europe and Canada, increased sales by approximately \$15.7 million. Geographically, the Company's international sales increased 16.1% year-over-year and domestic sales increased 10.6%. Excluding the positive impact on sales of foreign currency translation, the Company's international sales increased 9.8% in 2004 over 2003.

In 2003, Barnes Group's net sales were up \$106.8 million, or 13.6%, over 2002 net sales of \$784.0 million. The sales increase reflected the Company's recent acquisitions, which contributed \$108.3 million to Barnes Distribution's sales and \$14.5 million to Associated Spring's sales. Also contributing to the sales increase was continued growth of Associated Spring's nitrogen gas business. The strengthening of foreign currencies against the U.S. dollar, primarily in Europe and Canada, had a positive impact of \$11.7 million. This growth was partially offset by a decrease in Associated Spring's North American and Asian sales and a 9.4% decline in sales at Barnes Aerospace, which coincided with the continuing decline in the commercial aerospace markets.

## Expenses and Operating Income

<i>(\$ in millions)</i>	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Cost of sales .....	<b>\$654.6</b>	\$576.8	\$77.8	13.5%	\$530.0
% sales .....	<b>65.8%</b>	64.8%			67.6%
Gross profit .....	<b>\$340.1</b>	\$314.0	\$26.1	8.3%	\$254.0
% sales .....	<b>34.2%</b>	35.2%			32.4%
Selling and administrative expenses .....	<b>\$284.2</b>	\$262.0	\$22.2	8.5%	\$209.2
% sales .....	<b>28.6%</b>	29.4%			26.7%
Operating income .....	<b>\$ 55.9</b>	\$ 52.0	\$ 3.9	7.5%	\$ 44.8
% sales .....	<b>5.6%</b>	5.8%			5.7%

Operating income was \$55.9 million in 2004, an increase of 7.5% when compared with 2003. Operating income included a \$3.5 million pre-tax charge taken in the fourth quarter of 2004 related to costs of personnel reductions at Associated Spring and Barnes Distribution which will occur in the first quarter of 2005. These costs relate to actions to offset higher raw material costs going forward at Associated Spring and enable the realization of benefits from the Kar Products integration and improved customer service levels at Barnes Distribution. Operating income also included \$1.0 million in inventory and facility charges which were partially offset by \$0.7 million of benefits related to the reduction of lease obligations at idle facilities. These results reflect significantly higher operating profit at Barnes Aerospace offset by lower operating profits at both Barnes Distribution and Associated Spring, which are more fully discussed in the Financial Performance by Business Segment section below. Operating income margin declined from 5.8% in 2003 to 5.6% in 2004. Cost of sales, as a percentage of sales, increased to 65.8%, or a 13.5% increase, which is slightly more than the growth rate in sales for the year. This reflects a shift in overall sales mix to the manufacturing businesses which have lower gross margins than the distribution business combined with lower gross profit margins at Barnes Distribution and Associated Spring. Gross profit margins at Barnes Distribution were negatively impacted by a shift in sales mix to larger accounts which traditionally have lower pricing and to additional costs incurred to improve customer service levels. Associated Spring's margin compression resulted from higher raw material costs. Gross profit margins for the Company were also negatively impacted by a \$1.7 million LIFO inventory adjustment in 2004. Total selling and administrative expenses decreased as a percentage of sales to 28.6% from 29.4% in 2003. This decrease was also driven by the higher proportion of sales in the manufacturing businesses, which have a lower selling expense component than the distribution business. Impacting both cost of sales and selling and administrative expenses were higher benefit costs including medical and pension costs. Included in selling and administrative expenses in 2004 was \$3.5 million related to the fourth quarter severance charge discussed above as well as approximately \$1.0 million of incremental external costs related to the Company's Sarbanes-Oxley Section 404 compliance effort.

Operating income was \$52.0 million in 2003, an increase of 16.0% compared with \$44.8 million in 2002. These results reflect higher operating profit at Barnes Distribution. Overall operating income margin increased to 5.8% in 2003 compared with 5.7% in 2002. Cost of sales, as a percentage of sales, decreased to 64.8% reflecting improvements in gross profit margins at Barnes Distribution combined with the shift in overall sales mix to the higher margin distribution business, a result of the Kar acquisition. Total selling and administrative expenses increased to 29.4% as a percentage of sales, from 26.7% in 2002. This increase was also driven by the higher proportion of sales in the distribution business, which has a higher selling expense component. Impacting both cost of sales and selling and administrative expenses were higher postretirement benefit expenses at Associated Spring and lower pension income Company-wide. Pension income decreased by \$4.8 million due primarily to reduced investment performance of plan assets in 2001 and 2002 and a lower discount rate. The cost of postretirement benefits, other than pensions, increased \$1.1 million due in part to a higher medical cost trend, lower discount rate and the full year impact of increased benefit levels provided to certain U.S. employees.



## Other Income/Expense

Other income totaled \$2.1 million in 2004, compared with \$3.3 million in 2003. The reduction is principally due to lower equity income from NASCO, the Company's joint venture investment. Additionally, investment of foreign cash in the RSPs reduced short-term investments and related interest income.

The decrease in other income in 2003 compared with 2002 was due to foreign exchange transaction gains of \$1.2 million in 2002 compared with foreign exchange losses of \$0.7 million in 2003, which were included in other expenses. The foreign exchange transaction gains and losses related primarily to exposure on U.S. dollar-denominated financial instruments, primarily in the Company's operation in Brazil. The Company's policy is to hedge foreign currency transaction exposure except in locations where the local currency has historically weakened against the U.S. dollar, which includes Mexico and Brazil. The decrease in foreign exchange gains was partially offset by higher interest income due to higher interest rates in Brazil and increased short-term investments in Canada.

Although average borrowings increased in 2004 compared to 2003, interest expense decreased due to a reduction in average interest rates. The lower average interest rates resulted from principal payments on higher cost fixed rate debt and favorable terms negotiated in the amended and restated revolving credit agreement completed in the second quarter of 2004.

Interest expense increased in 2003 compared to 2002 as a result of higher borrowings related primarily to the Kar acquisition, and a reduction in the amount of debt subject to variable interest rate swaps.

## Income Taxes

The Company's effective tax rate was 19.2% in 2004, compared with 14.0% in 2003 and 18.0% in 2002. The increase in the tax rate in 2004 when compared to 2003 reflects the absence of two discrete beneficial tax matters included in 2003 that effectively reduced the 2003 tax rate from 19.4% to 14.0%. The benefits recorded in 2003 were associated with a Brazilian tax matter which was resolved in 2003 and the anticipated utilization of minimum asset tax carryforwards in Mexico. When compared to 2002, the benefits of these reversals were partially offset by the absence in 2003 of an additional deduction which was taken during 2002 for the Company's Retirement Savings Plan dividends. The 2002 dividend deduction resulted from a retroactive election in 2002 for the 2001 dividend distribution, pursuant to an amendment to the Plan. Among other items impacting the future tax rate is the mix of income between U.S. and foreign operations. See Note 10 of the Notes to the Consolidated Financial Statements of this Annual Report for a reconciliation of the U.S. federal statutory income tax rate to the consolidated effective income tax rate.

In the normal course of business, the Company and its subsidiaries are examined by various tax authorities, including the Internal Revenue Service ("IRS"). The IRS is currently reviewing the Company for the tax years 2000 through 2002. The Company currently has one disputed IRS tax issue with a potential tax cost of approximately \$16.5 million. The Company and its advisors believe the Company will prevail on this issue. Any additional impact on the Company's liability for income taxes cannot presently be determined, but the Company believes the outcome will not have a material impact on its financial statements.

## Net Income and Net Income Per Share

(\$ in millions, except per share)

	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Net income	\$33.4	\$33.0	\$ 0.4	1.2%	\$27.2
Net income per share:					
Basic	\$1.45	\$1.54	\$(0.09)	(5.8)%	\$1.45
Diluted	1.40	1.49	(0.09)	(6.0)%	1.42

Net income in 2004 increased slightly compared with 2003, however, an increase in basic and diluted average shares outstanding adversely impacted net income per share. The increase in shares resulted mainly from

the issuance of Company common stock in a May 2003 follow-on public offering, shares used as partial price consideration for the acquisition of Kar, and shares issued for stock compensation awards.

## Financial Performance by Business Segment

### Barnes Distribution

<i>(\$ in millions)</i>	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Sales .....	<b>\$424.8</b>	\$400.7	\$24.1	6.0%	\$286.7
Operating profit .....	<b>13.8</b>	16.5	(2.7)	(16.7)%	7.5
Operating margin .....	<b>3.2%</b>	4.1%			2.6%

Barnes Distribution achieved record sales of \$424.8 million for 2004, a 6.0% increase over 2003. Organic sales increased \$6.9 million or 1.7% while Kar, which the Company purchased on February 6, 2003, contributed incremental sales of \$10.4 million and the favorable impact of foreign exchange rates provided incremental sales of \$6.8 million. Key performance indicators in the U.S., such as the daily sales average and average order size, improved in each quarter of 2004. Customer service levels improved and returned to historical levels by year-end. Organic sales growth was driven mainly by positive results in the U.S. from strategic growth initiatives including national accounts, e-commerce platforms and Tier 2 relationships with industrial distributors, offset in part by decreases in sales to other customers. The national accounts selling team opened over 40 new relationships during 2004. Geographically, sales in Europe increased over 2003 while sales in Canada decreased. Additionally, Barnes Distribution's Raymond business reported higher year-over-year sales as a result of the general industrial recovery and new product introductions.

Barnes Distribution's operating profit decreased from 2003 which was partially due to a \$1.3 million charge for severance costs and \$1.0 million in inventory and facility charges taken in the fourth quarter of 2004. The reduction in operating profit was also driven by incremental costs of approximately \$2.1 million related to strategic growth initiatives, including costs to strengthen the sales force, and approximately \$2.4 million in costs incurred to address customer service issues. These costs were partially offset by incremental synergistic savings from the Kar acquisition of approximately \$5.9 million and lower integration costs of \$0.8 million and \$0.7 million of benefits related to the reduction of lease obligations on idle facilities during 2004. The Kar integration was completed during 2004, within 15 months of the acquisition. Profit was adversely impacted by a shift in sales mix to large accounts which traditionally have lower pricing than Barnes Distribution's core business. Gross profit was negatively impacted by higher product costs particularly related to steel supply and freight costs. These increases in costs were largely offset by customer pricing increases. In addition, the year-over-year profit comparison was negatively impacted by the \$1.3 million gain on the sale of a distribution center in 2003.

Outlook: Management believes the outlook for markets served by Barnes Distribution, particularly those which are the focus of our strategic growth initiatives and those which are located in the U.S., continues to strengthen. Additionally, Barnes Distribution has continued to improve its performance in its KPIs, specifically customer service levels, or fill rates, which returned to historical levels and should have a positive impact on sales going forward. Discrete charges incurred in late 2004 related to personnel reductions are estimated to generate annual savings of \$1.7 million. Steel supply issues, particularly for fasteners, continue to negatively impact Barnes Distribution. Suppliers have indicated that they are having difficulty procuring steel to meet customer demand which has affected availability and pricing, a trend that is expected to continue into 2005. Management is seeking to recover the increased costs through price increases to its customers and is looking for new offshore sources to mitigate any negative impact going forward.

Sales increased in 2003 due mainly to the acquisition of Kar, which contributed approximately \$108.3 million of sales. Sales were also favorably impacted by the strengthening of foreign currencies against the U.S. dollar. New growth initiatives contributed approximately \$20 million in sales and the Raymond business expanded product lines and generated higher sales in markets outside the U.S. These increases were offset by decreases in other customer markets.

The Kar acquisition also had a favorable impact on operating profit in 2003. Discrete costs of \$2.8 million were incurred related to the Kar integration into Barnes Distribution's base business. However, these discrete costs were more than offset by the realization of estimated cost savings of \$5.7 million. The 2003 operating profit also included a gain of \$1.3 million from the sale of a distribution center and severance costs of \$1.2 million.

### Associated Spring

<i>(\$ in millions)</i>	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Sales .....	<b>\$373.5</b>	\$333.1	\$40.4	12.1%	\$321.7
Operating profit .....	<b>22.5</b>	26.8	(4.3)	(16.0)%	28.1
Operating margin .....	<b>6.0%</b>	8.0%			8.7%

Associated Spring reported record sales of \$373.5 million in 2004. This performance was driven in large part by organic sales growth of \$23.0 million. Growth came in all of its key market segments, most notably in the industrial product markets which realized sales growth of 23.4% driven primarily by success of our reed products in Brazil. Additionally, the heavy truck, light vehicle, telecommunications and electronics, and nitrogen gas spring markets had positive year-over-year sales trends. DE-STA-CO, which the Company acquired in September 2004, contributed approximately \$8.5 million in sales in 2004. The strengthening of foreign currencies against the U.S. dollar, primarily in Europe, had a positive impact on sales of approximately \$8.9 million during 2004.

Associated Spring's operating profit decreased in 2004 resulting in a 6.0% operating margin, compared to 8.0% in 2003. Operating profit in 2004 was positively impacted by increased sales, mainly in Associated Spring's international locations. However, overall operating profit was reduced by raw material cost increases and unfavorable LIFO adjustments aggregating \$6.5 million in 2004 and a \$2.2 million charge for severance costs recorded in the fourth quarter. The personnel reductions, which are expected to reduce the Associated Spring workforce by approximately 4%, are aimed at offsetting the higher raw material costs going forward and are expected to generate estimated annual savings of \$3.8 million. Additionally in 2004, the Company incurred approximately \$2.5 million in costs related to operating improvement initiatives focused on capacity, quality issues and lean manufacturing, approximately \$0.8 million of higher medical costs and approximately \$0.4 million of cost of sales expense related to the purchase accounting step-up of inventory to fair value at DE-STA-CO.

Outlook: The outlook for the markets served by Associated Spring appears to be somewhat positive. An improving U.S. economy is expected to positively impact the industrial market. Published data have indicated that sales in the heavy truck segment are expected to remain robust through 2005, but sales in the light vehicle market are expected to be a bit soft in early 2005 due to high dealer inventory levels at the end of 2004. Management also expects near-term growth in the telecommunications and electronics market and the nitrogen gas springs market. During the first quarter of 2005, Associated Spring will begin shipping from its recently opened manufacturing facility in Monterrey, Mexico which should positively impact cost and capacity issues. Raw material issues, particularly for steel, continue to affect operating profit as suppliers are exerting cost pressures on Associated Spring and worldwide steel supplies remain challenging. Associated Spring has attempted to counter the higher raw material costs with the expected savings from the 2005 headcount reductions going forward and will continue to work aggressively with its customers to reach a mutually beneficial outcome in terms of cost sharing and ensuring product availability. Further, the Company will be negotiating two labor agreements and one master pension and retiree healthcare agreement affecting three U.S. facilities that will expire in the first half of 2005. Any resulting cost increases or labor actions could negatively impact 2005 profit margins.

Associated Spring generated sales of \$333.1 million in 2003. This 3.5% increase over 2002 reflected incremental sales from the 2002 acquisitions combined with the positive impact on sales, primarily in Europe, from the strengthening of foreign currency against the U.S. dollar and higher sales of nitrogen gas springs.

Incremental sales in 2003 from the acquisitions of Seeger-Orbis in February 2002 and Spectrum in April 2002 were \$14.5 million. Offsetting these increases were declines in sales in the North American light vehicle market, a drop in sales related to a planned withdrawal from the heavy truck brake spring market, and lower sales in the Asian telecommunications and electronics market. In 2003, Associated Spring outperformed the 3.3% decline in North American light vehicle production.

Associated Spring's operating profit decreased in 2003 and reflected an 8.0% operating margin, compared to 8.7% in 2002. Profits in 2003 were positively impacted by increased sales in Europe, the closure of the Texas plant in 2002 and the absence of \$1.1 million of discrete costs related to purchase accounting adjustments recorded in 2002. However, overall margins were dampened by a decrease in sales in the higher margin telecommunications and electronics market, approximately \$5.5 million of higher personnel costs, including pension, postretirement and medical costs, and a \$0.5 million reduction in the carrying value of the Texas facility, held for sale at the end of 2003.

### Barnes Aerospace

<i>(\$ in millions)</i>	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Sales .....	<b>\$205.9</b>	\$165.7	\$40.2	24.2%	\$183.0
Operating profit .....	<b>20.7</b>	10.7	10.0	93.9%	10.8
Operating margin .....	<b>10.1%</b>	6.4%			5.9%

Barnes Aerospace achieved record sales of \$205.9 million in 2004. Increased sales reflect solid growth in aftermarket sales, which increased 53.7% and were driven by \$9.6 million in sales from the RSPs and a 19.0% increase in the overhaul and repair business. Barnes Aerospace entered into three additional aftermarket RSPs during 2004 which drove the incremental RSP sales. Additionally, OEM sales increased 19.5%.

Total orders for 2004 were \$253.6 million, compared with \$161.9 million in 2003 and \$177.9 million in 2002. Included in the 2004 orders were \$50.4 million in orders for a large commercial engine program and \$61.6 million of direct and indirect military orders. Order backlog increased to a record \$193.8 million at December 31, 2004, from \$147.7 million at December 31, 2003. Orders and order backlog were affected by the same factors that generated record sales.

In 2004, Barnes Aerospace's operating profit nearly doubled from 2003. Operating profit was positively impacted by the sharply higher aftermarket and OEM sales volumes and the profit contribution from the RSPs. Partially offsetting these factors were higher incentive compensation expense and an unfavorable LIFO inventory adjustment.

Outlook: Sales at Barnes Aerospace are expected to remain robust into 2005 on the strength of sales from a large commercial engine program, higher military sales and the aftermarket RSPs. Additionally, based upon published information, recovery in the sales of commercial aircraft is anticipated in 2006, which is expected to impact aerospace component suppliers such as Barnes Aerospace beginning in 2005. However, continuing high fuel prices may adversely impact near-term aftermarket sales as airlines defer heavy maintenance to offset higher fuel costs. Also, higher raw material costs driven by raw material availability could negatively impact sales and profit in 2005.

Sales in 2003 were down from 2002 due mainly to the decline in commercial aircraft deliveries compared to 2002. The sales decline reflected the fall off in the commercial airline market in the wake of the events of 9/11. Operating profit remained relatively unchanged in 2003 and 2002 as a result of headcount reductions and productivity actions taken in 2002 that were aimed at positioning the business for a period of lower commercial aerospace volume.

## LIQUIDITY AND CAPITAL RESOURCES

Management assesses the Company's liquidity in terms of its overall ability to generate cash to fund its operating and investing activities. Of particular importance in the management of liquidity are cash flows generated from operating activities, capital expenditure levels, dividends, capital stock transactions, effective utilization of surplus cash positions overseas and adequate bank lines of credit.

