AR(S P.E./2-31-02 Matto Salo. MAR 1 7 2002 03000765 1088 Keeping Our Direction and Focus PROCESSED MAR 1 9 2003 THOMSON FINANCIAL BARNES GROUP IN R-rep-o-r----2-0-0-2

# Barnes Group Inc.

Barnes Group Inc. (NYSE: B) is a diversified international manufacturer of precision components and assemblies and distributor of industrial supplies, serving a wide range of markets and customers. Founded in 1857 and headquartered in Bristol, Commecticuit, the Company was organized as a Delaware corporattom in 1925. The Company consists of three businesses: Associated Spring, one of the world's largest manufacturers of precision mechanical and nitrogen gas springs, retaining rings and plastic injectionmolded components; Barnes Aerospace, a manufacturer and repairer of highly engineered assemblies and products for aircraft engines, airframes and land-based industrial gas turbines; and Barnes Distribution, an international distributor of industrial maintenance, repair and operating supplies. The Company has more than 5,100 employees at over 50 locations worldwide.

# Associatea

Associated Spring is the largest manufacture to be precision springs in North America, and one of the largest precision spring manufacturers in the world. Associated Spring is equipped to 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 springs and manifold systems, used to precisely control stamping presses; retaining rings; and injection-molded plastic-onmetal and metal-in-plastic components and assemblies. Nearly all of Associated Spring's a oducts are highly engineered custom-solutions. These products are made of various metals and plastic types, and are purchased. primarily by durable goods manufacturers in industries such as consumer products, farm equipment telecommunications. miedical devices, home appliances, electronics and transportation.

Associated Spring provides complete engineering solutions from concept to manufacturing. These include product design and development, physical product and material testing, rapid prototyping and reduction of manufacturing-cycle times.

Associated Spring has manufacturing operations in the United States, Brazil, Canada, China, Germany, Mexico, Singapore and Sweden. 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.

wide producer of precision machined and fabricated. components and assemblies for turbine engine, airframe <u>and industrial gas türbine</u> builders and the United States military, Bames, Aerospace, also provides jet engline componen overhaul and repair services for many of the world's major commercial airlines and the United States military, Barnes Aerospace products and services, which have earned a reputation for excellence throughout the international aerospace community, are sold primarily through Barnes Aerospace's sales employees.

Barnes Aerospace's machining and fabrication operations, wi facilities in Arizona, Connecticut, "Mi**dhi**gan, Ohio and Utah, produce critical engine and airframe parts through processes such as laser drilling, 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 super-plastic forming and diffusion bonding, and madhining of aluminum and other sheet metal products. Customers include airframe and gas turbine engine manufacturers for commercial and military jets, business jets and land-based industrial gas turbines.

Barnes Aerospace's overhaul and repair 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 induce electron beam welding, plasma coating, vacuum brazing and water et de aning Customers include worldwide major air lifesand coating vacuum brazing and water et de aning Customers include worldwide major air lifesand coating co

the United States military.

imes Distribution

Barnes Distribution is an inclusity leader in the distribution of maintenance, repair and operating (MRO) supplies Since 1927, it has grown into one of the world's largest value-added MRO distributors and international logistics management service businesses. Barnes Distribution distributes under six widely recognized oranges. Bowman. Curds, Mechanics Choice, Raymond, Autohalsons and Motalinik.

Bowman, Curtis, Mechanics Choice, Autoliaisons and Motalink distribute a wide variety of replacement parts and other products, and provide related inventory management and logistics services. These products individe fasteners, special-pumpose hardware, electrical supplies, by draulics, chemicals and security products. Raymond 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.

Using innovative methods and new technology to solve complex supply problems,
Barnes Distribution becomes a confical partner highle operation and profitability of its customers. Barnes Distribution has a well-diversified customer base ranging from small automobile dealers and repair shops to the largest railitoads and within the United States, Brazil, Canada, France, Ireland, Mexico, Spain, the United Kingdom, and Asia through a sales force of over 1,000 people, and in many other countries.

Your Company enjoyed another profitable year in 2002, as we set a new record for sales and generated significant operating cash flow and a 42 percent increase in our net income. We also delivered a total return to our stockholders that again exceeded that of both the Standard and Poor's SmallCap 500 Index and the Russell 2000 Index, despite an equity market that declined for a third straight year for the first time since the 1940s.

It was particularly satisfying that these results occurred in a year that saw significant external challenges to our business, the most pervasive of which was an industrial economy that showed little sign of improvement. While many companies rushed to adopt a 'flavor of the month' approach to their strategic direction in an effort to deal with the sustained economic downturn, we maintained our direction and focus on building lasting value for our stockholders by generating sustainable, profitable growth. Our steady commitment to our strategic direction, regardless of temporary external forces, speaks for itself.

By remaining focused on long-term value generation, each of our three businesses do livered solid results during 2002. At Associated Spring, sales of nitrogen gas springs and conducts for the transportation sector grew nicely, more than offsetting a drop in sales of telecommunications and electronics products. Through their investments to diversify the customer base, Barnes Aerospace was able to hold their backlog essentially steady year-over-year, dospite the disruption in the commercial aerospace market. And Barnes Distribution was able to reflect numerous new customer growth initiatives, while at the same time reducing their overall cost of doing business.

# The 'Group' Becomes Bigger

As we have mentioned in our past letters to you, there are two primary elements in our approach to generating sustainable, profitable growth: creating internal sales growth to new and existing customers and markets, and finding strategic acquisitions for each of our three businesses. In addition to several internal growth initiatives that were under way last year, we also continued down that second path in 2002 by acquiring two businesses that fit extremely well with Associated Spring.

First, in February, we acquired Seeger-Orbis. Seeger-Orbis, which is based in Germany, is a leading manufacturer of retaining rings — often called 'Seeger rings' in Europe — used in a number of transportation and industrial applications. Seeger-Orbis extends the product line reach of Associated Spring and gives the Company a critical geographic expansion into the automotive and industrial manufacturing markets of Europe, where previously Associated Spring did not have a large customer presence. A key business driver of the acquisition was the cross-selling opportunity for Seeger-Orbis into the North American market and from our other Associated Spring operations into Europe; to date, the business development opportunities have been excellent.

in April, we acquired Spectrum Plastics. Spectrum, which is based in Connecticut, is a premier, fully integrated precision plastic injection-molding company. Spectrum services many of the same customers as Associated Spring, and by adding advantage pastic molding capabilities, Associated Spring is able to supply metal-in-plastic and plastic-on-metal assemblies for the

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electronics, telecommunications, medical and other technologically advanced markets. Although the telecommunications and electronics end markets have suffered during the economic downturn, this acquisition is vital to our long-term success with our customers in these industries.