The Company's ability to generate cash from operations in excess of its internal operating needs is one of its financial strengths. Management continues to focus on cash flow and working capital and anticipates that operating activities in 2005 will generate significant cash. This operating cash flow may be supplemented with external borrowings to meet near-term organic business expansion and the Company's current financial commitments. Any future acquisitions are expected to be financed through internal cash, borrowings and equity, or a combination thereof.

### Cash Flow

<i>(\$ in millions)</i>	<u>2004</u>	<u>2003</u>	<u>\$ Change</u>	<u>% Change</u>	<u>2002</u>
Operating activities .....	\$ 54.2	\$ 60.1	\$ (5.9)	(9.8)%	\$ 54.4
Investing activities .....	(75.6)	(95.5)	19.9	20.9%	(48.0)
Financing activities .....	6.2	53.7	(47.5)	(88.4)%	(24.3)
Exchange rate effect .....	1.7	3.1	(1.4)	(45.7)%	(2.6)
(Decrease) increase in cash .....	<u>\$(13.5)</u>	<u>\$ 21.4</u>	<u>\$(34.9)</u>	NM	<u>\$(20.5)</u>

NM – not meaningful

Operating activities are the principal source of cash flow for the Company, generating \$54.2 million in cash during 2004. The decrease in operating cash flow in 2004 resulted mainly from the increased use of cash for working capital. In particular, investments in working capital were required to support organic sales growth including a higher investment in receivables at Barnes Aerospace and Associated Spring, and a higher investment in inventory at Barnes Aerospace. In addition, Barnes Distribution increased inventory to improve customer service levels and to mitigate certain price increases, particularly on steel products.

Cash used by investing activities in 2004 included \$32.0 million in participation fees related to the aftermarket RSPs which are more fully discussed in Note 5 of the Notes to the Consolidated Financial Statements of this Annual Report. These payments were funded mainly with cash held outside the U.S. As of December 31, 2004, the Company had a \$49.0 million liability for participation fees under the RSPs which is included in accounts payable and will also be paid using cash outside the U.S. The payment schedule for the RSPs follows (in millions):

2003 .....	\$17.5
2004 .....	32.0
2005 .....	49.0
	<u>\$98.5</u>

Investing activities also include the acquisitions of DE-STA-CO and Kar in 2004 and 2003, respectively. The Company's capital spending program focuses on business growth and improvements in productivity and quality. Capital expenditures in 2004 were \$28.5 million, a \$10.1 million increase over 2003. The majority of this increase relates to investments in new distribution centers for Barnes Distribution in Dallas, Chicago, and Ontario, Canada and a new manufacturing plant for Associated Spring in Monterrey, Mexico. The Company expects capital spending in 2005 to be in the range of \$30-33 million. Investing activities in 2002 include the acquisitions of Seeger-Orbis and Spectrum.



Cash from financing activities in 2004 included a net increase in borrowings of \$25.2 million. The proceeds were used, in part, to fund capital expenditures, a portion of the DE-STA-CO acquisition and dividends. In 2003, the Company's public offering of its common stock provided proceeds of approximately \$42.2 million (net of expenses incurred) that were used to reduce borrowings under its revolving credit facility. Cash dividends remained at \$0.80 per share for the fourth year. Total cash used to pay dividends increased in 2004 by \$0.9 million to \$18.5 million due to the increase in shares outstanding. In 2002, cash from financing activities included \$4.7 million of cash proceeds from the termination of an interest rate swap.

At December 31, 2004, the Company held \$36.3 million in cash and cash equivalents, nearly all of which are held outside the U.S. Since the repatriation of this cash to the U.S. has historically had adverse tax consequences, the balances remain outside the U.S. to fund future international growth investments, including acquisitions and RSP participation fees. See Note 10 to the Notes to the Consolidated Financial Statements of this Annual Report for a discussion of the impact of the favorable foreign dividend provisions of the recently enacted American Jobs Creation Act of 2004.

The Company maintains borrowing facilities with banks to supplement internal cash generation. During 2004, the Company amended and restated its revolving credit agreement with 11 participating banks. The amended and restated revolving credit agreement extended the maturity date until June 2009, increased the borrowing facility from \$150.0 million to \$175.0 million, decreased the interest rate to LIBOR plus a spread ranging from 0.8% to 1.4% depending on the Company's debt ratio at the time of the borrowing, and amended various financial and restrictive covenants. At December 31, 2004, \$98.0 million was borrowed under the revolving credit facility at an interest rate of 3.41%. Additionally, the Company pays a facility fee, calculated on the full amount of the borrowing facility, at a rate ranging from 0.20% to 0.35%, depending on the Company's debt ratio at the end of each calendar quarter.

Borrowing capacity is limited by various debt covenants in the revolving credit agreement. The most restrictive borrowing capacity covenant requires the Company to maintain a ratio of Total Debt to EBITDA, as defined in the revolving credit agreement, of not more than 3.25 times at December 31, 2004. The ratio requirement will decrease to 2.75 times on June 30, 2008. The actual ratio at December 31, 2004 was 2.70 times and would have allowed additional borrowings of \$53.5 million.

The Company believes its credit facilities, coupled with cash generated from operations, are adequate for its anticipated future requirements.

The funded status of the Company's pension plans is dependent upon many factors, including returns on invested assets, the level of market interest rates and benefit obligations. In 2004, the fair value of pension plan securities traded in equity markets increased, which had a positive impact on the funded status of the plans. However, the increase in the fair value of plan assets was more than offset by an increase in the benefit obligation due to normal service costs and a reduction in the discount rate. In accordance with Statement of Financial Accounting Standards ("SFAS") No. 87, "Employers' Accounting for Pensions," the Company records a minimum pension liability adjustment for under-funded plans through a non-cash after-tax charge to accumulated other non-owner changes to equity. As of December 31, 2003, the under-funded status of the plans improved, resulting in a reduction of \$5.7 million of this non-cash after-tax charge to equity. As of December 31, 2004, the under-funded status of the plans increased, resulting in an \$8.9 million non-cash after-tax charge to equity. From a cash perspective, approximately \$4.6 million in cash contributions were made by the Company to its various pension plans in 2004 including the required minimum contributions to its qualified U.S. pension plans. The Company expects to contribute approximately \$3.3 million to its various plans in 2005.

## Contractual Cash Obligations and Commitments

At December 31, 2004, the Company had the following contractual cash obligations and commercial commitments:

<i>(\$ in millions)</i>	<u>Total</u>	<u>Less Than 1 Year</u>	<u>1-3 Years</u>	<u>4-5 Years</u>	<u>Thereafter</u>
Long-term debt obligations <sup>(1)</sup> . . . . .	\$264.5	\$ 7.9	\$ 86.1	\$155.3	\$15.2
Capital lease obligations . . . . .	1.0	0.6	0.4	—	—
Operating lease obligations . . . . .	36.2	10.2	12.4	5.3	8.3
Purchase obligations <sup>(2)</sup> . . . . .	104.6	91.7	11.5	1.4	—
Expected pension contributions <sup>(3)</sup> . . . . .	3.3	3.3	—	—	—
Total . . . . .	<u>\$409.6</u>	<u>\$113.7</u>	<u>\$110.4</u>	<u>\$162.0</u>	<u>\$23.5</u>

- (1) The amounts exclude the fair value of an interest rate swap, the deferred gain on a terminated swap and any related interest payments.
- (2) The amounts do not include purchase obligations already reflected as current liabilities on the consolidated balance sheet. The purchase obligation amount includes all outstanding purchase orders as of the balance sheet date as well as the minimum contractual obligation or termination penalty under other contracts.
- (3) The amounts for 2005 reflect anticipated contributions to the Company's various pension plans.

## OTHER MATTERS

### Inflation

Inflation generally affects the Company through its costs of labor, equipment and raw materials. Increases in the costs of these factors have historically been offset by price increases, operating improvements, and other cost savings initiatives. During 2004, the Company, particularly the Associated Spring segment, experienced significant inflation in raw material prices, specifically steel, the majority of which was not recovered.

### Critical Accounting Policies

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant accounting policies are disclosed in Note 1 of the Notes to the Consolidated Financial Statements of this Annual Report. The most significant areas involving management judgments and estimates are described below. Actual results could differ from such estimates.

**Inventory Valuation:** Inventories are valued at the lower of cost or market. The last-in, first-out ("LIFO") method is used to value the majority of domestic inventories. Provisions are made to reduce excess or obsolete inventories to their estimated net realizable value. Loss provisions, if any, on contracts are established when estimable. Loss provisions are based on the projected excess of manufacturing costs over the net revenues of the products or group of related products under contract. The process for evaluating the value of excess and obsolete inventory often requires the Company to make subjective judgments and estimates concerning future sales levels, quantities and prices at which such inventory will be sold in the normal course of business. Accelerating the disposal process or incorrect estimates of future sales potential may necessitate future adjustments to these provisions.

**Business Acquisitions:** Assets and liabilities acquired in a business combination are recorded at their estimated fair values at the acquisition date. At December 31, 2004, the Company had \$221.9 million of goodwill, representing the cost of acquisitions in excess of fair values assigned to the underlying net assets of acquired companies. In accordance with SFAS No. 142, goodwill and intangible assets deemed to have indefinite lives are not amortized but are subject to annual impairment testing. The assessment of goodwill involves the estimation of the fair value of "reporting units," as defined by SFAS No. 142. Management completed this annual assessment during the second quarter of 2004 based on the best information available as of the date of the assessment, which incorporated management assumptions about expected future cash flows. Based on this

assessment, there was no goodwill impairment in 2004. Future cash flows can be affected by changes in the global economy and local economies, industries and markets in which the Company sells products or services, and the execution of management's plans, particularly with respect to integrating acquired companies. There can be no assurance that future events will not result in impairment of goodwill or other intangible assets.

**Revenue Sharing Programs:** The Company participates in aftermarket RSPs under which the Company receives an exclusive right to supply designated aftermarket parts over the life of the related aircraft engine program. As consideration, the Company pays participation fees, which are recorded as long-lived intangible assets, and are recognized as a reduction to sales over the life of the program. The recoverability of the intangible asset is subject to significant estimates about future revenues related to the program's aftermarket parts. Management updates revenue projections periodically, which includes comparing actual experience against projected revenue and obtaining industry projections. The potential exists that actual revenues will not meet expectations due to a change in market conditions. A shortfall in future revenues may indicate an impairment of the intangible asset. The Company evaluates the remaining useful life of this asset to determine whether events and circumstances warrant a revision to the remaining period of amortization. The intangible asset is reviewed for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. The Company has not revised the amortization period or identified any impairment of these intangible assets. See Note 5 of the Notes to the Consolidated Financial Statements of this Annual Report.

**Reorganization of Businesses:** For non-acquisition related reorganizations as of and subsequent to January 1, 2003, the Company records the cost of reorganization initiatives at the time the liability is incurred. For reorganization initiatives in connection with acquisitions, and for all other reorganization initiatives prior to January 1, 2003, the Company records liabilities at the time that management has approved and committed to a reorganization plan. Such a plan identifies all significant actions to be taken and specifies an expected completion date that is within a reasonable period of time. The liability includes those costs that can be reasonably estimated. These estimates are subject to adjustments based upon actual costs incurred.

**Pension and Other Postretirement Benefits:** Accounting policies and significant assumptions related to pension and other postretirement benefits are disclosed in Note 9 of the Notes to the Consolidated Financial Statements of this Annual Report.

The following table provides a breakout of the current targeted mix of investments, by asset classification, along with the historical rates of return for each asset class and the long-term projected rates of return for the U.S. plans.

<i>Asset class</i>	<b>Target Asset Mix %</b>	<b>Annual Return %</b>	
		<b>Historical<sup>(1)</sup></b>	<b>Long-Term Projection</b>
Large cap growth . . . . .	20	12.8	11.8
Large cap value . . . . .	20	13.8	12.8
Small cap growth . . . . .	10	9.1	8.1
Small cap value . . . . .	10	15.4	14.4
Non-U.S. equity . . . . .	10	11.0	10.0
Real estate-related . . . . .	5	14.2	13.2
Fixed income . . . . .	20	9.7	7.7
Cash . . . . .	5	6.7	3.7
Weighted average . . . . .		11.8	10.5

(1) Historical returns based on the life of the respective index, approximately 25 years.

The historical rates of return were calculated based upon compounded average rates of return of published indices. The 25% target for fixed income and cash investments is lower than the fixed income and cash component of a typical pension trust. The fixed income investments include a higher-than-average component of

yield-aggressive investments, including high-yield corporate bonds. Based on the overall historical and projected rates of return, management is projecting the long-term rate of return on its U.S. pension assets to be 9.5%.

A one-quarter percentage point change in the assumed long-term rate of return would impact the Company's pretax income by approximately \$0.8 million annually. A one-quarter percentage point change in the discount rate would impact the Company's pretax income by approximately \$0.5 million annually. The Company reviews these and other assumptions at least annually.

During 2004, the fair value of the Company's pension plan assets increased by \$20.6 million compared to an increase in projected benefit obligations of \$29.2 million. The higher increase in the benefit obligation is driven by a 50 basis point decrease in the assumed discount rate. The Company's pension expense for 2004 was \$1.0 million. Pension expense for 2005 is expected to increase by \$0.5 million over 2004 expense, primarily due to lower discount rates.

**Income Taxes:** As of December 31, 2004, the Company had recognized \$50.6 million of deferred tax assets, net of valuation reserves. The realization of these benefits is dependent in part on future taxable income. For those jurisdictions where the expiration date of tax loss carryforwards or the projected operating results indicate that realization is not likely, a valuation allowance is provided. Management believes that sufficient income will be earned in the future to realize deferred income tax assets, net of valuation allowances recorded. The recognized net deferred tax asset is based on the Company's estimates of future taxable income. The realization of these deferred tax assets can be impacted by changes to tax codes, statutory tax rates and future taxable income levels.

### **Recent Accounting Changes**

During the second quarter of 2004, the Financial Accounting Standards Board ("FASB") issued FASB Staff Position ("FSP") No. 106-2, "Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003." The FSP provides guidance on the accounting for the effects of the Act for employers that sponsor postretirement health care plans that provide prescription drug benefits and also increases the disclosure regarding the effect of the federal subsidy provided by the Act. This FSP superseded FSP No. 106-1 and was effective for the Company in the third quarter of 2004. Management estimated the effects of the Act on the Company's accumulated postretirement benefit obligations. Management, along with the Company's actuaries, determined that, based on regulatory guidance currently available, benefits provided by certain of the Company's postretirement benefit plans were at least actuarially equivalent to Medicare Part D and, accordingly, the Company expects to be entitled to the Federal subsidy. See Note 9 of the Notes to the Consolidated Financial Statements of this Annual Report for the disclosures required by the FSP.

During the second quarter of 2004, the Emerging Issues Task Force ("EITF") reached a consensus on EITF Issue No. 03-6 "Participating Securities and the Two-Class Method under FASB Statement No. 128, 'Earnings per Share'." The Issue, effective for fiscal periods beginning after March 31, 2004, defines a participating security and addresses how to treat participating securities in the calculation of earnings per share. Adoption of this consensus did not have an effect on the Company's financial position, results of operations or cash flows.

In October 2004, the EITF ratified the consensuses included in Issue No. 04-1, "Accounting for Preexisting Relationships between the Parties to a Business Combination." Among other things, these consensuses address whether a consummation of a business combination between two parties that have a preexisting relationship should be evaluated to determine if a settlement of a preexisting relationship exists, and the accounting for the preexisting relationship. The consensuses should be applied to any business combinations and goodwill impairment tests performed after the ratification in October 2004. The Company will comply with the provisions of the Issue, as applicable, subsequent to this date.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs, an amendment of ARB No. 43, Chapter 4." This Statement amends the guidance in ARB No. 43 to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material and requires that those items be recognized

as current-period charges. Additionally, the Statement requires that allocation of fixed production overhead to the costs of conversion be based on the normal capacity of the production facilities. The provisions of this Statement will be effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company is currently evaluating the impact this Statement will have on the Company's financial position, results of operations and cash flows.

In December 2004, the FASB issued a revision to FASB No. 123. SFAS No. 123R, "Share-Based Payment," focuses primarily on the accounting for transactions in which a company obtains employee services in exchange for stock options or share-based payments. Currently, the Company grants stock options and other equity-based compensation to its employees and discloses the pro forma effect of compensation expense had the Company applied the provisions of SFAS No. 123 in Note 1 of the Notes to the Consolidated Financial Statements of this Annual Report. Under SFAS No. 123R, the Company will be required to record this compensation expense in the Company's results of operations. SFAS No. 123R will be effective for the Company beginning in the third quarter of 2005. The Company is currently evaluating its transition alternatives and the effect of this Statement on the Company, which will be dependent in large part upon future equity-based grants. Management believes the impact upon adoption will be significantly lower than previous amounts disclosed in Note 1 of the Notes to the Consolidated Financial Statements of this Annual Report based on anticipated changes to the structure of the equity-based compensation program.

In December 2004, the FASB issued FSP No. 109-1, "Application of FASB Statement No. 109, 'Accounting for Income Taxes,' to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004." The American Jobs Creation Act of 2004 includes a tax deduction of up to 9% of the lesser of qualified production activities income, as defined, or taxable income, after the deduction for the utilization of any net operating loss carryforwards. The FSP clarified that this deduction should be accounted for as a special tax deduction in accordance with SFAS No. 109. Because of the Company's tax loss carryforwards, this FSP will not have a material effect on the Company's financial position, results of operations or cash flows in 2005.

## EBITDA

Earnings before interest, taxes, depreciation and amortization ("EBITDA") for 2004 were \$90.9 million compared to \$88.8 million in 2003. EBITDA is a measurement not in accordance with generally accepted accounting principles ("GAAP"). The Company defines EBITDA as net income plus income taxes, interest expense and depreciation and amortization. The Company does not intend EBITDA to represent cash flows from operations as defined by GAAP, and the reader should not consider it as an alternative to net income, net cash provided by operating activities or any other items calculated in accordance with GAAP, or as an indicator of the Company's operating performance. The Company's definition of EBITDA may not be comparable with EBITDA as defined by other companies. The Company believes EBITDA is commonly used by financial analysts and others in the industries in which the Company operates and, thus, provides useful information to investors. The Company's non-GAAP measure of EBITDA excludes incomes taxes, depreciation and amortization, and interest expense which the Company incurs in the normal course of business. Accordingly, the calculation has limitations depending on its use.