More recently, on February 6, 2003, we completed a strategic acquisition to augment Barnes Distribution by purchasing Kar Products ELC. Kar Products is a full-service distributor of MRO supplies to industrial, construction, transportation and other markets. In much the same vein as the Curtis Industries acquisition we made in 2000, Kar Products — which has the same expediter selling model as Barnes Distribution — will add significant scale to our distribution business, positioning us as a top-20 industrial distributor in North America. During 2003 and early 2004, we expect to recognize substantial cost savings as the infrastructures of Kar Products and Barnes Distribution are consolidated.

# Review of Operations

For a third consecutive year, we set a new record for revenues for the Company. Earnings improved substantially from 2001, as a number of cost reduction initiatives implemented in the past two years by our operating management teams have come to fruition. Cash flow this past year was excellent. We generated approximately \$54 million in cash from operations, providing funding to reinvest in our businesses while at the same time enabling us to reduce our debt by more than \$16 million. While earnings may fluctuate from year to year, as stewards of your capital in the Company, we are committed to generating strong cash flow in both good times and bad.

Looking at our three operations, each performed well given the state of its end markets. At Associated Spring, the top line grew by more than \$40 million, as internal growth in our products for the transportation and nitrogen gas spring markets and the two recent acquisitions helped offset a continued slide in demand for telecommunications and electronics products. Operating profit margin also expanded: efforts to control costs made by the management team at Associated Spring in the past few years were apparent, even as some one-time purchase accounting costs related to inventory in the acquired businesses dampened profitability. The team at Associated Spring worked diligently and rapidly to integrate the two new businesses, and with that effort complete, the emphasis going forward will be on capitalizing upon new customer opportunities with our expanded capabilities.

The second-half recovery that most economists anticipated as we entered 2002 failed to materialize. Industrial activity contracted for the second straight year, putting pressure on Barnes Distribution's top line. However, we indicated in our last letter that management at Barnes Distribution was working on a number of initiatives to improve profitability, and these were realized in 2002 as operating profit increased sharply even as sales declined. In our last letter, we also described Barnes Distribution's focus on developing new national and regional accounts in 2002. The results of that initiative have been very positive: 116 new national and regional accounts were opened, with a potential sales value of \$10 million to \$20 million per year. By comparison, just 18 new national accounts were opened in 2001. Barnes Distribution also successfully roiled out several new electronic commerce initiatives to better serve our customers. One of these initiatives, called enabled NRO<sup>TM</sup>, is now beginning to capture a piece of the industrial distribution market that was previously untapped; customers who want to more directly control the ordering of their MRO supplies. Although still in its mascent stages, we see some excellent potential for enabled MRO<sup>TM</sup> to complement our traditional selling

model. A recovery in industrial economic activity would have the greatest impact on Barnes Distribution's revenue, but these two growth drivers should clearly augment the operation in 2003 and beyond.

As expected in the post-9/11 environment, global aircraft production and airline passenger traffic was down substantially in 2002, impacting revenue at Barnes Aerospace. Because of this, the management team at Aerospace acted quickly to curtail costs, cutting employment in the business by nearly 20 percent and reducing operating costs throughout the organization. Despite the turmoil in the commercial aircraft industry, sales efforts made by Barnes Aerospace to diversify the customer base paid dividends in 2002, as sales were down only modestly and the business remained profitable. Our customer orders and order backlog also benefited from those efforts; Barnes Aerospace generated \$178 million in customer orders, while order backlog remained strong at \$152 million at year end. A particular bright spot was new orders for direct and indirect military customers, which were roughly one third of the total orders received this year. And, although the environment for commercial aircraft is likely to remain flat in 2003, we continue to be excited about several new commercial engine programs, in which Barnes Aerospace is a major supplier, that will be entering service over the next several years.

# Corporate Governance

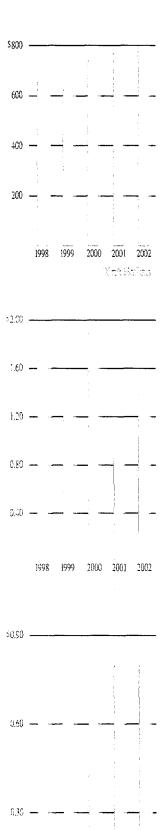
We've always regarded our disclosures to investors as open and transparent. And, we're eager to comply with the new enhanced disclosures passed by Congress in the Sarbanes-Oxiey Act of 2002; you'll find some of these new disclosures in this annual report, while many more will begin next year. Our current accounting policies, processes and internal controls, combined with a conscientious Board of Directors that includes an active and informed Audit Committee, give us confidence in affirming that the information we present to you in our periodic reports is a fair and accurate representation of the health and performance of your Company. Thus, in the case of Barnes Group, we think that the quantity of disclosure may change, but the high quality will remain the same.

Our Board of Directors also reached its full complement of 10 business leaders, as Mylle H. Mangum joined the Board in December. Mylle, the CEO of True Marketing Services, brings strong executive management, marketing and manufacturing experience — gained at companies such as BellSouth Corporation, Holiday Inn Worldwide and General Electric — that will be highly valued by our Board and our senior management team.

# Keeping Our Direction and Focus

In summary, despite a tough environment in 2002, Barnes Group continued to grow; we rebounded financially from 2001 and generated cash to further invest in the business; we integrated two strategic acquisitions; and we successfully positioned each of our three businesses to remain profitable through, and beyond, this current economic cycle. Looking ahead to the future, we remain confident that your Company will continue to generate sustainable, profitable growth and build lasting value for you, our stockholders.

Thomas O. Barnes Chairman of the Board Edmund M. Carpenter
President and Chief Executive Officer



2000

2001 2002

# BARNES GROUP INC.

FIVE-YEAR OPERATING RESULTS

# Associated Spring Segment

(Dollars in millions)	2002	2001	2000	1999	1998
Net sales	\$ 321.7	\$ 279.2	\$ 327.3	\$ 282.6	\$ 262.1
Operating profit	28.1	19.4	44.0	33.5	23.2
Assets (average for the year)	263.9	258.8	267.1	210.4	156.4
Capital expenditures	6.5	8.7	14.2	9.8	18.3
Depreciation and amortization expense	15.5	16.8	17.8	16.5	15.3
Order backlog (at year-end)	53.9	40.0	57.7	55.7	45.1
Performance benchmarks:					
Operating profit margin	8.7%	7.0%	13.4%	11.8%	8.8%
Return on average assets	10.7%	7.5%	16.5%	15.9%	14.8%