Following is a reconciliation of EBITDA to the Company's net income (in millions):

	<u>2004</u>	<u>2003</u>
Net income .....	\$33.4	\$33.0
Add back:		
Income taxes .....	7.9	5.4
Depreciation and amortization .....	34.2	34.6
Interest expense .....	15.4	15.8
EBITDA .....	<u>\$90.9</u>	<u>\$88.8</u>



## **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

Market risk is the potential economic loss that may result from adverse changes in the fair value of financial instruments. The Company's financial results could be impacted by changes in interest rates, foreign currency exchange rates and commodity price changes. The Company uses financial instruments to hedge its exposure to fluctuations in interest rates and foreign currency exchange rates. The Company does not use derivatives for speculative or trading purposes.

The Company's long-term debt portfolio consists of fixed-rate and variable-rate instruments and is managed to reduce the overall cost of borrowing while also minimizing the effect of changes in interest rates on near-term earnings. In August 2002, the Company entered into an interest rate swap agreement that effectively converts its 7.13% fixed-rate Senior Notes to variable-rate debt. The underlying debt is currently being repaid in equal installments with a corresponding reduction in the interest rate swap. This interest swap agreement had a positive impact on 2004 earnings, reducing interest expense by \$0.2 million.

The Company's primary interest rate risk is derived from its outstanding variable-rate debt obligations. At December 31, 2004, the result of a hypothetical 1% increase in the average cost of the Company's variable-rate debt, including debt subject to the interest rate swap agreement, would have reduced annual pretax profit by \$1.1 million.

At December 31, 2004, the fair value of the Company's fixed-rate debt was \$173.3 million, compared with its carrying amount of \$154.2 million. The Company estimates that a 1% decrease in market interest rates at December 31, 2004 would have increased the fair value of the Company's fixed-rate debt to \$178.5 million.

The Company has manufacturing, sales and distribution facilities around the world and thus makes investments and conducts business transactions denominated in various currencies. The currencies of the locations where the Company's business operations are conducted are the U.S. dollar, Singapore dollar, euro, British pound, Mexican peso, Brazilian real, Canadian dollar, Swedish krona, Chinese yuan and Thai baht. The Company is exposed primarily to U.S. dollar-denominated financial instruments at its international locations. A 10% adverse change in all currencies at December 31, 2004 would have resulted in a \$0.3 million loss in the fair value of those financial instruments.

Foreign currency commitments and transaction exposures are managed at the operating units as an integral part of their businesses in accordance with a corporate policy that addresses acceptable levels of foreign currency exposures. The Company does not hedge its foreign currency net investment exposure. To reduce foreign currency exposure, management maintains the majority of foreign cash and short-term investments in local currency and uses forward currency contracts for other U.S. dollar-denominated assets in an effort to reduce the effect of the volatility of changes in foreign exchange rates on the income statement. In weaker currency countries, such as Brazil and Mexico, management assesses the strength of these currencies relative to the U.S. dollar and may elect during periods of local currency weakness to invest excess cash in U.S. dollar-denominated instruments.

The Company's exposure to commodity price changes relates to certain manufacturing operations that utilize high-grade steel spring wire, titanium and other specialty metals. The Company attempts to manage its exposure to increases in those prices through its procurement and sales practices.

**Item 8. Financial Statements and Supplementary Data**

**BARNES GROUP INC.**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(Dollars in thousands, except per share data)

	Years Ended December 31,		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net sales .....	\$ <b>994,709</b>	\$ 890,818	\$ 784,036
Cost of sales .....	<b>654,572</b>	576,835	530,004
Selling and administrative expenses .....	<b>284,223</b>	261,983	209,192
	<u><b>938,795</b></u>	<u>838,818</u>	<u>739,196</u>
Operating income .....	<b>55,914</b>	52,000	44,840
Other income .....	<b>2,145</b>	3,337	3,651
Interest expense .....	<b>15,390</b>	15,840	14,823
Other expenses .....	<b>1,310</b>	1,129	557
Income before income taxes .....	<b>41,359</b>	38,368	33,111
Income taxes .....	<b>7,958</b>	5,353	5,960
Net income .....	<u><b>\$ 33,401</b></u>	<u>\$ 33,015</u>	<u>\$ 27,151</u>
Per common share:			
Net income:			
Basic .....	\$ <b>1.45</b>	\$ 1.54	\$ 1.45
Diluted .....	<b>1.40</b>	1.49	1.42
Dividends .....	<b>0.80</b>	0.80	0.80
Average common shares outstanding:			
Basic .....	<b>23,105,853</b>	21,475,336	18,750,442
Diluted .....	<b>23,836,463</b>	22,101,560	19,185,332

See accompanying notes.

**BARNES GROUP INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(Dollars in thousands)

	December 31,	
	2004	2003
<b>Assets</b>		
Current assets		
Cash and cash equivalents . . . . .	\$ 36,335	\$ 49,788
Accounts receivable, less allowances (2004 – \$2,727; 2003 – \$3,188) . . . . .	138,941	119,130
Inventories . . . . .	122,894	109,780
Deferred income taxes . . . . .	25,515	22,319
Prepaid expenses . . . . .	12,244	11,083
Total current assets . . . . .	335,929	312,100
Deferred income taxes . . . . .	25,070	22,790
Property, plant and equipment, net . . . . .	166,284	154,088
Goodwill . . . . .	221,856	220,118
Other intangible assets, net . . . . .	125,447	61,923
Other assets . . . . .	53,737	59,801
Total assets . . . . .	\$928,323	\$830,820
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities		
Notes payable . . . . .	\$ —	\$ 10,000
Accounts payable . . . . .	135,983	97,155
Accrued liabilities . . . . .	79,039	78,520
Long-term debt – current . . . . .	9,410	6,804
Total current liabilities . . . . .	224,432	192,479
Long-term debt . . . . .	258,635	224,213
Accrued retirement benefits . . . . .	85,685	77,455
Other liabilities . . . . .	17,686	14,934
Commitments and Contingencies (Notes 8 and 17)		
Stockholders' equity		
Common stock - par value \$0.01 per share		
Authorized: 60,000,000 shares		
Issued (2004 and 2003 – 24,419,694) . . . . .	244	244
Additional paid-in capital . . . . .	102,678	100,592
Treasury stock, at cost (2004 – 1,190,949 shares; 2003 – 1,552,006 shares) . . . . .	(31,541)	(34,652)
Retained earnings . . . . .	284,213	270,030
Accumulated other non-owner changes to equity . . . . .	(13,709)	(14,475)
Total stockholders' equity . . . . .	341,885	321,739
Total liabilities and stockholders' equity . . . . .	\$928,323	\$830,820

See accompanying notes.

**BARNES GROUP INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Dollars in thousands)

	Years Ended December 31,		
	2004	2003	2002
<b>Operating activities:</b>			
Net income	\$ 33,401	\$ 33,015	\$ 27,151
Adjustments to reconcile net income to net cash from operating activities:			
Depreciation and amortization	34,177	34,571	33,626
Gain on disposition of property, plant and equipment	(96)	(945)	(222)
Changes in assets and liabilities, net of the effects of acquisitions:			
Accounts receivable	(11,566)	(2,747)	5,692
Inventories	(6,891)	(4,668)	9,843
Prepaid expenses	(909)	(2,361)	3,095
Accounts payable	2,043	7,410	(12,626)
Accrued liabilities	4,714	(1,868)	(87)
Deferred income taxes	(6,615)	2,336	(15,941)
Long-term pension asset	1,923	(6,294)	(1,647)
Other	4,000	1,620	5,527
Net cash provided by operating activities	<u>54,181</u>	<u>60,069</u>	<u>54,411</u>
<b>Investing activities:</b>			
Proceeds from disposition of property, plant and equipment	4,970	3,220	3,592
Capital expenditures	(28,509)	(18,397)	(19,367)
Business acquisitions, net of cash acquired	(17,720)	(61,142)	(31,189)
Revenue sharing program payments	(32,000)	(17,500)	—
Other	(2,305)	(1,670)	(1,003)
Net cash used by investing activities	<u>(75,564)</u>	<u>(95,489)</u>	<u>(47,967)</u>
<b>Financing activities:</b>			
Net change in other borrowings	(11,976)	5,933	(2,935)
Payments on long-term debt	(20,804)	(41,064)	(61,004)
Proceeds from the issuance of long-term debt	58,000	56,000	48,000
Proceeds from the issuance of common stock	4,534	52,562	3,792
Common stock repurchases	(3,498)	(206)	(1,147)
Dividends paid	(18,509)	(17,564)	(15,018)
Proceeds from the sale of swaps	—	—	4,702
Other	(1,504)	(1,917)	(752)
Net cash provided (used) by financing activities	<u>6,243</u>	<u>53,744</u>	<u>(24,362)</u>
Effect of exchange rate changes on cash flows	1,687	3,109	(2,595)
(Decrease) increase in cash and cash equivalents	<u>(13,453)</u>	<u>21,433</u>	<u>(20,513)</u>
Cash and cash equivalents at beginning of year	49,788	28,355	48,868
Cash and cash equivalents at end of year	<u>\$ 36,335</u>	<u>\$ 49,788</u>	<u>\$ 28,355</u>

Supplemental Disclosure of Cash Flow Information:

Non-cash financing and investing activities include the 2004 acquisition of \$47.0 million of intangible assets and the recognition of the corresponding liabilities in connection with the aftermarket RSPs, the 2003 issuance of \$16.5 million of treasury stock in connection with the Kar acquisition, the 2003 acquisition of a \$17.0 million intangible asset and the recognition of a corresponding liability in connection with an RSP, the 2002 issuance of \$3.0 million of treasury stock and \$2.0 million in installment payments in connection with the Spectrum acquisition.

See accompanying notes.

**BARNES GROUP INC.**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**  
(Dollars in thousands)

	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Non-Owner Changes to Equity	Total Stockholders' Equity
January 1, 2002	\$220	\$ 54,874	\$(76,903)	\$243,369	\$(22,723)	\$198,837
Comprehensive income:						
Net income				27,151		27,151
Foreign currency translation adjustments, net					1,236	1,236
Unrealized losses on hedging activities, net					(502)	(502)
Minimum pension liability adjustment, net					(16,822)	(16,822)
Comprehensive income				27,151	(16,088)	11,063
Dividends paid				(15,018)		(15,018)
Stock issued for the purchase of Spectrum		(358)	3,358			3,000
Stock contribution to Barnes Group Foundation		(90)	488			398
Common stock repurchases			(1,147)			(1,147)
Employee stock plans		(915)	12,357	(355)		11,087
December 31, 2002	220	53,511	(61,847)	255,147	(38,811)	208,220
Comprehensive income:						
Net income				33,015		33,015
Foreign currency translation adjustments, net					18,071	18,071
Unrealized gains on hedging activities, net					555	555
Minimum pension liability adjustment, net					5,710	5,710
Comprehensive income				33,015	24,336	57,351
Dividends paid				(17,564)		(17,564)
Stock issued for the purchase of Kar		(2,064)	18,561			16,497
Stock issued, equity offering	24	42,188				42,212
Stock contribution to Barnes Group Foundation		168	232			400
Common stock repurchases			(206)			(206)
Employee stock plans		6,789	8,608	(568)		14,829
December 31, 2003	244	100,592	(34,652)	270,030	(14,475)	321,739
Comprehensive income:						
Net income				33,401		33,401
Foreign currency translation adjustments, net					9,637	9,637
Unrealized gains on hedging activities, net					31	31
Minimum pension liability adjustment, net					(8,902)	(8,902)
Comprehensive income				33,401	766	34,167
Dividends paid				(18,509)		(18,509)
Common stock repurchases			(3,498)			(3,498)
Employee stock plans		2,086	6,609	(709)		7,986
December 31, 2004	<u>\$244</u>	<u>\$102,678</u>	<u>\$(31,541)</u>	<u>\$284,213</u>	<u>\$(13,709)</u>	<u>\$341,885</u>

See accompanying notes.



## BARNES GROUP INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(All dollar amounts included in the notes are stated in thousands except per share data and the tables in Note 16.)

#### 1. Summary of Significant Accounting Policies

**General:** The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Certain reclassifications have been made to prior year amounts to conform to the current year presentation.

**Consolidation:** The accompanying consolidated financial statements include the accounts of the Company and all of its subsidiaries. Intercompany transactions and account balances have been eliminated. The Company accounts for its 45% investment in the common stock of NASCO, a suspension spring company jointly owned with NHK Spring Co., Ltd. of Japan since 1986, under the equity method. The NASCO investment of \$10,042 and \$10,397 as of December 31, 2004 and 2003, respectively, is included in other assets. Other income in the accompanying income statements includes income of \$700, \$1,309 and \$1,090 for the years 2004, 2003 and 2002, respectively, from the Company's investment in NASCO. The Company received dividends from NASCO totaling \$323, \$192 and \$44 in 2004, 2003 and 2002, respectively.

**Revenue recognition:** Sales and related cost of sales are recognized when products are shipped or delivered to customers depending upon when title and risk of loss have passed.

**Cash and cash equivalents:** Cash in excess of operating requirements is invested in short-term, highly liquid, income-producing investments. All highly liquid investments purchased with an original maturity of three months or less are cash equivalents. Cash equivalents are carried at cost which approximates fair value.

**Inventories:** Inventories are valued at the lower of cost or market. The last-in, first-out ("LIFO") method was used to determine the cost of the majority of U.S. inventories, which represent 61% of total inventories. The cost of all other inventories was determined using the first-in, first-out ("FIFO") method. Loss provisions, if any, on contracts are established when estimable. Loss provisions are based on the projected excess of manufacturing costs over the net revenues of the products or group of related products under contract.

**Property, plant and equipment:** Property, plant and equipment is stated at cost. Depreciation is recorded over estimated useful lives, ranging from 20 to 50 years for buildings and three to 17 years for machinery and equipment. The straight-line method of depreciation was adopted for all property, plant and equipment placed in service after March 31, 1999. For property, plant and equipment placed into service prior to April 1, 1999, depreciation is calculated using accelerated methods.

**Goodwill:** Goodwill represents the excess purchase price over the net assets of companies acquired in business combinations. In accordance with SFAS No. 142, "Goodwill and Other Intangible Assets," effective January 1, 2002, goodwill is not being amortized, as the lives are considered indefinite. Goodwill is subject to impairment testing in accordance with SFAS No. 142 on an annual basis or more frequently if an event or change in circumstances indicates that the fair value of a reporting unit has been reduced below its carrying value. Based on this assessment, there was no goodwill impairment in 2004, 2003 or 2002.

**Revenue Sharing Programs:** The Company, through its Barnes Aerospace business, participates in aftermarket RSPs under which the Company receives an exclusive right to supply designated aftermarket parts over the life of the related aircraft engine program. As consideration, the Company pays participation fees, which are recorded as long-lived intangible assets, and are recognized as a reduction to sales over the life of the

## BARNES GROUP INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

program. The recoverability of the intangible asset is subject to significant estimates about future revenues related to the program's aftermarket parts. Management updates revenue projections periodically, which includes comparing actual experience against projected revenue and obtaining industry projections. The potential exists that actual revenues will not meet expectations due to a change in market conditions. A shortfall in future revenues may indicate an impairment of the intangible asset. The Company evaluates the remaining useful life of this asset to determine whether events and circumstances warrant a revision to the remaining period of amortization. The intangible asset is reviewed for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. See Note 5.

**Derivatives:** The Company has manufacturing, sales and distribution facilities around the world and thus makes investments and conducts business transactions denominated in various currencies. The Company is also exposed to fluctuations in interest rates and commodity price changes. These financial exposures are monitored and managed by the Company as an integral part of its risk management program. The Company uses financial instruments to hedge its exposure to fluctuations in interest rates and foreign currency exchange rates but does not use derivatives for speculative or trading purposes. The Company also does not use derivatives to manage commodity exposures or hedge its foreign currency net investment exposure.

SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended, requires that all derivative instruments be recorded on the balance sheet at fair value. Foreign currency contracts may qualify as fair value hedges of unrecognized firm commitments, or cash flow hedges of recognized assets and liabilities or anticipated transactions. Changes in the fair market value of derivatives are recorded directly to earnings or accumulated other non-owner changes to equity, depending on the designation. Amounts recorded to accumulated other non-owner changes to equity are reclassified to earnings in a manner that matches the earnings impact of the hedged transaction. Any ineffective portion, or amounts related to contracts that are not designated as hedges, are recorded directly to earnings. The Company's policy for classifying cash flows from derivatives is to report the cash flows consistent with the underlying instrument.

At December 31, 2004 and 2003, the fair value of derivatives held by the Company was a net liability of \$742 and a net asset of \$109, respectively. During 2002, net losses of \$279 included in accumulated other non-owner changes to equity were reclassified to earnings. No such amounts were reclassified in 2003 or 2004. Amounts in accumulated other non-owner changes to equity expected to be reclassified to earnings within the next year are not material. During 2004, gains or losses related to hedge ineffectiveness were immaterial. Foreign currency transaction (losses) gains included in income were \$(695), \$(654) and \$1,172 in 2004, 2003 and 2002, respectively.

**Foreign currency translation:** The majority of the Company's international subsidiaries use the local currency as the functional currency. Assets and liabilities of international operations are translated at year-end rates of exchange; revenues and expenses are translated at average annual rates of exchange. The resulting translation gains or losses are reflected in accumulated other non-owner changes to equity within stockholders' equity.

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**Stock-Based Compensation:** The Company has stock-based employee compensation plans, which are described more fully in Note 14. The Company accounts for those plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees," and its related interpretations. The following table illustrates the effect on net income and net income per share if the Company had applied the fair value recognition provisions of SFAS No. 123, "Accounting for Stock-Based Compensation," to stock-based employee compensation.

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net income, as reported . . . . .	<b>\$33,401</b>	\$33,015	\$27,151
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects . . . . .	<b>2,252</b>	2,121	1,589
Deduct: Stock-based employee compensation expense determined under fair value-based method for all awards, net of related tax effects . . . . .	<b>(6,651)</b>	(5,958)	(5,970)
Pro forma net income . . . . .	<u><b>\$29,002</b></u>	<u>\$29,178</u>	<u>\$22,770</u>
Net income per share:			
Basic – as reported . . . . .	<b>\$ 1.45</b>	\$ 1.54	\$ 1.45
Basic – pro forma . . . . .	<b>1.26</b>	1.36	1.21
Diluted – as reported . . . . .	<b>1.40</b>	1.49	1.42
Diluted – pro forma . . . . .	<b>1.21</b>	1.32	1.18

The average fair value of options granted was \$4.66 in 2004, \$3.98 in 2003 and \$5.37 in 2002. The fair value of each stock option grant on the date of grant was estimated using the Black-Scholes option-pricing model based on the following weighted-average assumptions:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Risk-free interest rate . . . . .	<b>2.53%</b>	2.10%	3.69%
Expected life . . . . .	<b>2.7 years</b>	3.0 years	4.0 years
Expected volatility . . . . .	<b>30%</b>	33%	35%
Expected dividend yield . . . . .	<b>3.00%</b>	3.37%	3.51%

**2. Acquisitions**

During the past three years, the Company has acquired a number of businesses. The results of operations of these acquired businesses have been included in the consolidated results from their respective acquisition dates. The purchase prices for these acquisitions have been allocated to tangible and intangible assets and liabilities of the businesses based upon estimates of their respective fair values.