# Barnes Aerospace Segment

(Dollars in millions)	2002	2001	2000	1999	1998
Net sales	\$ 183.0	\$ 200.4	\$ 135.1	\$ 121.3	\$ 154.6
Operating profit	10.8	16.4	8.0	5.3	12.8
Assets (average for the year)	132.7	135.7	104.9	86.0	93.7
Capital expenditures	4.5	10.0	5.6	7.7	8.6
Depreciation and amortization expense	9.2	9.7	8.6	7.8	7.5
Order backlog (at year-end)	151.8	158.9	144.9	79.9	124.8
Performance benchmarks:					
Operating profit margin	5.9%	8.2%	5.9%	4.4%	8.3%
Return on average assets	8.1%	12.1%	7.6%	6.1%	13.7%

# Barnes Distribution Segment

(Dollars in millions)	2002	2001	2000	1999	1998
Net sales	\$ 286.7	\$ 298.4	\$ 291.1	\$ 230.4	\$ 246.9
Operating profit	7.5	5.5	12.9	9.9	35.0
Assets (average for the year)	170.0	175.1	136.7	90.7	87.9
Capital expenditures	7.4	6.0	5.5	9.4	7.5
Depreciation and amortization expense	7.7	9.9	9.0	6.0	5.4
Performance benchmarks:					
Operating profit margin	2.6%	1.8%	4.4%	4.3%	14.2%
Return on average assets	4.4%	3.1%	9.4%	11.0%	39.3%

# Our Business

Barnes Group is a diversified international manufacturer of precision components and assemblies and distributor of industrial supplies. The Company is comprised of three business segments. The Associated Spring segment is a manufacturer of precision mechanical and nitrogen gas springs, retaining rings and injection-molded plastic components that are used in a variety of industries, including transportation, consumer goods, electronics and telecommunications. The Barnes Aerospace segment supplies precision machined and fabricated components and assemblies for commercial and military aircraft and industrial gas turbines, as well as engine component overhaul and repair services in support of the global airline industry. The Barnes Distribution segment is an international distributor of MRO supplies and a full-service provider of logistics management services for industrial, heavy equipment and transportation maintenance markets. It also distributes close-tolerance engineered metal components manufactured principally by Associated Spring. Through these three businesses, Barnes Group helps its customers enhance their competitiveness and responsiveness by realizing the benefits of Barnes Group's manufacturing and logistics management capabilities.

# Key Business Drivers

There are a number of end-market demand factors that impact sales in each of the three businesses. Key sales drivers for Associated Spring are: light vehicle production in North America and Europe, which correlates well with the sales of automotive springs and with tool and die build, which impacts the Company's nitrogen gas spring sales; sales of cell phone handsets and other electronic products in the telecommunications, computer and optical device markets; and sales of white goods, small engines, compressors, heavy duty trucks and similar products that impact the Company's industrial springs.

For original equipment manufacturer (OEM) components produced at Barnes Aerospace, key sales drivers include new commercial and military aircraft production and land-based industrial gas turbine deliveries. The number of commercial aircraft in the active fleet and the number of revenue passenger miles flown by the world's airlines are key drivers of sales for the Barnes Aerospace overhaul and repair operations.

General industrial activity in North America and Europe is the key sales driver for Barnes Distribution, as Barnes Distribution's customer base is well diversified through many different economic sectors.

# 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 to the Consolidated Financial Statements. 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 reasonably expected. Loss provisions are based on the excess inventoriable 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.



Management's Discussion & Analysis



Management's Discussion & Analysis

# **Business** Acquisitions

Assets and liabilities acquired in a business combination are recorded at their estimated fair values at the acquisition date. At December 31, 2002, the Company had \$164.6 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 Statement of Financial Accounting Standards (SFAS) 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 142. Management completed this assessment during the second quarter of 2002 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 2002. 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.

# Reorganization of Businesses

The Company records a liability for reorganization initiatives at the time that management approves and commits 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 (see "Recent Accounting Changes" on page 16).

# Pension and Other Postretirement Benefits

Accounting policies and significant assumptions related to pension and other postretirement benefits are disclosed in Note 10 to the Consolidated Financial Statements.

In 2002, the portfolio managers authorized to invest pension trust funds were changed and the mix of assets in which managers invest was revised. The following table provides a breakout of the new 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.

		Annual Return %					
	Asset Mix		Long-Term				
Asset Class	%	Historical (1)	Projection				
Large Cap Growth	20	11.4	10.4				
Large Cap Value	20	13.1	12.1				
Small Cap Growth	9	8.9	7.9				
Small Cap Value	9	14.7	13.7				
Non-U.S. Equity	9	10.2	9.2				
Real Estate-Related	5	14.9	12.9				
Fixed Income	27	9.3	7.3				
Cash	1	7.1	5.1				
Weighted Average		11.3	9.9				

(1) Historical returns based on the life of the respective index, approximately 20 to 25 years.

The historical rates of return were calculated based upon compounded average rates of return of published indices. The fixed income investments represent approximately 27% of the trust asset mix and are estimated to be 5% to 10% lower than the fixed income components of typical pension trusts. 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 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 \$0.3 million annually. The Company reviews these and other assumptions at least annually.

The Company uses a calculated value to determine the market-related value of pension plan assets. This approach results in a market-related value of pension assets that differs from the fair

market value of plan assets. This difference results from the deferment in the recognition of asset gains and losses above or below expected returns on assets for a period of approximately five years. At December 31, 2002, the market-related value of pension assets exceeded the fair market value by \$70.0 million. This difference under SFAS 87 will increase pension expense by \$3.1 million in 2003 and an additional \$2.3 million in 2004.

#### Income Taxes

As of December 31, 2002, the Company had recognized \$38.6 million of deferred tax assets, net of valuation reserves. The realization of these benefits is dependent on future taxable income. For those jurisdictions where the expiration date of tax carry-forwards 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 and its tax planning strategies. The realization of these deferred tax assets can be impacted by changes to tax codes, statutory tax rates and future taxable income levels.

# Acquisitions

During the past three years, the Company acquired a number of businesses, which were accounted for using the purchase method. Accordingly, the results of operations of the acquired companies have been included in the consolidated results from their respective acquisition dates.

In May 2000, the Company purchased substantially all of the assets and liabilities of Curtis Industries, Inc. (Curtis) for \$63.4 million. Curtis, a distributor of MRO supplies and high-quality security products, was combined with Bowman Distribution to form Barnes Distribution. This business combination created a broader product offering, enhanced service capabilities and opportunities for increased sales penetration. The combination also created significant cost savings opportunities, primarily through headquarters and distribution center consolidations and increased purchasing leverage. The majority of these cost savings were realized in 2002.

In connection with the Curtis acquisition, the Company incurred certain integration costs. The integration plan included combining the headquarters functions and consolidating warehousing and distribution networks. As a result, the Company recorded total costs of \$6.4 million, relating primarily to lease consolidation costs, facility closure costs and reductions in personnel. Costs of \$4.7 million associated with the acquired business were reflected as assumed liabilities in the allocation of the purchase price to net assets acquired. The remaining integration costs of \$1.7 million were reflected in expenses in 2000. As of December 31, 2002, \$1.5 million remained as liabilities related primarily to future lease payments.