In 2002, the Company completed two acquisitions for a total purchase price of \$34,029. Consideration for the acquisitions included cash of approximately \$31,029, of which \$1,000 was paid in April 2004, and issuance of 119,048 shares of Barnes Group common stock (at a market value at the time of the acquisition of approximately \$3,000). In February 2002, the Company acquired substantially all of the manufacturing assets of Seeger-Orbis from TransTechnology Corporation. Seeger-Orbis is a leading manufacturer of retaining rings used in a number of transportation and industrial applications. The Seeger-Orbis acquisition expanded Associated Spring's product line and geographic reach, particularly into the automotive and industrial manufacturing markets of Western Europe. In April 2002, the Company acquired Spectrum, a manufacturer of plastic injection-molded components and assemblies that are used primarily in the telecommunications, electronics, medical and consumer goods industries. Spectrum, which is included in the Associated Spring segment, provides Associated Spring with the capability of providing more complete product solutions with discrete or continuous metal-in-plastic and plastic-on-metal injection-molded components.

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Pro forma operating results are not presented for the 2002 acquisitions since the results would not be significantly different than historical results.

On February 6, 2003, the Company acquired Kar Products, LLC and certain assets of a related company, A. & H. Bolt & Nut Company Ltd. (“Kar”). The acquisition expanded both the geographic scope and product offerings of the Barnes Distribution segment. Kar had a diversified customer base operating in all 50 states of the U.S., Puerto Rico, and Canada, which further enhanced Barnes Distribution’s leadership position within the maintenance, repair, operating and production (“MROP”) market and international presence. The adjusted purchase price of \$76,148, excluding transaction costs, was financed through a combination of \$3,651 of cash, \$56,000 of debt and \$16,497 of Barnes Group common stock (823,506 shares based upon an average market value preceding the acquisition date).

The Company utilized third-party valuations of certain assets acquired with Kar. The purchase price including transaction costs of \$1,491 was \$77,639. The following table summarizes the estimated fair values of the assets acquired and liabilities assumed:

	<u>February 6, 2003</u>
Current assets . . . . .	\$ 26,258
Property, plant and equipment . . . . .	2,544
Intangible and other assets . . . . .	15,979
Goodwill . . . . .	<u>54,884</u>
Total assets acquired . . . . .	<u>99,665</u>
Current liabilities . . . . .	(20,077)
Other liabilities . . . . .	<u>(1,949)</u>
Total liabilities assumed . . . . .	<u>(22,026)</u>
Net assets acquired . . . . .	<u>\$ 77,639</u>

The following table reflects the pro forma operating results of the Company for the year ended December 31, 2002 which gives effect to the acquisition of Kar as if it had occurred on January 1, 2002. The pro forma results are based on assumptions that the Company believes are reasonable under the circumstances. The pro forma results are not necessarily indicative of the operating results that would have occurred if the acquisition had been effective January 1, 2002, nor are they intended to be indicative of results that may occur in the future. The pro forma information does not include the effect of synergies and cost reduction initiatives related to the acquisition. The underlying unaudited pro forma information includes the historical financial results of the Company and Kar adjusted for the amortization expense associated with the assets acquired, the Company’s financing arrangements and certain purchase accounting adjustments. Pro forma results are not presented for 2003, since the results would not be significantly different than historical results.

	<u>2002</u>
Net sales . . . . .	\$906,132
Income before income taxes . . . . .	39,166
Net income . . . . .	30,784
Per common share:	
Basic . . . . .	\$ 1.57
Diluted . . . . .	1.54

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

On September 17, 2004, the Company acquired DE-STA-CO Manufacturing. DE-STA-CO is a world leader in the design and manufacture of specialty spring products--reed valves and shock discs. This acquisition expands the presence of the Associated Spring segment in these markets. The purchase price of this acquisition was \$17.8 million.

The Company reported \$8.5 million in sales from DE-STA-CO from the acquisition date through December 31, 2004. Pro forma operating results for the 2004 acquisition are not presented since the results would not be significantly different than historical results.

**3. Inventories**

Inventories at December 31 consisted of:

	<u>2004</u>	<u>2003</u>
Finished goods .....	\$ 84,296	\$ 76,425
Work-in-process .....	21,157	20,331
Raw materials and supplies .....	17,441	13,024
	<u>\$122,894</u>	<u>\$109,780</u>

Inventories valued by the LIFO method aggregated \$75,126 and \$73,839 at December 31, 2004 and 2003, respectively. If LIFO inventories had been valued using the FIFO method, they would have been \$14,069 and \$12,401 higher at those dates.

**4. Property, Plant and Equipment**

Property, plant and equipment at December 31 consisted of:

	<u>2004</u>	<u>2003</u>
Land .....	\$ 10,965	\$ 9,659
Buildings .....	83,556	77,953
Machinery and equipment .....	390,311	364,930
	<u>484,832</u>	452,542
Less accumulated depreciation .....	(318,548)	(298,454)
	<u>\$ 166,284</u>	<u>\$ 154,088</u>

Depreciation expense was \$29,529, \$30,178 and \$29,304 for 2004, 2003 and 2002, respectively.

**5. Goodwill and Other Intangible Assets**

**Goodwill:** The following table sets forth the change in the carrying amount of goodwill for each reportable segment and the Company:

	<u>Associated Spring</u>	<u>Barnes Aerospace</u>	<u>Barnes Distribution</u>	<u>Total Company</u>
January 1, 2003 .....	\$76,377	\$30,900	\$ 57,317	\$164,594
Goodwill acquired, net of adjustments .....	78	(114)	55,322	55,286
Foreign currency translation .....	—	—	238	238
December 31, 2003 .....	76,455	30,786	112,877	220,118
Goodwill acquired, net of adjustments .....	1,143	—	(1,240)	(97)
Foreign currency translation .....	—	—	1,835	1,835
December 31, 2004 .....	<u>\$77,598</u>	<u>\$30,786</u>	<u>\$113,472</u>	<u>\$221,856</u>



**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

In 2003, goodwill acquired related primarily to the acquisition of Kar in February 2003. In 2004, the Barnes Distribution goodwill was decreased as a result of adjustments to assumed liabilities from the Kar acquisition. The Associated Spring goodwill acquired resulted from the acquisition of DE-STA-CO in the third quarter of 2004. The purchase price allocation of this acquisition is subject to the finalization of the valuation of certain assets and liabilities. As a result, preliminary amounts assigned to assets and liabilities are subject to revision in future periods.

Of the \$221,856 of goodwill at December 31, 2004, \$134,039 is tax deductible.

**Other Intangible Assets:** Other intangible assets at December 31 consisted of:

	Range of Life-Years	2004		2003	
		Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Amortized intangible assets:					
Revenue sharing programs . . . . .	Up to 30	\$ 98,500	\$ (633)	\$34,500	\$ (48)
Customer lists/relationships . . . . .	10-18	12,260	(2,199)	11,500	(1,037)
Patents, trademarks/trade names . . . . .	5-30	11,128	(2,078)	11,128	(1,382)
Other . . . . .	4.5-10	1,750	(416)	600	(295)
		<u>123,638</u>	<u>(5,326)</u>	<u>57,728</u>	<u>(2,762)</u>
Foreign currency translation . . . . .		2,046	—	1,830	—
Unamortized intangible pension asset . . . . .		5,089	—	5,127	—
Other intangible assets . . . . .		<u>\$130,773</u>	<u>\$(5,326)</u>	<u>\$64,685</u>	<u>\$(2,762)</u>

Amortization of intangible assets for the year ended December 31, 2004 was \$2,564. In each of the years 2005 through 2009, the estimated aggregated amortization expenses will be approximately \$3,400.

During 2003 and 2004, the Company entered into multiple aftermarket RSP agreements with a major aerospace customer under which the Company is the sole supplier of certain aftermarket parts. As consideration, the Company agreed to pay participation fees to the customer. The Company has recorded the participation fees as long-lived intangible assets which will be recognized as a reduction to sales over the life of the related aircraft engine program. In 2003, the Company entered into the first and second RSP agreements and agreed to pay participation fees of \$34,500, of which \$17,500 was paid in 2003, \$15,000 was paid in 2004 and \$2,000 will be paid in 2005. During 2004, the Company entered into three additional agreements and agreed to pay participation fees aggregating \$64,000, of which \$17,000 was paid in 2004, and the remaining \$47,000 will be paid in 2005.

In connection with the acquisition of Kar in 2003, the Company recorded intangible assets including \$11,500 related to customer lists / relationships and \$800 related to trademarks and trade names.

**6. Accrued Liabilities**

Accrued liabilities at December 31 consisted of:

	2004	2003
Payroll and other compensation . . . . .	\$33,083	\$21,285
Pension and other postretirement benefits . . . . .	10,715	13,427
Income taxes currently payable . . . . .	8,542	7,612
Business reorganization . . . . .	1,386	6,036
Other . . . . .	25,313	30,160
	<u>\$79,039</u>	<u>\$78,520</u>

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**7. Business Reorganization**

Business reorganization accruals are included in accrued liabilities. In connection with the acquisition of the assets of Curtis Industries, Inc. in May 2000, the Company incurred certain exit costs. The Company recorded total costs of \$5,842 related primarily to lease consolidation costs, facility closure costs and reductions in personnel. During 2004, \$162 of the accrual was utilized through lease payments and, in addition, the accrual was adjusted for a \$563 reduction in the net lease obligations. As of December 31, 2004 and 2003, the remaining balances of \$428 and \$1,153, respectively, related to future lease payments, which will continue through the remaining terms of the leases ending in 2013.

During the fourth quarter of 2001, the Company recorded pre-tax charges of \$4,842, primarily for Associated Spring, related to the closure of an Associated Spring plant in Texas. During 2003, the Company recorded a \$539 reduction in the carrying value of the Texas plant held for sale. During the first quarter of 2004, the Company sold the Texas plant.

In connection with the Kar acquisition in February 2003, the Company recorded certain costs. The Company's reorganization plan included combining the headquarters functions and consolidating warehousing and distribution centers. The Company recorded total costs of \$11,740, of which \$7,042 were reflected as assumed liabilities in the allocation of the purchase price to net assets acquired and \$4,698 were recorded as expense, \$1,935 in 2004 and \$2,763 in 2003. The accruable integration costs were primarily related to lease consolidations and employee severance payments for reductions primarily in administrative and warehouse personnel. During 2004, \$3,383 of the accrual was utilized and, in addition, the accrual was adjusted by \$417 for reductions in severance and net lease obligations. As of December 31, 2004 and 2003, the remaining balances of \$958 and \$4,758, respectively, related to future lease payments.

**8. Debt and Commitments**

Long-term debt and notes payable at December 31 consisted of:

	2004		2003	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
7.13% Notes, including interest swap adjustment . . . . .	\$ 6,241	\$ 6,391	\$ 12,673	\$ 13,191
7.66% Notes . . . . .	24,500	26,367	24,500	28,018
7.80% Notes . . . . .	45,500	53,880	45,500	55,344
9.34% Notes, including deferred gain . . . . .	62,577	68,942	63,478	69,397
2.15% Notes . . . . .	23,245	23,139	22,330	22,414
Revolving credit agreement . . . . .	98,000	98,000	54,000	54,000
Industrial revenue bonds . . . . .	7,000	7,000	7,000	7,000
Borrowings under lines of credit . . . . .	—	—	10,000	10,000
Capital leases . . . . .	982	982	1,536	1,536
	<b>268,045</b>	<b>284,701</b>	241,017	260,900
Less current maturities . . . . .	(9,410)	(9,410)	(16,804)	(16,804)
Long-term debt . . . . .	<b>\$258,635</b>	<b>\$275,291</b>	\$224,213	\$244,096

The 7.13% Notes are payable in four equal annual installments of \$6,250 that began on December 5, 2002. The 7.66% Notes are payable in 2007. The 7.80% Notes are payable in three equal annual installments beginning in 2008. The 9.34% Notes are payable in three equal installments beginning in 2006.

## BARNES GROUP INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In July 2001, the Company borrowed Yen 3,000 million, under a term loan facility with The Development Bank of Singapore Limited. The loan is payable in ten semi-annual installments of Yen 87.3 million that began on December 28, 2001, with a balloon payment of Yen 2,214.3 million due June 30, 2006. The borrowing has a stated interest rate of 2.15%. In connection with the Yen borrowing, the Company entered into a series of forward currency exchange contracts, a form of derivative, that effectively convert the Yen principal payments to Singapore dollar payments. The forward contracts are cash flow hedges, and increase the effective interest rate of the borrowing to 5.16%. On December 30, 2002, the Company prepaid the next four consecutive semi-annual installments totaling Yen 349.2 million (U.S. equivalent \$2,917) and also paid \$475 in settlement of the corresponding forward contracts. As a result of this prepayment, there are no scheduled principal payments due on the Yen note until June 2005. The fair value of the remaining forward contracts at December 31, 2004 was a liability of approximately \$886.

The fair values of these Notes are determined using discounted cash flows based upon the Company's estimated current interest cost for similar types of borrowings. The amounts do not include the fair value of the swap and the deferred gain on the terminated swap. The carrying values of other long-term debt and notes payable approximate their fair market values.

During 2004, the Company amended and restated its revolving credit agreement with eleven participating banks. The amended and restated revolving credit agreement extended the maturity date until June 2009, increased the borrowing facility from \$150,000 to \$175,000, decreased the interest rate to LIBOR plus a spread ranging from 0.8% to 1.4% depending on the Company's debt ratio at the time of the borrowing, and amended various financial and restrictive covenants. The Company had borrowed \$98,000 under these facilities at December 31, 2004. The interest rate on these borrowings was 3.41% and 2.63% on December 31, 2004 and 2003, respectively. The Company also pays a facility fee on the total commitment amount of the revolving credit at a rate ranging from 0.20% to 0.35%, depending on the Company's debt ratio at the end of each calendar quarter.

In addition, the Company has available approximately \$15,000 in uncommitted short-term bank credit lines, of which \$10,000 was borrowed at December 31, 2003. There were no borrowings under the credit lines at December 31, 2004. The interest rate on the December 31, 2003 borrowings was 3.00%.

The Industrial Revenue Bonds, due in 2008, have variable interest rates. The interest rates on this borrowing were 2.05% and 1.15% at December 31, 2004 and 2003, respectively.

The Company's long-term debt portfolio consists of fixed-rate and variable-rate instruments and is managed to reduce the overall cost of borrowing and to mitigate fluctuations in interest rates. Interest rate fluctuations result in changes in the market value of the Company's fixed-rate debt. In August 2002, the Company entered into an interest rate swap agreement, a form of derivative, which effectively converts the 7.13% fixed-rate Senior Notes to variable-rate debt with an interest rate equal to LIBOR plus 425 basis points. The effective rate of the borrowing was 6.90% on December 31, 2004. This interest rate contract is a fair value hedge, which is effective in offsetting fluctuations in the fair value of the debt instrument. The gains and losses on the interest rate contract are recorded to earnings and are offset by gains and losses recorded on the re-measurement of the underlying debt. The fair value of the swap is determined based upon current market prices and was a liability of approximately \$9 at December 31, 2004.

The Company assumed \$2,750 of debt related to capital leases with the acquisition of Spectrum in April 2002 of which \$982 remained at December 31, 2004. The weighted average interest rate on these borrowings was 7.93% and 7.81% at December 31, 2004 and 2003, respectively. This debt has an interest rate equalization prepayment penalty.

## BARNES GROUP INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In August 2002, the Company terminated its \$60,000 interest rate swap dated July 2001. This agreement had converted \$60,000 of fixed-rate 9.34% debt to floating rate debt at LIBOR plus 276 basis points. The Company received a payment of \$5,286 at termination. The payment represented \$4,702 for the fair value of the swap plus \$584 for accrued interest at the time of termination. The accumulated adjustment to the carrying value of the debt is being amortized in accordance with the terms of the underlying debt, which effectively reduces the fixed rate of the debt to 7.84%.

Long-term debt and notes payable, excluding the fair value of the swap and the deferred gain on the terminated swap, is payable as follows: \$8,518 in 2005, \$41,865 in 2006, \$44,595 in 2007, \$42,167 in 2008, \$113,167 in 2009 and \$15,165 thereafter.

In addition, the Company had outstanding letters of credit totaling \$8,728 at December 31, 2004.

The Company's debt agreements contain financial covenants that require the maintenance of interest coverage and leverage ratios, and minimum levels of net worth. The agreements also place certain restrictions on indebtedness, capital expenditures and investments by the Company and its subsidiaries. Such covenants and restrictions determine the amount of borrowings, dividend payments or treasury stock purchases the Company can make.

The most restrictive borrowing capacity covenant in any agreement requires the Company to maintain a ratio of Total Debt to EBITDA, as defined in the revolving credit agreement, of not more than 3.25 times. This ratio requirement will decrease to 2.75 times at June 30, 2008. The actual ratio at December 31, 2004 was 2.70 times and would have allowed \$53,539 of additional borrowings. The debt agreements also require the Company to maintain a minimum level of net worth. Under the most restrictive covenant, net worth must not be less than \$260,000 plus 50% of Consolidated Net Income for each fiscal year beginning after December 31, 2003. As of December 31, 2004, the Company's actual net worth, as defined by the debt agreements, of \$339,740 exceeded the required level of minimum net worth of \$276,701 by \$63,039.

Interest paid was \$15,990, \$15,028 and \$9,496 in 2004, 2003 and 2002, respectively. The amount paid in 2002 reflects the \$4,702 of cash received for the swap termination. Interest capitalized was \$314, \$85 and \$128 in 2004, 2003 and 2002, respectively, and is being depreciated over the lives of the related fixed assets.

#### **9. Pension and Other Postretirement Benefits**

The Company has defined contribution plans covering a majority of the employees of Barnes Aerospace, certain field sales employees of Barnes Distribution's U.S. operation, employees of Spectrum, certain employees of Barnes Distribution Canada, union employees of Associated Spring, and employees in Sweden. Company contributions under these plans are based primarily on the performance of the business units and employee compensation. The Spectrum defined contribution plan was merged into the Retirement Savings Plan on May 30, 2003. Contribution expense under these defined contribution plans was \$2,843, \$2,331 and \$2,048 in 2004, 2003 and 2002, respectively. Most U.S. salaried and non-union hourly employees are eligible to participate in the Retirement Savings Plan. See Note 14 for further discussion of this plan.