In September 2000, the Company purchased substantially all of the assets and liabilities of AVS/Kratz-Wilde Machine Company and Apex Manufacturing, Inc. (Kratz-Wilde/Apex) for \$40.9 million. Kratz-Wilde/Apex fabricates and machines intricate aerospace components for jet engines and auxiliary power units. These businesses are included in the Barnes Aerospace segment. This acquisition augmented Barnes Aerospace by extending product depth and customer penetration, and also provided an additional FAA-licensed aircraft engine repair facility.

In 2001, the Company completed two bolt-on acquisitions, for a combined purchase price of \$3.8 million. In January 2001, the Company acquired Euro Stock Springs & Components Limited (Euro Stock). Euro Stock distributes standard springs through catalogs to customers located primarily in Europe. This business, which is included in the Barnes Distribution segment, expanded Barnes Distribution's presence in Europe and added a new sales channel through Euro Stock's product catalog. In November 2001, the Company acquired certain assets of Forward Industries, L.L.C., and its subsidiary Forward Industries, Ltd. Forward Industries designs and manufactures nitrogen gas springs that are used in the appliance, automotive, heating and cooling and electrical industries. This acquisition has been integrated with the Company's existing nitrogen gas spring business and is included in the Associated Spring segment. The acquisition broadened the nitrogen gas spring product line offering of Associated Spring.

In 2002, the Company completed two acquisitions for a total purchase price of \$34.0 million. Consideration for the acquisitions included cash of approximately \$31.0 million, of which \$2.0 million



Management's Discussion & Analysis



Management's Discussion & Analysis

will be paid in two equal installments in April 2003 and 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 \$3.0 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 premier 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.

The purchase price of each acquisition has been allocated to tangible and intangible assets and liabilities of the businesses, based upon estimates of their respective fair values. For acquisitions initiated prior to June 30, 2001, the resulting goodwill had been amortized over a 40-year life. Beginning in 2002, goodwill is no longer amortized, as the lives are considered indefinite. See Note 1 to the Consolidated Financial Statements.

On February 6, 2003, the Company acquired Kar Products LLC of Des Plaines, Illinois, and certain assets and liabilities of its Canadian business, A.&H. Bolt & Nut Company Ltd. (Kar Products). Kar Products adds to the Barnes Distribution segment a diversified customer base that operates in all 50 states, Puerto Rico and Canada, further enhancing Barnes Distribution's international presence and leadership position within the MRO market. The purchase price of \$78.5 million was paid through a combination of \$60.0 million cash and \$18.5 million (923,506 shares) of Barnes Group common stock. The Company expects to achieve a number of post-acquisition cost savings and other synergies through headquarters and infrastructure consolidation. The Company also anticipates that the acquisition will be accretive in the first year.

# Results of Operations

The following table sets forth the Company's consolidated statement of income data as a percentage of revenue:

	2002	2001	2000
Net sales	100.0%	100.0%	100.0%
Cost of sales	67.6%	67.6%	66.0%
Gross profit	32.4%	32.4%	34.0%
Selling and administrative expenses	26.7%	27.2%	25.5%
Operating income	5.7%	5.2%	8.5%
Other income	0.5%	0.5%	0.6%
Interest expense	1.9%	2.1%	2.0%
Other expense	0.1%	0.6%	0.5%
Income taxes	0.7%	0.5%	1.8%
Net income	3.5%	2.5%	4.8%

Barnes Group reported record net sales of \$784 million in 2002, an increase of \$15 million, or 2%, over 2001 net sales of \$769 million. The sales increase reflected the Company's recent acquisitions, which contributed \$40 million, all to Associated Spring's sales, as well as organic growth in Associated Spring. This growth was partially offset by a 9% decline in sales at Barnes Aerospace, which coincides with a sharp decline in the commercial aerospace markets, and a 4% sales decline at Barnes Distribution. The decline at Barnes Distribution reflects the impact of adverse market conditions in the manufacturing, industrial and transport services sectors. From a geographic perspective, the Company's foreign sales increased 17% year-over-year, while domestic sales decreased 3%.

In 2001, Barnes Group net sales were up \$29 million, or 4%, over 2000, reflecting a sharp rise in sales at Barnes Aerospace and sales from the Company's 2000 and 2001 acquisitions. This growth was partially offset by a decline in transportation- and telecommunications-related sales at Associated Spring and the adverse impact of weak economic conditions on Barnes Distribution's sales. The businesses acquired in 2000 and 2001 provided incremental sales of \$61 million in 2001: \$1 million to Associated Spring, \$34 million to Barnes Aerospace and \$26 million to Barnes Distribution.

Operating income was \$44.8 million in 2002, an increase of 11.2% compared with \$40.3 million in 2001. These results reflect higher operating profit at Associated Spring and Barnes Distribution. The year-over-year increase in operating profit was impacted positively by a \$4.8 million pretax business consolidation charge, relating primarily to the Associated Spring segment, taken in the fourth quarter of 2001, which did not recur in 2002. In addition, operating income in 2002 benefited from efficiencies gained from the actions taken in this business consolidation. These improvements were partially offset by lower profits at Barnes Aerospace due to lower sales volume and additional severance expense, higher postretirement benefit expense at Associated Spring and lower pension income Companywide. Pension income decreased by \$1.2 million due primarily to reduced investment performance of plan assets and a lower discount rate. The cost of postretirement benefits, other than pensions, increased \$1.4 million due to increased benefit levels provided to certain U.S. employees.

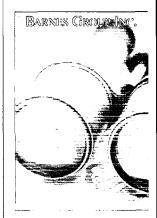
Overall operating income margin was 5.7% in 2002 compared with 5.2% in 2001. While gross profit margin held steady at 32.4% in 2002, gross profit margins improved at both Associated Spring and Barnes Distribution. The decline in gross profit margin in Barnes Aerospace, due directly to the sales shortfall, offset the improvements in the other two businesses. Total selling and administrative expenses declined to 26.7% as a percentage of sales, from 27.2% in 2001. In total dollars, selling and administrative expenses increased \$0.2 million to \$209.2 million in 2002, which included \$5.8 million in selling and administrative expenses related to the recent acquisitions, offset by the impact of the \$4.8 million fourth-quarter 2001 charge. Reductions in selling and administrative expenses resulting from synergies realized from Barnes Distribution's integration of Curtis were partially offset by the higher pension, postretirement and other compensation costs, including the higher severance expense at Barnes Aerospace.