Defined benefit pension plans cover a majority of the Company's worldwide employees at Associated Spring and the Company's Corporate Office and a substantial portion of the employees at Barnes Distribution. Plan benefits for salaried and non-union hourly employees are based on years of service and average salary. Plans covering union hourly employees provide benefits based on years of service. The Company funds U.S. pension costs in accordance with the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The Company acquired DE-STA-CO in 2004. DE-STA-CO's Troy Division pension plan is included

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

in these disclosures. Certain DE-STA-CO pension assets were transferred and liabilities were assumed by the Company. The Company acquired Kar in February 2003. The Kar Products Retirement Income Plan, a qualified defined benefit pension plan for Kar Products' sales employees, is also included in these disclosures.

In accordance with SFAS No. 87, "Employers' Accounting for Pensions," the Corporation has recorded a non-cash minimum pension liability adjustment for underfunded plans of \$24,060 at December 31, 2003, which increased to \$35,169 at December 31, 2004, representing the excess of the accumulated benefit obligation ("ABO") over the fair value of plan assets. The minimum pension liability adjustment is included in accrued liabilities and accrued retirement benefits on the balance sheet.

Recognition of the minimum pension liability resulted in an after-tax benefit of \$5,710 in 2003 and an after-tax charge of \$8,902 in 2004 which are included in accumulated other non-owner changes to equity, which is part of shareholders' equity. The principal cause of the accrual for a minimum pension liability adjustment was the decline in the value, in certain years prior to 2003, of equity securities held by the pension trusts as well as a significant decline in the discount rate.

The Company provides certain other medical, dental and life insurance postretirement benefits for a majority of its retired employees in the U.S. and Canada. It is the Company's practice to fund these benefits as incurred. The Company's accumulated postretirement benefit obligation related to its retiree health care benefit plans decreased \$3,010 as a result of the adoption of FASB Staff Position ("FSP") No. 106-2, "Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003 ("Act")" which became effective in the third quarter of 2004. Pursuant to FSP No. 106-2, the decrease in the benefit obligation has been treated as an actuarial gain and was reflected retroactively as of December 31, 2003. Additionally, the Company recorded an adjustment of \$399 to decrease its net periodic benefit cost in 2004 as a result of the subsidy provided for in the Act.

The Company uses December 31 as the measurement date for the majority of its plans.

A reconciliation of the beginning benefit obligations to the ending benefit obligations follows:

	<u>Pensions</u>		<u>Other Postretirement Benefits</u>	
	<u>2004</u>	<u>2003</u>	<u>2004</u>	<u>2003</u>
Benefit obligation, January 1 .....	<b>\$331,266</b>	\$291,831	<b>\$87,845</b>	\$84,040
Service cost .....	<b>10,265</b>	8,915	<b>1,182</b>	840
Interest cost .....	<b>19,577</b>	19,647	<b>4,806</b>	5,463
Amendments .....	<b>330</b>	—	—	—
Actuarial loss (gain) .....	<b>14,120</b>	14,665	<b>(2,360)</b>	6,025
Benefits paid .....	<b>(19,711)</b>	(19,211)	<b>(8,754)</b>	(9,270)
Acquisitions .....	<b>2,731</b>	9,443	—	—
Curtailments (gain) loss .....	<b>(2,328)</b>	43	<b>(1,636)</b>	—
Participant contributions .....	<b>286</b>	243	<b>997</b>	477
Special termination benefits .....	<b>370</b>	—	—	—
Foreign exchange rate changes .....	<b>3,588</b>	5,690	<b>164</b>	270
Benefit obligation, December 31 .....	<b><u>\$360,494</u></b>	<u>\$331,266</u>	<b><u>\$82,244</u></b>	<u>\$87,845</u>
Projected benefit obligations related to plans with benefit obligations in excess of assets .....	<b>\$159,652</b>	\$135,456		
Accumulated benefit obligations related to plans with accumulated benefit obligations in excess of assets .....	<b>\$153,297</b>	\$128,788		
Accumulated benefit obligations of all plans .....	<b>\$329,644</b>	\$303,020		

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

A reconciliation of the beginning fair value of plan assets to the ending fair value of plan assets follows:

	<u>Pensions</u>	
	<u>2004</u>	<u>2003</u>
Fair value of plan assets, January 1 . . . . .	<b>\$312,465</b>	\$247,299
Actual return on plan assets . . . . .	<b>30,116</b>	66,439
Acquisitions . . . . .	<b>2,704</b>	7,429
Company contributions . . . . .	<b>4,583</b>	6,122
Plan participants' contributions . . . . .	<b>286</b>	243
Benefits paid . . . . .	<b>(19,711)</b>	(19,211)
Foreign exchange rate changes . . . . .	<b>2,654</b>	4,144
Fair value of plan assets, December 31 . . . . .	<b><u>\$333,097</u></b>	<u>\$312,465</u>
Assets related to plans with projected benefit obligations in excess of plan assets . . . . .	<b>\$116,932</b>	\$ 99,167
Assets related to plans with accumulated benefit obligations in excess of plan assets . . . . .	<b>\$116,932</b>	\$ 99,167

A reconciliation of the funded status of the plans with the amounts recognized in the accompanying balance sheets is set forth below:

	<u>Pensions</u>		<u>Other Postretirement Benefits</u>	
	<u>2004</u>	<u>2003</u>	<u>2004</u>	<u>2003</u>
Funded status . . . . .	<b>\$(27,397)</b>	\$(18,801)	<b>\$(82,244)</b>	\$(87,845)
Adjustments for unrecognized:				
Net actuarial losses . . . . .	<b>56,293</b>	42,037	<b>21,977</b>	26,885
Prior service costs . . . . .	<b>5,633</b>	7,025	<b>2,914</b>	3,518
Net asset at transition . . . . .	<b>(15)</b>	(27)	—	—
Prepaid (accrued) benefit cost . . . . .	<b><u>\$ 34,514</u></b>	<u>\$ 30,234</u>	<b><u>\$(57,353)</u></b>	<u>\$(57,442)</u>

Amounts recognized in the accompanying balance sheets consist of:

	<u>Pensions</u>		<u>Other Postretirement Benefits</u>	
	<u>2004</u>	<u>2003</u>	<u>2004</u>	<u>2003</u>
Other assets . . . . .	<b>\$ 37,107</b>	\$ 38,887	\$ —	\$ —
Other intangible assets . . . . .	<b>5,089</b>	5,127	—	—
Accrued liabilities . . . . .	<b>(2,130)</b>	(3,627)	<b>(8,585)</b>	(9,800)
Accrued retirement benefits . . . . .	<b>(35,632)</b>	(28,080)	<b>(48,768)</b>	(47,642)
Accumulated other non-owner changes to equity . . . . .	<b>30,080</b>	17,927	—	—
Prepaid (accrued) benefit cost . . . . .	<b><u>\$ 34,514</u></b>	<u>\$ 30,234</u>	<b><u>\$(57,353)</u></b>	<u>\$(57,442)</u>

U.S. pension plan deferred gains and losses that fall outside of a 10% corridor are amortized over 8.7 years or the remaining average service life of active participants, whichever is shorter.



**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Weighted-average assumptions used to determine benefit obligations at December 31,

	<u>2004</u>	<u>2003</u>
Discount rate . . . . .	<b>5.73%</b>	6.25%
Increase in compensation . . . . .	<b>4.40%</b>	4.50%

The weighted-average asset allocations for all pension plan assets at December 31, 2004 and 2003 by asset category are as follows:

<u>Asset Category</u>	<u>Target</u>	<u>2004</u>	<u>2003</u>
Equity securities . . . . .	70%	<b>69%</b>	66%
Fixed income securities . . . . .	20%	<b>21%</b>	24%
Real estate . . . . .	5%	<b>5%</b>	4%
Other, including cash . . . . .	5%	<b>5%</b>	6%
Total . . . . .	<u>100%</u>	<u><b>100%</b></u>	<u>100%</u>

The investment strategy of the plans is to generate a consistent total investment return sufficient to pay present and future plan benefits to retirees, while minimizing the long-term cost to the Company. Target allocations for asset categories are used to earn a reasonable rate of return, provide required liquidity and minimize the risk of large losses. Targets are adjusted, as necessary within certain guidelines, to reflect trends and developments within the overall investment environment.

Equity securities in the pension plans include Company stock in the amounts of \$13,345 and \$20,584 at December 31, 2004 and 2003, respectively. The decrease in 2004 over 2003 is primarily due to the decrease in the market price of the Company's stock and a decrease in the number of such shares owned by the plans.

The Company expects to contribute approximately \$3,329 to the pension plans in 2005.

The following benefit payments, which reflect future service, are expected to be paid:

	<u>Pensions</u>	<u>Other Postretirement Benefits</u>
2005 . . . . .	\$ 21,467	\$ 7,315
2006 . . . . .	21,280	6,804
2007 . . . . .	21,292	6,867
2008 . . . . .	21,584	6,744
2009 . . . . .	21,898	6,682
Years 2010-2014 . . . . .	<u>116,331</u>	<u>31,294</u>
Total . . . . .	<u><b>\$223,852</b></u>	<u><b>\$65,706</b></u>

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Pension and other postretirement benefit expenses consisted of the following:

	Pensions			Other Postretirement Benefits		
	2004	2003	2002	2004	2003	2002
Service cost	\$ 10,265	\$ 8,915	\$ 8,034	\$1,282	\$ 890	\$ 776
Interest cost	19,577	19,647	18,622	4,806	5,463	5,231
Expected return on plan assets	(31,253)	(29,862)	(30,153)	—	—	—
Amortization of transition assets	(13)	(94)	(191)	—	—	—
Recognized (gains) losses	708	358	(1,499)	877	1,153	731
Curtailement	176	58	(572)	144	—	—
Prior service cost (benefits)	1,200	1,200	1,169	459	(406)	(718)
Special termination benefits	370	—	—	—	—	—
Net periodic benefit cost (credit)	<u>\$ 1,030</u>	<u>\$ 222</u>	<u>\$ (4,590)</u>	<u>\$7,568</u>	<u>\$7,100</u>	<u>\$6,020</u>

Weighted-average assumptions used to determine net benefit expense for years ended December 31,

	2004	2003	2002
Discount rate	6.25%	6.75%	7.25%
Long-term rate of return	9.50%	9.50%	9.75%
Increase in compensation	4.50%	4.50%	4.50%

The expected long-term rate of return is based on the actual historical rates of return of published indices that are used to measure the plans' target asset allocation. The historical rates are then discounted to consider fluctuations in the historical rates as well as potential changes in the investment environment.

The Company's accumulated postretirement benefit obligations, exclusive of pensions, take into account certain cost-sharing provisions. The annual rate of increase in the cost of covered benefits (i.e., healthcare cost trend rate) is assumed to be 11% and 13% at December 31, 2004 and 2003, respectively, decreasing gradually to a rate of 5% at December 31, 2013. A one percentage point change in the assumed healthcare cost trend rate would have the following effects:

	One Percentage Point Increase	One Percentage Point Decrease
Effect on postretirement benefit obligation	\$2,031	\$(1,847)
Effect on postretirement benefit cost	139	(127)

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**10. Income Taxes**

The components of income before income taxes and the income tax provision follow:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Income before income taxes:			
U.S. . . . .	\$ 4,710	\$ 8,690	\$ 7,120
International . . . . .	<u>36,649</u>	<u>29,678</u>	<u>25,991</u>
Income before income taxes . . . . .	<u>\$41,359</u>	<u>\$38,368</u>	<u>\$33,111</u>
Income tax provision:			
Current:			
U.S. – federal . . . . .	\$ 2,743	\$ (21)	\$ 4,870
U.S. – state . . . . .	1,094	746	2,213
International . . . . .	<u>9,284</u>	<u>5,439</u>	<u>4,050</u>
	<u>13,121</u>	<u>6,164</u>	<u>11,133</u>
Deferred:			
U.S. – federal . . . . .	(3,278)	2,022	(4,350)
U.S. – state . . . . .	(840)	(861)	(1,751)
International . . . . .	<u>(1,045)</u>	<u>(1,972)</u>	<u>928</u>
	<u>(5,163)</u>	<u>(811)</u>	<u>(5,173)</u>
Income tax provision . . . . .	<u>\$ 7,958</u>	<u>\$ 5,353</u>	<u>\$ 5,960</u>

Deferred income tax assets and liabilities at December 31 consisted of the tax effects of temporary differences related to the following:

	<u>Assets</u>		<u>Liabilities</u>	
	<u>2004</u>	<u>2003</u>	<u>2004</u>	<u>2003</u>
Allowance for doubtful accounts . . . . .	\$ 612	\$ 679	\$ —	\$ —
Depreciation and amortization . . . . .	(9,493)	(11,698)	4,210	3,544
Inventory valuation . . . . .	9,565	9,211	338	698
Other postretirement/postemployment costs . . . . .	21,933	21,898	(472)	(395)
Tax loss carryforwards . . . . .	31,534	28,183	(163)	(467)
Pension . . . . .	6,322	9	2,157	2,150
Goodwill . . . . .	(8,776)	(6,030)	365	—
Swedish tax incentive . . . . .	3,830	2,359	7,039	5,474
Other . . . . .	<u>4,067</u>	<u>6,782</u>	<u>(276)</u>	<u>(283)</u>
	<u>59,594</u>	<u>51,393</u>	<u>13,198</u>	<u>10,721</u>
Valuation allowance . . . . .	(9,009)	(6,284)	—	—
	<u>\$50,585</u>	<u>\$ 45,109</u>	<u>\$13,198</u>	<u>\$10,721</u>
Current deferred income taxes . . . . .	\$25,515	\$ 22,319	\$ 389	\$ 644
Non-current deferred income taxes . . . . .	<u>25,070</u>	<u>22,790</u>	<u>12,809</u>	<u>10,077</u>
	<u>\$50,585</u>	<u>\$ 45,109</u>	<u>\$13,198</u>	<u>\$10,721</u>

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

SFAS No. 109, “Accounting for Income Taxes”, requires that deferred tax assets be reduced by a valuation allowance, if based on all available evidence, it is more likely than not that the deferred tax asset will not be realized. Available evidence includes the reversal of existing taxable temporary differences, future taxable income exclusive of temporary differences, taxable income in carryback years and tax planning strategies. The change in the valuation allowance in 2004 was an increase of \$2,725, primarily related to the uncertainty regarding the realization of foreign and state net operating losses due to the uncertainty regarding future profitability in foreign jurisdictions as well as brief carryforward periods. Management believes that sufficient income will be earned in the future to realize the remaining net deferred tax assets. The Company has tax loss carryforwards of \$88,248 with remaining carryforward periods ranging from one year to unlimited. In addition, the Company has tax credit carryforwards of \$4,206 with remaining carryforward periods ranging from one year to unlimited.

The Company has not recognized deferred income taxes on \$193,729 of undistributed earnings of its international subsidiaries, since such earnings are considered to be reinvested indefinitely. If the earnings were distributed in the form of dividends, the Company would be subject, in certain cases, to both U.S. income taxes and foreign withholding taxes. Determination of the amount of this unrecognized deferred income tax liability is not practicable. While management is currently evaluating the impact of the one-time favorable foreign dividend provisions recently enacted as part of the American Jobs Creation Act of 2004, it is currently management’s intention to continue to indefinitely reinvest undistributed foreign earnings of its international subsidiaries and, accordingly, no deferred tax liability has been recorded in connection therewith.

A reconciliation of the U.S. federal statutory income tax rate to the consolidated effective income tax rate follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
U.S. federal statutory income tax rate .....	35.0%	35.0%	35.0%
State taxes (net of federal benefit) .....	—	0.3	0.9
Foreign losses without tax benefit .....	2.0	1.4	3.6
Foreign operations taxed at lower rate .....	(13.1)	(13.0)	(12.0)
NASCO equity income .....	—	(0.5)	(0.4)
Export sales benefit .....	(1.1)	(1.1)	(1.3)
ESOP dividend .....	(1.9)	(2.3)	(5.8)
Valuation allowance reversal .....	—	(3.0)	(4.0)
Resolution of Brazilian tax matter .....	—	(2.6)	—
Other .....	(1.7)	(0.2)	2.0
Consolidated effective income tax rate .....	<u>19.2%</u>	<u>14.0%</u>	<u>18.0%</u>

Income taxes paid, net of refunds, were \$9,055, \$4,922 and \$1,906 in 2004, 2003 and 2002, respectively.

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**11. Comprehensive Income**

Comprehensive income includes all changes in equity during a period except those resulting from investment by, and distributions to, stockholders. For the Company, comprehensive income includes net income and other non-owner changes to equity, net of taxes. The components of accumulated other non-owner changes to equity, net of taxes, follow:

	<u>Foreign Currency Translation Adjustments</u>	<u>Unrealized Gains/(Losses) On Hedging Activities</u>	<u>Minimum Pension Liability Adjustments</u>	<u>Total</u>
Balance, January 1, 2002 .....	\$(22,061)	\$ (662)	\$ —	\$(22,723)
2002 Change .....	<u>1,236</u>	<u>(502)</u>	<u>(16,822)</u>	<u>(16,088)</u>
December 31, 2002 .....	(20,825)	(1,164)	(16,822)	(38,811)
2003 Change .....	<u>18,071</u>	<u>555</u>	<u>5,710</u>	<u>24,336</u>
December 31, 2003 .....	(2,754)	(609)	(11,112)	(14,475)
2004 Change .....	<u>9,637</u>	<u>31</u>	<u>(8,902)</u>	<u>766</u>
December 31, 2004 .....	<u>\$ 6,883</u>	<u>\$ (578)</u>	<u>\$(20,014)</u>	<u>\$(13,709)</u>

**12. Common Stock**

In 2004, 2003 and 2002, 497,970 shares, 704,384 shares and 414,944 shares, respectively, of common stock were issued from treasury for the exercise of stock options, various other incentive awards, purchases by the Employee Stock Purchase Plan and matching contributions to the Barnes Group Inc. Retirement Savings Plan. Additionally, in 2003, 823,506 and 11,817 shares were issued from treasury in connection with the acquisition of Kar and for the payment of charitable contributions to Barnes Group Foundation, respectively, and in 2002, 119,048 shares and 17,500 shares were issued from treasury, in connection with the acquisition of Spectrum and for the payment of charitable contributions to Barnes Group Foundation, respectively. In 2004, 2003 and 2002, the Company acquired 136,912 shares, 9,995 shares and 56,888 shares, respectively, of the Company's common stock at a cost of \$3,498, \$206 and \$1,147, respectively. These amounts exclude shares issued and reacquired in connection with certain stock-for-stock exercises under the Company's stock option plans. These reacquired shares were placed in treasury.