Operating income was \$40.3 million in 2001, compared with \$62.9 million in 2000. A number of items contributed to the operating income decline. The primary factors were the impact of a weak industrial economy on sales volume and a shift in the overall sales mix to lower-margin businesses. The \$29 million net sales increase was comprised of \$61 million in incremental sales from the 2001 and 2000 acquisitions and a \$31 million increase in the existing Aerospace business, which was substantially offset by a \$63 million sales decrease in the higher-gross-margin Associated Spring and Barnes Distribution businesses. Also impacting operating income were higher personnel costs, specifically health insurance and pension costs. Selling and administrative expenses increased \$20.5 million in 2001 over 2000, reflecting the fourth-quarter charge and the costs attributable to the newly acquired businesses, as well as the continued investment made in the sales, marketing and engineering functions throughout the Company.

# Segment Review

Associated Spring sales for 2002 were \$322 million, up \$43 million, or 15%, from sales of \$279 million in 2001. Sales were a record \$327 million in 2000. Sales in 2002 increased over 2001 due to higher light vehicle production in the domestic transportation markets as well as from incremental sales from the acquisitions of Forward Industries, Seeger-Orbis and Spectrum, which in the aggregate totaled \$40 million. Offsetting these increases was a sharp drop in organic sales of telecommunications and electronics products, as sales to those end markets fell by over 40% in 2002. Domestic sales at Associated Spring grew by approximately 5% in 2002, while foreign sales increased by approximately 38% to \$120 million. Sales grew sharply in Europe in 2002, reflecting the Seeger-Orbis acquisition and organic growth in nitrogen gas spring sales from Sweden, but were lower in Asia, reflecting the weakness in the telecommunications and electronics markets. Associated Spring's sales fell in 2001 compared with 2000, due to the sharp contraction in domestic light vehicle production, a weak domestic economy and a worldwide decline in telecommunications and electronics sales.

Associated Spring reported operating profit of \$28.1 million in 2002, compared with \$19.4 million in 2001 and \$44.0 million in 2000. The increase in operating profit in 2002 reflects



Management's Discussion & Analysis



Management's Discussion & Analysis

the higher sales volume; higher profits resulting from actions taken since late 2000 to reduce the business's cost structure; operational improvements, particularly in Mexico; and the absence of a \$4.6 million charge taken in 2001 to reduce the business unit's infrastructure. This increase was partially offset by a decline in sales of more profitable telecommunications and electronics products, and one-time costs related to the purchase accounting step-up of inventory to fair value at Seeger-Orbis. In 2002, the closure of the Texas spring plant was completed, with retained business from the Texas plant being relocated to other Associated Spring facilities, improving their capacity utilization. As of December 31, 2002, the remaining accrual balance of \$0.5 million related primarily to facility holding costs for the Texas plant, which is currently held for sale. Management anticipates that the impact of the transfer of business from the Texas plant will continue to be accretive to operating profit in 2003. The decrease in operating profit in 2001 reflects the sales volume decline and, in particular, the significant shortfall in the more profitable electronics business. In addition, operating profit was significantly impacted in the fourth quarter of 2001 from expenses immediately recognized at the time of the announcement of the Texas plant closure.

Barnes Aerospace sales for 2002 were \$183 million, down \$17 million, or 9%, from a record \$200 million in 2001. Sales in 2000 totaled \$135 million. The sales decline in 2002 largely reflected the sharp decrease in global new commercial aircraft deliveries and continued aircraft order cancellations or deferrals by the major airlines in the wake of the events of September 11, 2001. The 2002 decline also reflects lower overhaul and repair sales, as a significant number of aircraft were removed from the active fleet in response to continued low passenger traffic. These factors were partially offset by higher direct and indirect military sales. Sales increased in 2001 versus 2000 as Barnes Aerospace benefited from the successful cultivation of new markets and customers and from approximately \$34 million in incremental sales related to the acquisition of Kratz-Wilde/Apex. Total orders for 2002 were \$178 million, compared with \$216 million in 2001. Order backlog declined to \$152 million at December 31, 2002, from \$159 million at December 31, 2001. Both orders and order backlog were affected by the same factors that negatively impacted sales in 2002.

Barnes Aerospace operating profit was \$10.8 million in 2002, compared with \$16.4 million in 2001 and \$8.0 million in 2000. Operating profit fell in 2002 primarily as a result of the decline in sales volume. In addition, during 2002, management addressed what is likely to be a protracted recovery in the aerospace industry by reducing employment by approximately 20%, resulting in severance expenses of \$1.3 million. Management believes that these headcount reductions and other steps to reduce costs, such as work furloughs and reduced overtime, have properly positioned the business for the current economic environment. Operating profit increased in 2001 versus 2000, reflecting the sharply higher sales volume and the benefit of lean manufacturing initiatives completed throughout the year.

Sales at Barnes Distribution were \$287 million in 2002, down \$11 million, or 4%, from \$298 million in 2001; sales in 2000 were \$291 million. Sales fell in 2002 due to weak economic conditions within the manufacturing and industrial sectors in the United States and many international markets, which have persisted since late 2000. This was partially offset by new sales initiatives, including an increased focus on national and regional account development, which generated more than \$3 million in sales during 2002. This initiative, combined with electronic commerce initiatives, will be a growth driver in 2003 and beyond. Sales increased in 2001 versus 2000 as a result of incremental sales from acquisitions of \$26 million, which was largely offset by a \$19 million decline in organic sales driven by the weak economic conditions noted above.

Despite the year-over-year decline in sales, operating profit at Barnes Distribution increased to \$7.5 million in 2002 from \$5.5 million in 2001. The increase largely reflects higher operating efficiency as synergies from the Curtis acquisition were successfully realized. Operating profit also benefited from an improvement in gross profit margin stemming from selective price increases and lower product procurement costs. Operating profit decreased in 2001 from \$12.9 million in 2000 as a result of lower organic sales volume, which more than offset the benefits from incremental sales volume and early realization of synergies from the Curtis acquisition.

# Other Income/Expense

Other income totaled \$3.7 million in 2002, compared with \$3.9 million in 2001 and \$4.8 million in 2000. The decrease in other income in 2002, compared with 2001, was due to foreign exchange transaction gains of \$1.2 million in 2002 compared with gains of \$1.9 million in 2001,

offset by higher equity income from the Company's NASCO joint venture. The foreign exchange gains related primarily to exposures on U.S. dollar-denominated financial instruments, primarily in the Company's Brazil operation. 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. The decrease in 2001, compared with 2000, was due to lower equity income from NASCO, offset in part by higher net foreign exchange transaction gains.

Lower interest expense in 2002, compared with 2001, was a result of lower market interest rates and a fixed-to-variable interest rate swap agreement that collectively more than offset the impact of an increase in average borrowings. Other expenses declined in 2002 due to an accounting change that eliminated goodwill amortization of \$4.2 million in 2001. This change is more fully described in Note 1 to the Consolidated Financial Statements.

Interest expense and other expenses increased in 2001 as a result of acquisitions. Interest expense increased due to significantly higher borrowings, offset in part by lower average interest rates. Other expenses increased with the additional goodwill amortization associated with the acquisitions.