On May 21, 2003, the Company issued 2,381,925 shares of its common stock as a result of a follow-on public offering at \$19.00 per share. Proceeds to the Company, net of expenses incurred, of \$42,212 were used to pay down a portion of the indebtedness incurred in connection with the Kar acquisition. The offering also included 823,506 shares sold by an existing stockholder, GC-Sun Holdings II, L.P. The Company did not receive any of the proceeds from the sale of the shares owned by GC-Sun Holdings.

The Company has a shareholder rights plan under which each share of common stock contains one right ("Right") that entitles the holder to purchase one one-hundredth of a share of Series A Junior Participating Preferred Stock for \$200. The Rights generally will not become exercisable unless and until, among other things, any person or group acquires beneficial ownership of 35% or more of the outstanding stock. The Rights are generally redeemable at \$0.01 per Right at any time until 10 days following a public announcement that a 35% or greater position in the Company's common stock has been acquired and will expire, unless earlier redeemed or exchanged, on December 23, 2006. If, following the acquisition of 35% or more of the outstanding shares of the Company's common stock, the Company is acquired in a merger or other business combination, or 50% or more of the Company's assets or earning power is sold or transferred, each outstanding Right becomes exercisable for common stock or other securities of the acquiring entity having a value of twice the exercise price of the Right.

## BARNES GROUP INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### 13. Preferred Stock

At December 31, 2004 and 2003, the Company had 3,000,000 shares of preferred stock authorized, none of which were outstanding.

#### 14. Stock Plans

Most U.S. salaried and non-union hourly employees are eligible to participate in the Company's 401(k) plan. The Retirement Savings Plan provides for the investment of employer and employee contributions in the Company's common stock and also provides other investment alternatives for employee contributions. The Company discontinued providing a guaranteed minimum rate of return on employee contributions to the Retirement Savings Plan for investment in the Company's common stock after March 31, 2001. However, the Company continued to guarantee a minimum rate of return on certain pre-April 1, 2001 assets of the plan. Effective October 10, 2003, the Plan was modified to reduce the vesting period and to provide that participants are no longer required to invest pre-April 1, 2001 employee contributions in the Barnes Group Stock Fund. In addition, the Plan was modified so that the Company match, after vesting, may also be invested in any of the Plan's investment options. Since the participant is no longer restricted to investing in Company stock and has the flexibility of multiple investment options, the minimum guaranteed rate of return on the Barnes Group Stock Fund was eliminated effective with the October 10, 2003 plan modification. The Company contributes an amount equal to 50% of employee contributions up to 6% of eligible compensation, plus any guarantee payments prior to October 10, 2003. The Company expenses all contributions made to the Retirement Savings Plan. The Company recognized expense of \$3,166, \$2,954 and \$2,990 in 2004, 2003 and 2002, respectively. As of December 31, 2004, the Retirement Savings Plan held 2,732,527 shares of the Company's common stock.

The Company has an Employee Stock Purchase Plan ("ESPP") under which eligible employees may elect to have up to the lesser of \$21,250 or 10% of base compensation deducted from payroll for the purchase of the Company's common stock at 85% of market value on the date of purchase. The maximum number of shares which may be purchased under the ESPP is 2,025,000. The number of shares purchased under the ESPP was 64,808, 57,993 and 62,741 in 2004, 2003 and 2002, respectively. As of December 31, 2004, 133,726 additional shares may be purchased.

The 1991 Barnes Group Stock Incentive Plan (the "1991 Plan") authorized the granting of incentives to executive officers, directors and key employees in the form of stock options, stock appreciation rights, incentive stock rights and performance unit awards. Options granted under the 1991 Plan that terminated without being exercised became available for future grants under the 1991 Plan. A maximum of 1,028,293 common shares are subject to issuance under this plan after December 31, 2004. As of December 31, 2003, there were 311,752 shares available for future grant under the 1991 Plan. Effective April 14, 2004, all shares available and not used under the 1991 Plan became available for future grants under the 2004 Plan.

The Barnes Group Inc. Employee Stock and Ownership Program (the "2000 Plan") was approved on April 12, 2000, and subsequently amended on April 10, 2002 by the Company's stockholders. The 2000 Plan permitted the granting of incentive stock options, nonqualified stock options, restricted stock awards, performance share or cash unit awards and stock appreciation rights, or any combination of the foregoing, to eligible employees to purchase up to 3,450,000 shares of the Company's common stock. Such shares were authorized and reserved. Options granted under the 2000 Plan that terminated without being exercised became available for future grants under the 2000 Plan. A maximum of 2,016,883 common shares are subject to issuance under this plan as of December 31, 2004. As of December 31, 2003, there were 158,417 shares available for future grants under the 2000 Plan. Effective April 14, 2004, all shares available and not used under the 2000 Plan became available for future grants under the 2004 Plan.



**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The 2004 Barnes Group Stock and Incentive Award Plan (the “2004 Plan”) was approved on April 14, 2004 by the Company’s stockholders. The 2004 Plan permits the issuance of incentive awards, stock option grants and stock appreciation rights to eligible participants to purchase up to 950,000 shares of common stock. Also available for grants under the Plan are the number of shares of common stock reserved for grants of awards under the 1991 and 2000 Plans but not used as of April 14, 2004 and the number of shares of common stock that become available under the terms of the 1991, 2000 and 2004 Plans, including shares subject to awards which are forfeited, settled for cash, expire or otherwise terminate without issuance of the shares. A maximum of 2,079,182 common shares are subject to issuance under the 2004 Plan after December 31, 2004. As of December 31, 2004, there were 1,001,792 shares available for future grants under the 2004 Plan.

In 1998, 60,000 incentive units and 75,000 stock options were granted under the Key Executive Stock Plan (“Key Plan”). There are no additional shares available for future grant. A maximum of 75,000 common shares are subject to issuance under the Key Plan after December 31, 2004.

Compensation cost related to these plans was \$3,659, \$3,448 and \$2,588 in 2004, 2003 and 2002, respectively. The Company recorded, in additional paid-in capital, tax benefits related to stock options of \$3,569, \$2,486 and \$1,148 in 2004, 2003 and 2002, respectively.

Data relating to options granted under these plans follow:

	2004		2003		2002	
	Number Of Shares	Average Exercise Price	Number Of Shares	Average Exercise Price	Number Of Shares	Average Exercise Price
Outstanding, January 1 . . . . .	3,477,827	\$21.69	3,947,891	\$20.80	3,374,792	\$19.61
Granted . . . . .	1,496,049	27.24	1,062,546	21.95	1,242,843	22.66
Exercised . . . . .	(1,513,534)	20.39	(1,291,229)	18.50	(616,348)	17.81
Cancelled . . . . .	(72,418)	24.07	(241,381)	25.30	(53,396)	23.13
Outstanding, December 31 . . . . .	<u>3,387,924</u>	<u>24.67</u>	<u>3,477,827</u>	21.69	<u>3,947,891</u>	20.80
Exercisable, December 31 . . . . .	<u>2,574,605</u>	<u>24.95</u>	2,157,177	22.54	2,065,666	21.29

The following table summarizes information about stock options outstanding at December 31, 2004:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Of Shares	Average Remaining Life (Years)	Average Exercise Price	Number Of Shares	Average Exercise Price
\$14 to \$21	660,627	6.47	\$18.62	395,060	\$18.35
\$21 to \$24	688,413	6.52	22.95	417,268	22.94
\$24 to \$27	1,328,893	5.70	26.20	1,291,956	26.19
\$27 to \$34	709,991	6.66	29.11	470,321	28.87

Incentive stock rights under the 1991 Plan, restricted stock unit awards under the 2000 Plan, restricted stock unit awards under the 2004 Plan and incentive stock unit awards under the Key Plan (collectively, “Rights”) entitle the holder to receive, without payment, one share of the Company’s common stock after the expiration of the vesting period. Certain Rights are also subject to the satisfaction of established performance goals. Additionally, holders of Rights are credited with dividend equivalents, which are converted into additional Rights, and certain holders of restricted stock units are paid dividend equivalents when dividends are paid to other stockholders. All Rights have up to a seven-year vesting period. In 2004, 205,000 Rights were granted;

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

11,392 Rights were credited to holders for dividend equivalents; 95,140 Rights, which include dividend equivalents, were converted to an equivalent number of shares of common stock; and 46,135 Rights were forfeited. In 2004, \$391 of dividend equivalents were paid in cash. As of December 31, 2004, there were 809,642 Rights outstanding.

Under the Non-Employee Director Deferred Stock Plan, as further amended, each non-employee director is granted the right to receive 6,000 shares of the Company's common stock upon retirement. There were 6,000 shares granted to new directors in 2002. In 2004, \$43 of dividend equivalents were paid in cash. There are 54,000 shares reserved for issuance under this plan.

Total shares reserved for issuance under all stock plans aggregated 5,387,084 at December 31, 2004.

**15. Average Shares Outstanding**

Net income per common share is computed in accordance with SFAS No. 128, "Earnings per Share." Basic net income per share is calculated using the weighted average number of common shares outstanding during the year. Diluted net income per share reflects the assumed exercise and conversion of all dilutive securities. Shares held by the Retirement Savings Plan are considered outstanding for both basic and diluted net income per share. There are no adjustments to net income for purposes of computing income available to common stockholders for the years ended December 31, 2004, 2003 and 2002. A reconciliation of the average number of common shares outstanding used in the basic and diluted EPS computation follows:

	<u>Average Common Shares Outstanding</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Basic .....	<b>23,105,853</b>	21,475,336	18,750,442
Dilutive effect of:			
Stock options .....	<b>361,438</b>	323,315	288,036
Stock incentive units .....	<b>222,871</b>	230,419	127,431
Restricted stock units .....	<b>117,969</b>	48,953	—
Non-Employee Director Stock Plan ..	<b>28,332</b>	23,537	19,423
Diluted .....	<b><u>23,836,463</u></b>	<u>22,101,560</u>	<u>19,185,332</u>

As of December 31, 2004, there were 3,387,924 stock options outstanding, of which 2,551,671 were considered dilutive and 836,253 were anti-dilutive. As of December 31, 2003, there were 3,477,827 stock options outstanding, of which 3,416,156 were considered dilutive and 61,671 were anti-dilutive.

**16. Information on Business Segments**

The Company's reportable segments are strategic business groups that offer different products and services. Each segment is managed separately because each business requires different technology and marketing strategies. Specifically, the Company operates three reportable business segments, as follows:

**Barnes Distribution** is an international distributor of MROP supplies and offers an array of service options built around a vendor-managed inventory business model, and designed to improve the productivity of its customers while substantially reducing procurement and transaction costs. Additionally, it distributes die and nitrogen gas springs, mechanical struts and standard parts such as coil and flat springs, most of which are manufactured by Associated Spring. Barnes Distribution, formerly known as Bowman Distribution, was formed from the combination of the Curtis and Kar acquisitions and Bowman Distribution. Barnes Distribution operates

## BARNES GROUP INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

and markets its products primarily in the U.S. and Canada. However, it also distributes products in 31 other countries through distribution/sales centers located in the United Kingdom, France, Ireland, Spain, Mexico, Singapore, Brazil and China.

**Associated Spring** manufactures precision mechanical and nitrogen gas springs, manifold systems, retaining rings, reed valves, shock discs, injection-molded plastic components, and other close-tolerance engineered metal components that are used in a variety of industries including, electronics, medical devices, telecommunications, consumer goods and transportation markets. Associated Spring's parts are sold in the U.S. and through its international subsidiaries. International manufacturing operations are located in Brazil, Canada, China, the United Kingdom, Germany, Mexico, Singapore, Sweden and Thailand.

**Barnes Aerospace** produces precision machined and fabricated components and assemblies for commercial and military aircraft and industrial gas turbines. Additionally, it provides jet engine components overhaul and repair services for many of the world's commercial airlines and the United States military. Barnes Aerospace participates in aftermarket RSPs with a large aerospace manufacturer under which it receives the exclusive right to supply designated aftermarket parts for the life of the related aircraft engine program. Barnes Aerospace's operations are primarily in the U.S., with additional locations in Europe and Singapore. Its markets are located primarily in the U.S., Europe and Asia.

The Company evaluates the performance of its reportable segments based on the operating profit of the respective businesses, which includes net sales, cost of sales, selling and administrative expenses and certain components of other income and other expenses, as well as the allocation of corporate overhead expenses.

The equity income from the Company's investment in the NASCO joint venture is incorporated into the segment results of Associated Spring. Sales between the business segments and between the geographic areas in which the businesses operate are accounted for on the same basis as sales to unaffiliated customers. Additionally, revenues are attributed to countries based on location of manufacturing or distribution facilities.

During the fourth quarter of 2004, the Company recorded pre-tax charges of \$2,184 related to actions to offset higher raw material costs at Associated Spring and \$1,298 to enable the realization of benefits from the Kar integration and improved customer service levels at Barnes Distribution. These charges related mainly to personnel reductions whereby the workforces at Associated Spring and Barnes Distribution will be reduced by approximately 4% and 3%, respectively. These charges have been recorded in selling and administrative expenses in the accompanying consolidated statement of income and will be paid in 2005.

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The following tables (dollars shown in millions) set forth information about the Company's operations by its three reportable business segments and by geographic area.

**Operations by Reportable Business Segment**

	<u>Barnes Distribution</u>	<u>Associated Spring</u>	<u>Barnes Aerospace</u>	<u>Other</u>	<u>Total Company</u>
Revenues					
<b>2004</b> .....	<b>\$424.8</b>	<b>\$373.5</b>	<b>\$205.9</b>	<b>\$ (9.5)</b>	<b>\$994.7</b>
2003 .....	400.7	333.1	165.7	(8.7)	890.8
2002 .....	286.7	321.7	183.0	(7.4)	784.0
Operating profit					
<b>2004</b> .....	<b>\$ 13.8</b>	<b>\$ 22.5</b>	<b>\$ 20.7</b>	<b>\$ —</b>	<b>\$ 57.0</b>
2003 .....	16.5	26.8	10.7	—	54.0
2002 .....	7.5	28.1	10.8	—	46.4
Assets					
<b>2004</b> .....	<b>\$291.3</b>	<b>\$305.4</b>	<b>\$226.4</b>	<b>\$105.2</b>	<b>\$928.3</b>
2003 .....	276.2	295.6	155.0	104.0	830.8
2002 .....	168.5	283.8	123.9	76.3	652.5
Depreciation and amortization					
<b>2004</b> .....	<b>\$ 10.6</b>	<b>\$ 15.0</b>	<b>\$ 7.4</b>	<b>\$ 1.2</b>	<b>\$ 34.2</b>
2003 .....	10.5	15.2	8.2	0.7	34.6
2002 .....	7.7	15.5	9.2	1.2	33.6
Capital expenditures					
<b>2004</b> .....	<b>\$ 13.0</b>	<b>\$ 10.0</b>	<b>\$ 3.4</b>	<b>\$ 2.1</b>	<b>\$ 28.5</b>
2003 .....	8.8	7.2	2.2	0.2	18.4
2002 .....	7.4	6.5	4.5	1.0	19.4

Notes:

One customer accounted for 12%, 10% and 11% of the Company's total revenue in 2004, 2003 and 2002, respectively.

"Other" revenues represent the elimination of intersegment sales, the majority of which are sales by Associated Spring to Barnes Distribution. The operating profit of Associated Spring includes income from its equity investment in NASCO of \$0.7 million, \$1.3 million and \$1.1 million in 2004, 2003 and 2002, respectively.

The assets of Associated Spring include the NASCO investment of \$10.0 million, \$10.4 million and \$9.9 million in 2004, 2003 and 2002, respectively.

"Other" assets include corporate controlled assets, the majority of which are cash and deferred tax assets.

A reconciliation of the total reportable segments' operating profit to income before income taxes follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Operating profit .....	<b>\$ 57.0</b>	\$ 54.0	\$ 46.4
Interest income .....	<b>1.1</b>	1.4	0.9
Interest expense .....	<b>(15.4)</b>	(15.8)	(14.8)
Other (expense) income .....	<b>(1.3)</b>	(1.2)	0.6
Income before income taxes .....	<b><u>\$ 41.4</u></b>	<u>\$ 38.4</u>	<u>\$ 33.1</u>

**BARNES GROUP INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**Operations by Geographic Area**

	<u>Domestic</u>	<u>International</u>	<u>Other</u>	<u>Total Company</u>
Revenues				
<b>2004</b> .....	<b>\$748.6</b>	<b>\$286.7</b>	<b>\$(40.6)</b>	<b>\$994.7</b>
2003 .....	676.8	246.9	(32.9)	890.8
2002 .....	606.6	200.8	(23.4)	784.0
Long-lived assets				
<b>2004</b> .....	<b>\$319.9</b>	<b>\$247.4</b>	<b>\$ —</b>	<b>\$567.3</b>
2003 .....	327.0	168.9	—	495.9
2002 .....	269.7	121.6	—	391.3

**Notes:**

International sales derived from any one country did not exceed 10% of the Company's total revenues.

Long-lived assets located in any one country that exceeded 10% of the Company's total long-lived assets were as follows: \$97.9 million of intangible assets related to the RSPs recorded in Singapore and \$57.1 million of goodwill related to an investment in Sweden.

"Other" revenues represent the elimination of intercompany sales between geographic locations, of which approximately 53% were sales from international locations to domestic locations.

**17. Commitments and Contingencies**

**Leases**

The Company has various noncancellable operating leases for buildings, office space and equipment. As discussed in Note 8, the Company assumed certain debt related to capital leases with the acquisition of Spectrum of which \$982 remained at December 31, 2004. Rent expense was \$13,273, \$12,579 and \$10,257 for 2004, 2003 and 2002, respectively. Minimum rental commitments under noncancellable leases in years 2005 through 2009 are \$10,158, \$7,915, \$4,476, \$2,815 and \$2,440 respectively, and \$8,338 thereafter.

**Product Warranties**

The Company provides product warranties in connection with the sale of products. From time to time, the Company is subject to customer claims with respect to product warranties. A customer of Associated Spring has asserted that the Company is responsible for product warranty liabilities currently approximating \$2,700, which amount includes the value of replacement parts and consequential damages. The Company's stated warranty is limited to replacement parts, the cost of which is not deemed significant. Management cannot predict the final outcome of this claim at this time. In addition, Associated Spring is a subcontractor to an original equipment manufacturer ("OEM") which has alleged that the Company's product did not comply with specifications and has resulted in a warranty recall campaign. The Company is currently investigating its compliance with the OEM's part specifications. While no claim has been asserted, management expects the OEM will seek some payment from the Company. The amount of any such payment cannot be estimated, and management cannot predict the final outcome at this time.