# Income Taxes

The Company's effective tax rate was 18.0% in 2002, compared with 18.5% in 2001 and 26.6% in 2000. The decline in the tax rate in both 2002 and 2001 is due to a significant shift in the overall mix of income to a higher percentage of foreign income, in jurisdictions with tax rates lower than the U.S. statutory tax rate. In addition, the lower tax rate in 2002 reflects the benefit of an ESOP dividend distribution tax deduction. The 2002 tax deduction includes a retroactive election for the 2001 dividend distribution, the result of an amendment to the Company's Retirement Savings Plan (RSP). The effective tax rate is expected to be in the range of 22.0% to 25.0% in 2003, assuming a single-year deduction for the RSP dividends and an anticipated shift in earnings to countries with higher tax rates, primarily the United States.

### Net Income and Net Income Per Share

Consolidated net income was \$27.2 million in 2002, \$19.1 million in 2001 and \$35.7 million in 2000. Basic earnings per share was \$1.45 for 2002, compared with \$1.03 in 2001 and \$1.92 in 2000. Diluted earnings per share was \$1.42 for 2002, \$1.01 for 2001 and \$1.90 in 2000.

# 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 2003 will provide sufficient cash to take advantage of opportunities for organic business expansion and to meet the Company's current financial commitments. Future acquisitions are expected to be financed through a mix of internal cash, borrowing and equity.

Operating activities are the principal source of cash flow for the Company, generating \$54.4 million in 2002, \$65.0 million in 2001 and \$51.9 million in 2000. Operating cash flow in 2002 reflects higher net income when compared with 2001. The reduction in depreciation and amortization was due to the absence of \$4.2 million of goodwill amortization in 2002, as discussed in Note 1 to the Consolidated Financial Statements. In addition, depreciation declined \$0.7 million due to lower capital spending over the past three years and the retirement of older assets. Management continues to stress the need for effective working capital management, which contributed to positive cash flow in 2002. Significant progress was made in reducing inventory levels, primarily at Barnes Distribution and Barnes Aerospace. Accounts payable decreased in part due to reduced inventory purchases, combined with the impact, in 2002, of aggressive working capital management at the end of 2001. The increase in deferred taxes reflects operating loss carry-forwards generated in 2002 that will be utilized in the future and the impact of a minimum pension liability adjustment. In 2001, the increase



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in operating cash flow was due primarily to significant improvements in working capital, which more than offset the lower net income in that year.

Investing activities used cash of \$48.0 million in 2002, compared with \$26.0 million in 2001 and \$134.5 million in 2000. Investing activities in 2002 included the acquisitions of Seeger-Orbis and Spectrum. The Seeger-Orbis acquisition was funded from cash held by the Company outside the United States. In 2001, funds used for two bolt-on acquisitions were offset in part by a favorable purchase price adjustment received in 2001 on the Kratz-Wilde/Apex acquisition. The significant cash use in 2000 is attributable to the purchases of Curtis and Kratz-Wilde/Apex. The Company's capital spending program focuses on business growth and improvements in productivity and quality. In 2002, capital spending was reduced in response to the economic downturn. The Company expects to increase capital spending in 2003 to roughly 2001 levels.

Net cash used by financing activities was \$24.4 million in 2002 and \$13.3 million in 2001, compared with net cash provided by financing activities of \$64.8 million in 2000. Cash from financing activities in 2002 included \$4.7 million of cash proceeds from the termination of an interest rate swap. This cash, combined with cash provided by operating activities, proceeds from additional borrowings and excess cash, was used to fund acquisitions and capital expenditures and to pay dividends. Cash dividends were held at \$0.80 per share. Total cash used to pay 2002 dividends to stockholders was \$15.0 million. In 2001, proceeds from the sale of a cross-currency debt swap, combined with strong cash flow from operating activities, were used in part to fund capital expenditures, pay dividends, repurchase the Company's stock and reduce debt. In 2000, the increase in borrowings reflected the issuance of additional long-term debt to fund business acquisitions as well as to supplement cash generated by operating activities.

The Company maintains bank-borrowing facilities to supplement internal cash generation. At December 31, 2002, the Company had a \$150 million borrowing facility under a three-year revolving credit agreement, of which \$32 million was borrowed at an interest rate of 3.05%. Additionally, the Company had \$6.0 million in borrowings under uncommitted short-term bank credit lines, at an interest rate of 2.38%. The revolving credit borrowing facility was signed in June 2002 and replaced a revolving credit facility that was due to expire in December 2002.

Borrowing capacity is limited by various debt covenants. The most restrictive covenant requires the Company to maintain a ratio of Total Debt to EBITDA, as defined in the revolving credit agreement, of not more than 3.0 times at December 31, 2002. The actual ratio at December 31, 2002, was 2.66 times and would have allowed additional borrowings of \$27.6 million. In conjunction with the Kar Products acquisition, the Company amended the revolving credit agreement, pursuant to which the ratio was increased to 3.25 times for the first three quarters of 2003 and will return to 3.0 times at December 31, 2003, a ratio the Company expects to meet. In connection with the financing of the acquisition, the Company borrowed an additional \$56 million under the revolving credit facility.

At December 31, 2002, the Company held \$28.4 million in cash and equivalents, predominately in its non-U.S. subsidiaries. Although repatriation of certain non-U.S. cash balances to the U.S. could have adverse tax consequences, cash held outside the U.S. is available to fund international cash requirements, including acquisitions.

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

In November 2000, the Company financed a portion of the Curtis and Kratz-Wilde/Apex business acquisitions by issuing \$60 million of privately placed Senior Notes (Notes) with three insurance companies. These Notes bear an annual fixed rate of 9.34% and are payable in three equal annual installments beginning in 2006. In August 2002, the Company terminated an interest rate swap agreement that had effectively converted the Notes to variable-rate debt. In connection with the swap agreement termination, the Company received a cash payment of \$4.7 million. The corresponding adjustment to the carrying value of the debt is being amortized against interest expense over the remaining life of the Notes.

The funded status of the Company's pension plans is dependent upon many factors, including returns on invested assets and the level of market interest rates. Recent declines in the value of securities traded in equity markets and declines in long-term interest rates have had a negative impact

on the funded status of the plans. In 2002, no contribution was required and no cash contribution was made to any of the U.S. qualified pension plans. Furthermore, no significant cash contributions to the qualified plans are anticipated in 2003. In accordance with SFAS 87, "Employers' Accounting for Pensions," the Company recorded a minimum pension liability adjustment for under-funded plans as of December 31, 2002, through an after-tax charge of \$16.8 million to accumulated other non-owner changes to equity.

## 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 \$18.8 million of its fixed-rate Senior Notes to variable-rate debt. This interest swap agreement had a positive impact on 2002 earnings, reducing interest expense by \$0.1 million.