**Income Taxes**

In the normal course of business, the Company and its subsidiaries are examined by various tax authorities, including the Internal Revenue Service ("IRS"). The IRS is currently reviewing the Company for certain tax years. The Company currently has one disputed IRS tax issue with a potential tax cost of approximately \$16,500. The Company and its advisors believe the Company will prevail on this issue. Any additional impact on the Company's liability for income taxes cannot presently be determined, but the Company believes the outcome will not have a material impact on its financial statements.

## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders  
of Barnes Group Inc.:

We have completed an integrated audit of Barnes Group Inc.'s 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2004 and audits of its 2003 and 2002 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

### Consolidated financial statements and financial statement schedule

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of changes in stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Barnes Group Inc. and its subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule of valuation and qualifying accounts presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

### Internal control over financial reporting

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A, that the Company maintained effective internal control over financial reporting as of December 31, 2004 based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control—Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in



accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As described in Management's Report on Internal Control Over Financial Reporting, management has excluded DE-STA-CO from its assessment of internal control over financial reporting as of December 31, 2004 because it was acquired by the Company in a purchase business combination during 2004. We have also excluded DE-STA-CO from our audit of internal control over financial reporting. DE-STA-CO's total assets and net sales represent 2.1% and 0.9%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2004.

/s/ PRICEWATERHOUSECOOPERS LLP

PricewaterhouseCoopers LLP

Hartford, Connecticut

February 25, 2005

**QUARTERLY DATA (UNAUDITED)***(Dollars in millions, except per share data)*

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter <sup>(2)</sup>	Full Year
<b>2004</b>					
Net sales	\$ 247.2	\$ 252.0	\$ 243.9	\$ 251.6	\$ 994.7
Gross profit <sup>(1)</sup>	85.2	87.7	84.0	83.2	340.1
Operating income	15.8	17.7	14.8	7.6	55.9
Net income	9.6	11.3	9.2	3.3	33.4
Per common share:					
Net income:					
Basic	\$ .42	\$ .49	\$ .40	\$ .14	\$ 1.45
Diluted	.40	.47	.39	.14	1.40
Dividends	.20	.20	.20	.20	.80
Market prices (high - low)	\$33.57-26.01	\$29.58-25.73	\$29.14-24.20	\$28.46-24.80	\$33.57-24.20
<b>2003</b>					
Net sales	\$ 218.7	\$ 229.6	\$ 222.2	\$ 220.3	\$ 890.8
Gross profit <sup>(1)</sup>	76.5	83.3	78.5	75.7	314.0
Operating income	13.2	16.0	14.0	8.8	52.0
Net income	7.4	9.7	9.0	6.9	33.0
Per common share:					
Net income:					
Basic	\$ .38	\$ .46	\$ .40	\$ .31	\$ 1.54
Diluted	.37	.46	.38	.29	1.49
Dividends	.20	.20	.20	.20	.80
Market prices (high - low)	\$22.07-18.55	\$21.85-19.32	\$26.11-21.95	\$33.85-26.45	\$33.85-18.55

(1) Sales less cost of sales.

(2) The fourth quarter, 2004 results include approximately \$4.5 million, or \$0.12 per share, of discrete charges principally related to severance costs and inventory and facilities charges. These charges were partially offset by \$0.7 million of benefits related to the reduction of lease obligations on idle facilities.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

**Item 9A. Controls and Procedures****Disclosure Controls and Procedures.**

Management, including the Company's President and Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures as of the end of the period covered by this report. Based upon, and as of the date of, that evaluation, the President and Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective, in all material respects, to ensure that information required to be disclosed in the reports the Company files and submits under the Securities Exchange Act of 1934 (the "Exchange Act") is recorded, processed, summarized and reported as and when required.

## **Management's Report on Internal Control Over Financial Reporting**

Management is responsible for establishing and maintaining adequate control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of management, including the principal executive officer and principal financial officer, the Company conducted an assessment of the effectiveness of its internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The scope of such assessment did not include DE-STA-CO, which was acquired by the Company in a purchase business combination on September 17, 2004. DE-STA-CO's total assets and net sales represent approximately 2.1% and 0.9%, respectively, of the accompanying consolidated financial statement amounts as of and for the year ended December 31, 2004. Based on the assessment under the framework in *Internal Control—Integrated Framework*, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2004.

PricewaterhouseCoopers LLP ("PwC"), the independent registered public accounting firm that audited the financial statements included in this Annual Report, has audited management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2004 as stated in their report which appears on page 49 of this Annual Report on Form 10-K.

## **Item 9B. Other Information**

On December 8, 2004 the Compensation and Management Development Committee of the Company approved the following actions pursuant to the Company's 2004 Stock and Incentive Award Plan, which has been previously approved by the Company's stockholders, in connection with the appointment of Gregory F. Milzcik as President, Associated Spring. Mr. Milzcik was a named executive officer in the Company's Proxy Statement dated March 16, 2004.

Mr. Milzcik was granted 15,000 stock options. The stock option will vest at the rate of 33.34% on June 8, 2005 and 33.33% on each of June 8, 2007 and June 8, 2009. The exercise price of each stock option is \$26.57, the fair market value of a share of the Company's Common Stock on the date of the grant, determined in accordance with the Stock and Incentive Award Plan.

In connection with his appointment, the Compensation and Management Development Committee set Mr. Milzcik's annual salary at \$370,000.

## PART III

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

#### DIRECTORS

Information with respect to the Company's directors and nominees may be found under the caption "Election of Three Directors For A Three-Year Term" of the Company's proxy statement to be delivered to stockholders in connection with the Annual Meeting of Stockholders to be held on April 21, 2005 (the "Proxy Statement"). Such information is incorporated herein by reference.

#### EXECUTIVE OFFICERS

The Company's executive officers as of the date of this Annual Report are as follows:

<u>Executive Officer</u>	<u>Position</u>	<u>Age as of December 31, 2004</u>
Edmund M. Carpenter	President and Chief Executive Officer	63
John R. Arrington	Senior Vice President, Human Resources	58
Francis C. Boyle, Jr.	Vice President, Controller	54
Joseph D. DeForte	Vice President, Tax	62
Patrick Dempsey	Vice President, Barnes Group Inc. and President, Barnes Aerospace	40
William C. Denninger	Senior Vice President, Finance and Chief Financial Officer	54
A. Keith Drewett	Vice President, Barnes Group Inc. and President, Barnes Distribution	58
Thomas P. Fodell	Vice President, Barnes Group Inc. and President, Associated Spring Sales	54
Signe S. Gates	Senior Vice President, General Counsel and Secretary	55
Philip A. Goodrich	Senior Vice President, Corporate Development	48
Gregory F. Milzcik	Vice President, Barnes Group Inc. and President, Associated Spring	45
Lawrence W. O'Brien	Vice President, Treasurer	55
Idelle K. Wolf	Vice President, Barnes Group Inc. and President, Barnes Distribution North America	52

Each officer holds office until his or her successor is chosen and qualified or otherwise as provided in the Company's By-Laws, except Mr. Carpenter who holds office pursuant to an employment agreement with the Company. No family relationships exist among the executive officers of the Company. Except for Messrs. Dempsey, Denninger, Drewett, and O'Brien, and Ms. Wolf, each of the Company's executive officers has been employed by the Company or its subsidiaries in an executive or managerial capacity for at least the past five years.

Mr. Arrington joined the Company as Senior Vice President, Human Resources in April 1998.

Mr. Boyle joined the Company in April 1978. Mr. Boyle was appointed Vice President, Controller in 1997.

Mr. Carpenter joined the Company as President and Chief Executive Officer in December 1998.

Mr. DeForte joined the Company as Vice President, Tax in August 1999.

Mr. Dempsey joined the Company in October 2000. Mr. Dempsey has held a series of increasingly responsible roles since joining the Company and was promoted to Vice President, Barnes Group Inc. and President, Barnes Aerospace in November 2004. Prior to that, Mr. Dempsey was Vice President, Operations for Barnes Aerospace beginning in 2003 and President, Windsor Airmotive division of Barnes Aerospace from 2002 to 2003. Prior to joining the Company in 2000, Mr. Dempsey was President, HAC Division of Pratt & Whitney, an aerospace manufacturing and service company. From 1999 to 2000, he was General Manager, DPRO Division, Pratt & Whitney.

Mr. Denninger joined the Company as Senior Vice President, Finance and Chief Financial Officer in March 2000. From 1994 to 2000, Mr. Denninger was Vice President-Finance and Chief Financial Officer of BTR Inc., an industrial products manufacturer.

Mr. Drewett joined the Company as Vice President, Barnes Group Inc. and President, Barnes Distribution in May 2000, upon the Company's acquisition of Curtis. From 1998 to 2000, Mr. Drewett was President and Chief Executive Officer of Curtis Industries, Inc.

Mr. Fodell joined the Company in November 1979. Mr. Fodell has held a series of increasingly responsible positions in the sales, marketing and management functions of Associated Spring, and was appointed President, Associated Spring Sales in 2003. Prior to that Mr. Fodell was Chief Operating Officer of Associated Spring from 2002 to 2003, Vice President, Sales and Marketing from 1999 to 2002, and was director of worldwide automotive sales from 1997 to 1999.

Ms. Gates joined the Company as Senior Vice President, General Counsel and Secretary in June 1999.

Mr. Goodrich joined the Company as Vice President, Business Development in November 1999. He was promoted to Senior Vice President, Corporate Development in December 2000.

Mr. Milzcik joined the Company as Vice President, Barnes Group Inc. and President, Barnes Aerospace in June 1999. He was appointed President, Associated Spring in November 2004.

Mr. O'Brien joined the Company as Vice President, Treasurer in August 2001. From 1997 to 2001, Mr. O'Brien was Vice President and Treasurer of L-3 Communications Corporation.

Ms. Wolf joined the Company as Vice President, Barnes Group Inc. and Chief Operating Officer, Barnes Distribution in May 2000, upon the Company's acquisition of Curtis. Ms. Wolf was appointed President, Barnes Distribution North America in December 2004. From 1998 to 2000, Ms. Wolf was Executive Vice President and Chief Operating Officer of Curtis Industries, Inc.

## **AUDIT COMMITTEE**

Messrs. Benanav, Griffin, Grzelecki and Ratcliffe and Ms. Mangum are the members of the Company's audit committee which is a separately designated standing committee of the Board of Directors of the Company established in accordance with Section 3(a)(58)(A) of the Exchange Act.

The Company's Board of Directors has determined that Mr. Benanav, who qualifies as an independent director under the New York Stock Exchange listing standards, is an audit committee financial expert.

## **PROCEDURE FOR STOCKHOLDER NOMINATION OF DIRECTORS**

The Corporate Governance Committee of the Board of Directors adopted a policy with respect to the procedures to be followed by stockholders in recommending nominees to be elected to the Company's Board of Directors. The policy specifies that recommendations are to be sent by mail to:

Chairperson, Corporate Governance Committee  
c/o Signe S. Gates  
Senior Vice President, General Counsel and Secretary  
Barnes Group Inc.  
123 Main Street  
Bristol, CT 06010

The policy provides that the recommendation letter must, at a minimum, provide the stockholder's name, address, and number of shares owned (if the stockholder is not the registered holder of shares, a written statement from the record holder of shares (e.g., a broker or bank) verifying the stockholder's beneficial ownership must be provided); the candidate's biographical information, including name, residential and business addresses, telephone number, age, education, accomplishments, employment history (including positions held and current and former directorships); and the stockholder's opinion as to whether the recommended candidate meets the definition of "independent" under the Company's Corporate Governance Guidelines and is "financially literate" as contemplated by the New York Stock Exchange rules. The recommendation letter must also provide such other information, if any, that would be required to be disclosed with regard to a nominee for director in the solicitation of proxies for election of directors under federal securities laws. The stockholder must include the recommended candidate's signed statement that he or she meets the qualifications of a director as described in the policy; is willing to complete the questionnaire required of all officers, directors and candidates for nomination to the Board; will provide such other information as the committee may reasonably request; and consents to serve on the Board if elected.

## **COMPLIANCE WITH SECTION 16(A) OF THE EXCHANGE ACT**

The information in the Proxy Statement under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" is incorporated herein by reference.

## **CODE OF ETHICS**

The Company has adopted a Code of Ethics Applicable to the Senior Executives (the "Executive Code of Ethics") which is applicable to its Chief Executive Officer, Chief Financial Officer and Controller. The Executive Code of Ethics is available on the Company's website at [www.barnesgroupinc.com](http://www.barnesgroupinc.com). The Company will disclose any material amendments to or waivers of the Executive Code of Ethics on that website or in a report on Form 8-K.

## **Item 11. Executive Compensation**

The information in the Proxy Statement under the captions "Compensation of Directors," "Compensation," "Stock Options," "Pension Plans," "Employment Agreement," and "Change-In-Control and Severance Arrangements" is incorporated herein by reference.

## **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information in the Proxy Statement under "Stock Ownership By Directors and Executive Officers" and "Beneficial Owners of More than 5% of Shares" is incorporated herein by reference.



## SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table sets forth information regarding securities authorized for issuance under the Company's equity compensation plans.

Plan category	Equity Compensation Plan Information		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
<b>Equity compensation plans approved by security holders:</b>			
1991 Barnes Group Stock Incentive Plan (1991 Plan) . . .	1,028,293	\$24.98 <sup>(1)</sup>	—
Barnes Group Inc. Employee Stock and Ownership Program (2000 Plan) . . . . .	2,016,883	23.15 <sup>(2)</sup>	—
Barnes Group Inc. Stock and Incentive Award Plan (2004 Plan) . . . . .	1,077,390	26.58 <sup>(3)</sup>	1,001,792
Employee Stock Purchase Plan (ESPP) . . . . .	—	—	133,726
Non-Employee Director Deferred Stock Plan, As Further Amended . . . . .	54,000	—	—
<b>Equity compensation plans not approved by security holders:</b>			
Key Executive Stock Plan <sup>(4)</sup> . .	75,000	26.30	—
<b>Total</b> . . . . .	<u>4,251,566</u>		<u>1,135,518</u>

### Footnotes:

- (1) Weighted-average exercise price excludes 2,000 shares for restricted stock unit awards and 246 shares for dividends equivalents, both with a zero exercise price.
- (2) Weighted-average exercise price excludes 582,340 shares for restricted stock unit awards and 34,006 shares for dividends equivalents, both with a zero exercise price.
- (3) Weighted-average exercise price excludes 191,050 shares for restricted stock unit awards with a zero exercise price.
- (4) Key Executive Stock Plan. In 1998, in accordance with Mr. E.M. Carpenter's employment agreement and pursuant to the plan, 60,000 incentive stock units and 75,000 stock options to acquire shares of Common Stock were granted. The plan permitted and Mr. E.M. Carpenter elected to meet payroll tax liabilities that arose under the plan with shares of Common Stock. As a result of the election, 13,135 shares remain for issuance; however, the plan does not provide for additional grants. The stock options have a ten-year term and vested over a period of four years. The incentive stock units vested over a five-year period.

### Item 13. Certain Relationships and Related Transactions

None.

### Item 14. Principal Accounting Fees and Services

The information in the Proxy Statement under "Principal Accounting Fees and Services" and "Pre-Approval Policy and Procedures" is incorporated herein by reference.

## PART IV

### Item 15. Exhibits and Financial Statement Schedules

- (a)(1) The Financial Statements of the Company are set forth under Item 8 of this Annual Report.
- (a)(2) See Financial Statement Schedule under Item 15(c).
- (a)(3) See Item 15(b) below.
- (b) The Exhibits required by Item 601 of Regulation S-K are filed as Exhibits to this Annual Report and indexed at pages 61 through 64 of this Annual Report.
- (c) Financial Statement Schedules.

### Schedule II—Valuation and Qualifying Accounts Years Ended December 31, 2004, 2003, and 2002 (In thousands)

#### Allowances for Doubtful Accounts:

Balance December 31, 2001 .....	\$ 3,114
Provision charged to income <sup>(1)</sup> .....	580
Doubtful accounts written off (net) <sup>(1)</sup> .....	(1,657)
Other adjustments <sup>(2)</sup> .....	854
Balance December 31, 2002 .....	2,891
Provision charged to income <sup>(3)</sup> .....	1,116
Doubtful accounts written off (net) <sup>(3)</sup> .....	(1,805)
Other adjustments <sup>(2)</sup> .....	986
Balance December 31, 2003 .....	3,188
Provision charged to income <sup>(4)</sup> .....	903
Doubtful accounts written off (net) <sup>(4)</sup> .....	(1,369)
Other adjustments <sup>(2)</sup> .....	5
Balance December 31, 2004 .....	\$ 2,727

- (1) In 2002 the higher level of doubtful accounts written-off as compared to the provision charged to income resulted from Barnes Distribution recognizing the write-off of receivables reserved and expensed in prior years.
- (2) Opening balances of acquired businesses.
- (3) The 2003 increase in the provision charged to income and the write-off of doubtful accounts was primarily due to certain collection issues at Barnes Distribution. Contributing to the increase at Barnes Distribution is the higher accounts receivable activity from the then newly acquired business, Kar.
- (4) The 2004 decreases in the provision charged to income and write-off of doubtful accounts were due primarily to the resolution by Barnes Distribution of the 2003 collection issues, including the Kar receivables.

**Schedule II—Valuation and Qualifying Accounts—(Continued)**  
**Years Ended December 31, 2004, 2003, and 2002**  
(In thousands)

**Valuation Allowance on Deferred Tax Assets:**

Balance December 31, 2001 .....	\$ 7,924
Current year provision charged to income tax expense .....	1,264
Other adjustments <sup>(1)</sup> .....	<u>(1,163)</u>
Balance December 31, 2002 .....	8,025
Current year provision charged to income tax expense .....	989
Other adjustments <sup>(2)</sup> .....	<u>(2,730)</u>
Balance December 31, 2003 .....	6,284
Current year provision charged to income tax expense .....	3,531
Other adjustments <sup>(3)</sup> .....	<u>(806)</u>
Balance December 31, 2004 .....	<u><u>\$ 9,009</u></u>

- (1) The 2002 adjustment to the valuation allowance is primarily due to the realization of the net operating loss deferred tax asset in the Company's Mexican operations.
- (2) The 2003 adjustment to the valuation allowance is primarily due to the realization of the deferred tax asset in the Company's Mexican operation, as well as management's belief that certain credit carryforwards in Mexico and capital allowances in the United Kingdom would be utilized based on projected future earnings.
- (3) The 2004 adjustment to the valuation allowance is primarily due to the realization of the net operating loss deferred tax asset in the Company's United Kingdom operations.

## 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.

Date: February 28, 2005

BARNES GROUP INC.

By           /s/ EDMUND M. CARPENTER          

**Edmund M. Carpenter**  
**President and Chief Executive Officer**

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below as of the above date by the following persons on behalf of the Company in the capacities indicated.