The Company's primary interest rate risk is derived from its outstanding variable-rate debt obligations. At December 31, 2002, the result of a hypothetical 1% increase in the average cost of the Company's variable-rate debt, including the interest rate swap agreement, would have reduced annual pretax profit by \$0.6 million.

At December 31, 2002, the fair value of the Company's fixed-rate debt was \$153.0 million, compared with its carrying amount of \$156.9 million. The Company estimates that a 1% decrease in market interest rates at December 31, 2002, would have increased the fair value of the Company's fixed-rate debt to \$158.5 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 and Chinese renminbi. 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, 2002, would have resulted in a \$1.0 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 in countries where the local currency is strengthening against the U.S. dollar, management has converted U.S dollar-denominated cash and short-term investments to local currency and is using 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 continues to invest excess cash in U.S. dollar-denominated instruments.

The Company's exposure to commodity price changes relates primarily to certain manufacturing operations that utilize high-grade steel spring wire and titanium. The Company manages its exposure to changes in those prices through its procurement and sales practices. The Company is not dependent upon any single source for any of its principal raw materials or products for resale, and all such materials and products are readily available.

# Inflation

Management believes that during the 2000–2002 period, inflation did not have a material impact on the Company's financial statements.



Management's Discussion & Analysis



Management's Discussion & Analysis

# Recent Accounting Changes

The Company adopted SFAS 141, "Business Combinations," and SFAS 142, "Goodwill and Other Intangible Assets." SFAS 141 requires companies to account for acquisitions entered into after June 30, 2001, using the purchase method and establishes criteria to be used in determining whether acquired intangible assets are to be recorded separately from goodwill. SFAS 142 sets forth the accounting for goodwill and other intangible assets. Goodwill and other intangible assets with indefinite lives are no longer amortized but instead are evaluated at least annually for impairment by comparing the carrying value to the fair value at the reporting unit level. Intangible assets with finite lives will be amortized over their useful lives. SFAS 142 is effective for acquisitions completed after June 30, 2001, and, as of January 1, 2002, became effective for all other prior acquisitions.

In August 2001, SFAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," was issued. This statement was effective on January 1, 2002, for the Company. Adoption of this standard did not have a material impact on the Company's financial position, results of operations or cash flows.

In April 2002, SFAS 145, "Rescission of FASB Statements No. 4, 44, and 64, amendment of FASB Statement No. 13, and Technical Corrections," was issued. The standard eliminates an inconsistency between the required accounting for sale-leaseback transactions and the required accounting for certain lease modifications that have economic effects that are similar to sale-leaseback transactions. The adoption of this statement is not expected to have a material impact on the Company's financial position, results of operations or cash flows.

In June 2002, SFAS 146, "Accounting for Costs Associated with Exit or Disposal Activities," was issued. This statement provides guidance on the recognition and measurement of liabilities associated with exit or disposal activities and requires that such liabilities be recognized when incurred. This statement is effective for exit or disposal activities that are initiated after December 31, 2002, and does not impact the Company's existing accruals. Adoption of this standard may impact the timing of recognition of costs associated with future exit and disposal activities.

In November 2002, the FASB issued FASB Interpretation 45 (FIN 45), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness to Others." FIN 45 expands disclosure requirements and requires that a guarantor recognize, at fair value, a liability for its obligation under a guarantee. The recognition and measurement requirements are effective on a prospective basis for guarantees issued or modified after December 31, 2002. Management believes that FIN 45 will not have a material impact on the Company's financial position, results of operations or cash flows. The Company has complied with the expanded disclosure requirements.

In December 2002, SFAS 148, "Accounting for Stock Compensation – Transition and Disclosure," was issued. This statement addresses transition provisions and disclosure requirements. The Company has complied with the amended disclosure requirements.

# Forward-Looking Statements

This Annual Report may contain certain forward-looking statements as defined in the Public Securities Litigation and 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 timely ability to develop new and enhanced products to meet customers' needs; the effectiveness of the Company's marketing and sales programs; increased competitive activities that could adversely affect customer demand for the Company's products; changes in economic and political conditions worldwide and in the locations where the Company does business; interest and foreign exchange rate fluctuations; and regulatory changes.

(Dollars in thousands, except per share data)

Years ended December 31,		2002		2001		2000
Net sales	\$	784,036	\$	768,821	\$	740,032
Cost of sales		530,004		519,536		488,634
Selling and administrative expenses		209,192		208,965		188,449
		739,196		728,501		677,083
Operating income		44,840		40,320		62,949
Other income		3,651		3,890		4,773
Interest expense		14,823		16,161		15,140
Other expenses		557		4,590		3,992
Income before income taxes		33,111		23,459		48,590
Income taxes		5,960		4,338		12,925
Net income	\$	27,151	\$	19,121	\$	35,665
Per common share:						
Net income:						
Basic	\$	1.45	\$	1.03	\$	1.92
Diluted		1.42		1.01		1.90
Dividends		0.80		0.80		0.79
Average common shares outstanding:						
Basic		8,750,442		8,506,247		8,568,359
Diluted	19	9,185,332	13	8,919,968	1	8,791,227



CONSOLIDATED
STATEMENTS
OF INCOME



Consolidated Balance Sheets

(Dollars in thousands)		
December 31,	2002	2001
Assets		
Current assets		
Cash and cash equivalents	\$ 28,355	\$ 48,868
Accounts receivable, less allowances		
(2002 - \$2,891; 2001 - \$3,114)	97,533	94,124
Inventories	88,809	85,721
Deferred income taxes	16,024	16,702
Prepaid expenses	7,916	11,120
Total current assets	238,637	256,535
Deferred income taxes	22,610	5,783
Property, plant and equipment	159,440	152,943
Goodwill	164,594	159,836
Other assets	67,249	61,408
Total assets	\$652,530	\$636,505
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Liabilities and Stockholders' Equity		
Current liabilities	Φ.	* ~ COO
Notes payable	\$	\$ 5,500
Accounts payable	63,389	71,410
Accrued liabilities	61,853	59,118
Long-term debt – current	6,837	47,576
Total current liabilities	132,079	183,604
Long-term debt	214,125	178,365
Accrued retirement benefits	87,162	63,610
Other liabilities	10,944	12,089
Commitments and contingencies (Notes 9 and 18)		
Stockholders' equity		
Common stock – par value \$0.01 per share		
Authorized: 60,000,000 shares		
Issued: 22,037,769 shares at par value	220	220
Additional paid-in capital	53,511	54,874
Treasury stock at cost $(2002 - 3,081,718 \text{ shares})$ ;		
2001 – 3,576,322 shares)	(61,847)	(76,903)
Retained earnings	255,147	243,369
Accumulated other non-owner changes to equity	(38,811)	(22,723)
Total stockholders' equity	208,220	198,837
Total liabilities and stockholders' equity	\$652,530	\$636,505