          /s/ EDMUND M. CARPENTER          

**Edmund M. Carpenter**  
**President and Chief Executive Officer**  
**(Principal Executive Officer) and Director**

          /s/ WILLIAM C. DENNINGER          

**William C. Denninger**  
**Senior Vice President, Finance**  
**Chief Financial Officer**  
**(Principal Financial Officer)**

          /s/ FRANCIS C. BOYLE, JR.          

**Francis C. Boyle, Jr.**  
**Vice President, Controller**  
**(Principal Accounting Officer)**

          /s/ THOMAS O. BARNES          

**Thomas O. Barnes**  
**Director**

          /s/ JOHN W. ALDEN          

**John W. Alden**  
**Director**

          /s/ GARY G. BENANAV          

**Gary G. Benanav**  
**Director**

          /s/ WILLIAM S. BRISTOW, JR.          

**William S. Bristow, Jr.**  
**Director**

          /s/ GEORGE T. CARPENTER          

**George T. Carpenter**  
**Director**

/s/ DONALD W. GRIFFIN

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**Donald W. Griffin**  
**Director**

/s/ FRANK E. GRZELECKI

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**Frank E. Grzelecki**  
**Director**

/s/ MYLLE H. MANGUM

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**Mylle H. Mangum**  
**Director**

/s/ G. JACKSON RATCLIFFE

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**G. Jackson Ratcliffe**  
**Director**

## EXHIBIT INDEX

### Barnes Group Inc.

#### Annual Report on Form 10-K for the Year ended December 31, 2004

<u>Exhibit No.</u>	<u>Description</u>	<u>Reference</u>
3.1	Restated Certificate of Incorporation.	Incorporated by reference to Exhibit 3.1 to the Company's report on Form 10-K for the year ended December 31, 1997.
3.2	Amended and Restated By-Laws.	Incorporated by reference to Exhibit 3.2 to the Company's report on Form 10-K for the year ended December 31, 1998.
4.1	Amended and Restated \$175,000,000 Senior Unsecured Revolving Credit Agreement dated June 2, 2004, among the Company and several commercial banks.	Incorporated by reference to Exhibit 10.1 to the Company's report on Form 10-Q for the quarter ended June 30, 2004.
4.2	(i) Rights Agreement dated as of December 10, 1996, between the Company and ChaseMellon Shareholder Services, L.L.C. (ii) Amendment No. 1 to Rights Agreement, dated as of February 19, 1999, between the Company and ChaseMellon Shareholder Services, L.L.C.	Incorporated by reference to Exhibit 1 to the Company's report on Form 8-A filed on December 20, 1996. Incorporated by reference to Exhibit 1 to the Company's report on Form 8-A/A filed on March 18, 1999.
4.3	(i) Note Purchase Agreement dated as of December 1, 1995, between the Company and several insurance companies. (ii) First Amendment to Note Purchase Agreement dated as of September 1999. (iii) Interest Rate Swap Master Agreement, between Barnes Group Inc. and Sun Trust Bank, dated as of August 19, 2002. (iv) Amendment No. 2 to Note Purchase Agreement dated as of February 5, 2003.	Incorporated by reference to Exhibit 4.9 to the Company's report on Form 10-K for the year ended December 31, 1995. Incorporated by reference to Exhibit 4.3(ii) to the Company's report on Form 10-K for the year ended December 31, 2002. Incorporated by reference to Exhibit 4.3(iii) to the Company's report on Form 10-K for the year ended December 31, 2002. Incorporated by reference to Exhibit 4.3(iv) to the Company's report on Form 10-K for the year ended December 31, 2002.
4.4	(i) Note Agreement dated as of November 12, 1999, between 3031786 Nova Scotia Company, a wholly owned subsidiary of the Company, and several insurance companies; and related Guaranty Agreement between the Company and such insurance companies. (ii) Amendment No. 1 to Note Agreement, dated as of February 5, 2003.	Incorporated by reference to Exhibit 4.6 to the Company's report on Form 10-K for the year ended December 31, 1999. Incorporated by reference to Exhibit 4.4(ii) to the Company's report on Form 10-K for the year ended December 31, 2002.
4.5	(i) Note Agreement dated as of November 21, 2000, between Barnes Group Inc. and several insurance companies. (ii) Amendment No. 1 to Note Agreement dated as of February 21, 2002.	Incorporated by reference to Exhibit 4.7 to the Company's report on Form 10-K for the year ended December 31, 2000. Incorporated by reference to Exhibit 4.5(ii) to the Company's report on Form 10-K for the year ended December 31, 2002.



<u>Exhibit No.</u>	<u>Description</u>	<u>Reference</u>
	(iii) Amendment No. 2 to Note Agreement dated as of February 5, 2003.	Incorporated by reference to Exhibit 4.5(iii) to the Company's report on Form 10-K for the year ended December 31, 2002.
4.6	(i) Term Loan Facility Agreement between Associated Spring-Asia Pte. Ltd. and The Development Bank of Singapore Limited, dated June 19, 2001.	Incorporated by reference to Exhibit 10.1 to the Company's report on Form 10-Q for the quarter ended June 30, 2001.
	(ii) Guarantee of Term Loan Facility Agreement, between Barnes Group Inc. and The Development Bank of Singapore Limited, dated June 19, 2001.	Incorporated by reference to Exhibit 10.2 to the Company's report on Form 10-Q for the quarter ended June 30, 2001.
	(iii) Currency Swap and Interest Rate Hedging Master Agreement, between Associated Spring-Asia Pte. Ltd. and The Development Bank of Singapore Limited, dated June 19, 2001.	Incorporated by reference to Exhibit 10.3 to the Company's report on Form 10-Q for the quarter ended June 30, 2001.
	(iv) Guarantee of Currency Swap and Interest Rate Hedging Master Agreement, between Barnes Group Inc. and The Development Bank of Singapore Limited, dated June 19, 2001.	Incorporated by reference to Exhibit 10.4 to the Company's report on Form 10-Q for the quarter ended June 30, 2001.
10.1*	The Company's Management Incentive Compensation Plan, as amended and restated January 1, 2000.	Incorporated by reference to Exhibit 10.1 to the Company's report on Form 10-K for the year ended December 31, 2000.
10.2*	The Company's 1996 Long-Term Incentive Plan.	Incorporated by reference to Exhibit 10.2 to the Company's report on Form 10-K for the year ended December 31, 1995.
10.3*	The Company's Retirement Benefit Equalization Plan.	Incorporated by reference to Exhibit 10.3 to the Company's report on Form 10-K for the year ended December 31, 2002.
10.4*	The Company's Supplemental Executive Retirement Plan.	Incorporated by reference to Exhibit 10.4 to the Company's report on Form 10-K for the year ended December 31, 2002.
10.5*	The Company's 1991 Stock Incentive Plan, as amended and restated May 15, 1998.	Incorporated by reference to Exhibit 10.5 to the Company's report on Form 10-K for the year ended December 31, 1998.
10.6*	The Company's Non-Employee Director Deferred Stock Plan, as further amended.	Incorporated by reference to Annex 3 to the Company's Proxy Statement dated March 16, 2004 for the Annual Meeting of Stockholders held April 14, 2004 that was filed on March 10, 2004.
10.7*	The Company's Amended and Restated Directors' Deferred Compensation Plan.	Incorporated by reference to Exhibit 10.8 to the Company's report on Form 10-K for the year ended December 31, 1996.
10.8*	The Company's Senior Executive Enhanced Life Insurance Program, as amended and restated May 16, 1997.	Incorporated by reference to Exhibit 10.8 to the Company's report on Form 10-K for the year ended December 31, 1998.
10.9*	The Company's Enhanced Life Insurance Program.	Incorporated by reference to Exhibit 10.12 to the Company's report on Form 10-K for the year ended December 31, 1993.

<u>Exhibit No.</u>	<u>Description</u>	<u>Reference</u>
10.10*	The Company's Supplemental Senior Officer Retirement Plan.	Incorporated by reference to Exhibit 10.13 to the Company's report on Form 10-K for the year ended December 31, 1996.
10.11*	The Company's Executive Officer Change-In-Control Severance Agreement.	Incorporated by reference to Exhibit 10.14 to the Company's report on Form 10-K for the year ended December 31, 1997.
10.12*	(i) Employment Agreement dated as of December 8, 1998 between the Company and Edmund M. Carpenter. (ii) Amendment 1 to Employment Agreement between the Company and Edmund M. Carpenter.	Incorporated by reference to Exhibit 10.14 to the Company's report on Form 10-K for the year ended December 31, 1998. Incorporated by reference to Exhibit 10.1 to the Company's report on Form 10-Q for the quarter ended June 30, 2003.
10.13*	The Company's Key Executive Stock Plan, effective December 8, 1998.	Incorporated by reference to the Company's report on Form 10-Q for the quarter ended June 30, 2002.
10.14*	The Company's Amended Employee Stock and Ownership Program as further amended.	Incorporated by reference to the Company's report on Form 10-Q for the quarter ended March 31, 2003.
10.15*	Barnes Group Inc. Executive Deferred Compensation Plan.	Incorporated by reference to Exhibit 10.1 to the Company's report on Form 10-Q for the quarter ended September 30, 2001.
10.16*	Barnes Group Inc. Retirement Saving Plan, as amended and restated January 1, 2002.	Incorporated by reference to Exhibit 10.15 of the Company's report on Form 10-K for the year ended December 31, 2001.
10.17*	Barnes Group Inc. Executive Separation Pay Plan.	Incorporated by reference to Exhibit 10.17 to the Company's report on Form 10-K for the year ended December 31, 2002.
10.18*	The Company's Performance Linked Bonus Plan for Selected Executive Officers.	Incorporated by reference to Annex I to the Company's Proxy Statement dated March 15, 2001 for the Annual Meeting of Stockholders held April 12, 2001 that was filed on March 13, 2001.
10.19*	Barnes Group Inc. Stock and Incentive Award Plan.	Incorporated by reference to Annex 2 to the Company's Proxy Statement dated March 16, 2004 for the Annual Meeting of Stockholders held April 14, 2004 that was filed on March 10, 2004.
10.20*	Executive Compensation.	Filed with this report.
10.21*	Director Compensation.	Filed with this report.
21	List of Subsidiaries.	Filed with this report.
23	Consent of Independent Registered Public Accounting Firm.	Filed with this report.
31.1	Certificate pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed with this report.
31.2	Certificate pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed with this report.
32	Certificate pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished with this report.

\* Management contract or compensatory plan or arrangement.

The Company agrees to furnish to the Commission, upon request, a copy of each instrument with respect to which there are outstanding issues of unregistered long-term debt of the Company and its subsidiaries, the authorized principal amount of which does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis.

Except for Exhibits 21 and 23, which will be furnished free of charge, copies of exhibits referred to above will be furnished at a cost of twenty-five cents per page to stockholders who make a written request to the Secretary, Barnes Group Inc., 123 Main Street, P.O. Box 489, Bristol, Connecticut 06011-0489.

**BARNES GROUP INC.**  
**CONSOLIDATED SUBSIDIARIES**  
**as of December 31, 2004**

<u>Name</u>	<u>Jurisdiction of Incorporation</u>
Associated Spring-Asia PTE. LTD.	Singapore
Associated Spring do Brasil Ltda.	Brazil
Associated Spring Mexico, S.A.	Mexico
Associated Spring (Tianjin) Company, Limited	China
AS Monterrey S. de R.L. de C.V.	Mexico
AS Troy, LLC	Delaware
Barnes Financing Delaware LLC	Delaware
Barnes Group (Bermuda) Limited	Bermuda
Barnes Group Canada Corp.	Canada
Barnes Group (Delaware) LLC	Delaware
Barnes Group France S.A.	France
Barnes Group Finance Company (Bermuda) Limited	Bermuda
Barnes Group Finance Company (Delaware)	Delaware
Barnes Group (Germany) GmbH	Germany
Barnes Group Holding B.V.	Netherlands
Barnes Group Spain SRL	Spain
Barnes Group Trading Ltd.	Bermuda
Barnes Group (U.K.) Limited	United Kingdom
Barnes Sweden Holding Company AB	Sweden
DE-STA-CO Mfg. Ltd.	Thailand
DE-STA-CO Mfg. Ltd. (U.K.)	United Kingdom
Euro Stock Springs & Components Limited	United Kingdom
Raymond Distribution (Ireland) Limited	Ireland
Raymond Distribution-Mexico, S.A. de C.V.	Mexico
Ressorts SPEC, SARL	France
Seeger-Orbis GmbH & Co. OHG	Germany
Spectrum Plastics Molding Resources, Inc.	Connecticut
Stromsholmen AB	Sweden
The Wallace Barnes Company	Connecticut
Windsor Airmotive Asia PTE. LTD.	Singapore
3031786 Nova Scotia Company	Canada
3032350 Nova Scotia Limited	Canada

The foregoing does not constitute a complete list of all subsidiaries of the registrant. The subsidiaries that have been omitted do not, if considered in the aggregate as a single subsidiary, constitute a "Significant Subsidiary" as defined by the Securities and Exchange Commission.

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## CERTIFICATION

I, Edmund M. Carpenter, certify that:

1. I have reviewed this annual report on Form 10-K for the period ended December 31, 2004 of Barnes Group Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2005

/s/ EDMUND M. CARPENTER  
Edmund M. Carpenter  
President and Chief Executive Officer



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## CERTIFICATION

I, William C. Denninger, certify that:

1. I have reviewed this annual report on Form 10-K for the period ended December 31, 2004 of Barnes Group Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2005

/s/ WILLIAM C. DENNINGER

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**William C. Denninger**  
**Chief Financial Officer**

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**Annual CEO Certification**  
**(Section 303A.12(a))**

As the Chief Executive Officer of

Barnes Group Inc.,

(Name of Company)

and as required by Section 303A.12(a) of the New York Stock Exchange Listed Company Manual, I hereby certify that as of the date hereof I am not aware of any violation by the Company of NYSE's Corporate Governance listing standards, other than has been notified to the Exchange pursuant to Section 303A.12(b) and disclosed as an attachment hereto.

By: /s/ Edmund M. Carpenter

Print Name: Edmund M. Carpenter

Title: President and Chief Executive Officer

Date: April 29, 2004



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# About the Company

## Board of Directors

### **John W. Alden**

Former Vice Chairman,  
United Parcel Service  
of America, Inc.,  
Atlanta, Georgia

### **Thomas O. Barnes**

Chairman of the Board,  
Barnes Group Inc.,  
Bristol, Connecticut

### **Gary G. Benanav**

Chairman and Chief Executive  
Officer, New York Life  
International, LLC

Vice Chairman, New York Life  
Insurance Company, LLC,  
New York, New York

### **William S. Bristow, Jr.**

President, W.S. Bristow &  
Associates, Inc.,  
New Castle, New Hampshire

### **Edmund M. Carpenter**

President and Chief Executive  
Officer, Barnes Group Inc.,  
Bristol, Connecticut

### **George T. Carpenter**

President, The S. Carpenter  
Construction Company and the  
Carpenter Realty Company,  
Bristol, Connecticut

### **Donald W. Griffin**

Former Chairman, President and  
CEO, Olin Corporation,  
Norwalk, Connecticut

### **Frank E. Grzelecki**

Former Managing Director,  
Saugatuck Associates Inc.,  
Stamford, Connecticut

Former Vice Chairman  
Handy & Harman,  
Rye, New York

### **Mylle H. Mangum**

Chief Executive Officer,  
International Banking  
Technologies,  
Norcross, Georgia

### **G. Jackson Ratcliffe**

Former Chairman,  
Hubbell, Incorporated,  
Orange, Connecticut

## Officers

### Corporate Office

#### **Edmund M. Carpenter**

President and  
Chief Executive Officer

#### **John R. Arrington**

Senior Vice President,  
Human Resources

#### **William C. Denninger**

Senior Vice President, Finance, and  
Chief Financial Officer

#### **Signe S. Gates**

Senior Vice President,  
General Counsel and Secretary

#### **Philip A. Goodrich**

Senior Vice President,  
Corporate Development

#### **Francis C. Boyle, Jr.**

Vice President, Controller

#### **Joseph D. DeForte**

Vice President, Tax

#### **Lawrence W. O'Brien**

Vice President, Treasurer

## Operations

#### **Patrick Dempsey**

Vice President, Barnes Group Inc.,  
and President,  
Barnes Aerospace

#### **A. Keith Drewett**

Vice President, Barnes Group Inc.,  
and President,  
Barnes Distribution

#### **Thomas P. Fodell**

Vice President, Barnes Group Inc.,  
and President, Sales,  
Associated Spring

#### **Gregory F. Milzcik**

Vice President, Barnes Group Inc.,  
and President,  
Associated Spring

#### **Idelle K. Wolf**

Vice President, Barnes Group Inc.,  
and President,  
Barnes Distribution,  
North America

## Corporate Information

### Transfer Agent and Registrar

Mellon Investor Services LLC  
Overpeck Centre  
85 Challenger Road  
Ridgefield Park, NJ 07660-2108

Phone: 1-800-801-9519  
(Continental U.S. only)  
or 1-201-329-8660  
[www.melloninvestor.com/isd](http://www.melloninvestor.com/isd)  
For the hearing-impaired:  
1-800-231-5469

### Use the above address and phone numbers for information on the following services:

Direct Deposit of Dividends  
Stockholder Inquiries  
Change of Name or Address  
Consolidations  
Lost Certificates  
Replacements

### Direct Stock Purchase Plan/Dividend Reinvestment:

Initial purchases of Barnes  
Group common stock can be  
made through the Direct Stock  
Purchase Plan. Dividends on  
Barnes Group common stock may  
be automatically invested in  
additional shares.

### Stock Exchange

New York Stock Exchange  
Stock Trading Symbol: B

### Independent Public Accountants

PricewaterhouseCoopers LLP  
100 Pearl Street  
Hartford, CT 06103

## Communications

For press releases and other  
information about the Company,  
go to our Internet address,  
[www.barnesgroupinc.com](http://www.barnesgroupinc.com) or  
contact:

Brian D. Kopyy  
(for Investor Relations) or  
Monique B. Marchetti  
(for Stockholder Relations)

Barnes Group Inc.  
123 Main St., P.O. Box 489  
Bristol, CT 06011-0489 USA  
Phone: 1-860-583-7070  
Fax: 1-860-589-3507

## Annual Meeting

Barnes Group Inc.'s annual  
meeting of stockholders  
will be held at 11:00 a.m.,  
Thursday, April 21, 2005,  
at Hartford/Windsor  
Marriott Airport Hotel,  
Windsor, Connecticut.



**Corporate Office**

**123 Main Street**

**Bristol, Connecticut 06010**

**[www.barnesgroupinc.com](http://www.barnesgroupinc.com)**