(Dollars in thousands)			
Years ended December 31,	2002	2001	2000
Operating activities:			
Net income	\$ 27,151	\$ 19,121	\$ 35,665
Adjustments to reconcile net income			
to net cash from operating activities:			
Depreciation and amortization	33,626	37,045	35,871
Loss (gain) on disposition of property,			
plant and equipment	(222)	2,093	(1,960)
Changes in assets and liabilities:			
Accounts receivable	5,692	11,378	1,087
Inventories	9,843	(3,629)	(7,631)
Prepaid expenses	3,095	(1,884)	(1,425)
Accounts payable	(12,626)	13,514	(5,415)
Accrued liabilities	(87)	(5,552)	1,026
Deferred income taxes	(15,941)	6,510	5,863
Long-term pension asset	(2,070)	(7,514)	(8,249)
Other	5,950	(6,044)	(2,975)
Net cash provided by operating activities	54,411	65,038	51,857
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Investing activities:			
Proceeds from disposition of property, plant			
and equipment	3,592	1,093	2,744
Capital expenditures	(19,367)	(24,857)	(28,042)
Business acquisitions, net of cash acquired	(31,189)	(1,036)	(104,935)
Other	(1,003)	(1,209)	_(4,309)
Net cash used by investing activities	(47,967)	(26,009)	(134,542)
Financing activities:			
Net decrease in notes payable	(2,935)	(1,463)	(5,201)
Payments on long-term debt	$(\hat{61},004)$	(28,000)	(60,000)
Proceeds from the issuance of long-term debt	48,000	23,711	150,000
Proceeds from the issuance of common stock	3,792	2,845	3,920
Common stock repurchases	(1,147)	(8,798)	(9,197)
Dividends paid	(15,018)	(14,806)	(14,677)
Proceeds from the sale of swaps	4,702	13,766	— (= 1,711)
Other	(752)	(584)	
Net cash (used) provided by financing activities	(24,362)	(13,329)	64,845
rect cash (asea) provided by initialients activities	(24,302)	(13,32))	04,045
Effect of exchange rate changes on cash flows	(2,595)	(135)	(2,489)
(Decrease) increase in cash and cash equivalents	(20,513)	25,565	(20,329)
Cash and cash equivalents at beginning of year	48,868	23,303	43,632
Cash and cash equivalents at beginning of year	\$ 28,355	\$ 48,868	\$ 23,303
Cash and Cash equivalents at the Of year	+ 40,333	* 70,000	23,303



Consolidated **STATEMENTS** OF CASH FLOWS

Supplemental Disclosure of Cash Flow Information: Non-cash financing and investing activities include the 2002 issuance of \$3.0 million of treasury stock and \$2.0 million in installment payments in connection with the Spectrum acquisition.



CONSOLIDATED
STATEMENTS OF
CHANGES IN
STOCKHOLDERS'
EQUITY

					Accumulated	
		Additional			Other Non-Owner	Total
	Common	Paid-In	Treasury	Retained	Changes to	Stockholders'
(Dollars in thousands)	Stock	Capital	Stock	Earnings	Equity	Equity
January 1, 2000	\$ 220	\$49,786	\$ (63,893)	\$218,388	\$(23,887)	\$180,614
Comprehensive income:						
Net income				35,665		35,665
Foreign currency						
translation adjustments					3,070	3,070
Comprehensive income				35,665	3,070	38,735
Dividends paid				(14,677)		(14,677)
Common stock repurchases			(9,197)			(9,197)
Employee stock plans		2,059	3,909	(110)		5,858_
December 31, 2000	220	51,845	(69,181)	239,266	(20,817)	201,333
Comprehensive income:						
Net income				19,121		19,121
Foreign currency				,		<b>y</b>
translation adjustments					(1,244)	(1,244)
Unrealized losses on hedging activi	ties				(662)	(662)
Comprehensive income				19,121	(1,906)	17,215
Dividends paid				(14,806)		(14,806)
Common stock repurchases			(8,798)	, , ,		(8,798)
Employee stock plans		3,029	1,076	(212)		3,893
December 31, 2001	220	54,874	(76,903)	243,369	(22,723)	198,837
Comprehensive income:						
Net income				27,151		27,151
Foreign currency				_,,		,
translation adjustments					1,236	1,236
Unrealized losses on hedging activi	ities				(502)	(502)
Minimum pension liability adjustm					(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 issued for charitable		` /	,			,
contribution		(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

(All dollar amounts included in the notes are stated in thousands except per share data and the tables in Note 17.)

# 1. Summary of Significant Accounting Policies

General: 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. Actual results could differ from those estimates. Certain reclassifications have been made to prior year amounts to conform to the current year presentation.

Comsolidation: 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, under the equity method. The NASCO investment of \$9,908 and \$9,431 as of December 31, 2002 and 2001, respectively, is included in other assets. Other income in the accompanying income statements includes income of \$1,090, \$408 and \$1,611 for the years 2002, 2001 and 2000, respectively, from the Company's investment in NASCO. The Company received dividends from NASCO totaling \$44, \$464 and \$666 in 2002, 2001 and 2000, respectively.

Revenue recognition: Sales and related cost of sales are recognized when products are shipped to customers and title has 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 a maturity of three months or less are cash equivalents. Cash equivalents are carried at fair value.

Inventories: Inventories are valued at the lower of cost or market. The last-in, first-out (LIFO) method was used to accumulate the cost of the majority of U.S. inventories, which represent 66% 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 reasonably expected. Loss provisions are based on the excess inventoriable 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 142, "Goodwill and Other Intangible Assets," effective January 1, 2002, goodwill is not being amortized, as the lives are considered indefinite. For periods prior to January 1, 2002, goodwill acquired since 1970 but prior to July 1, 2001, was being amortized on a straight-line basis over 40 years. Annually, goodwill is subject to impairment testing in accordance with SFAS 142. Based on this assessment, there was no goodwill impairment in 2002.



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The following table presents income adjusted to exclude goodwill amortization expense recognized in the prior periods:

	2002	2001	2000
Net income, as reported	\$ 27,151	\$ 19,121	\$ 35,665
Add back: goodwill amortization, net of income taxes		3,449	2,899
Adjusted net income	\$ 27,151	\$ 22,570	\$ 38,564
Basic earnings per share, as reported Add back: goodwill amortization, net of income taxes	\$ 1.45	\$ 1.03 .19	\$ 1.92 .16
Adjusted basic earnings per share	\$ 1.45	\$ 1.22	\$ 2.08
Diluted earnings per share, as reported Add back: goodwill amortization, net of income taxes	\$ ·1.42 —	\$ 1.01 .18	\$ 1.90 .15
Adjusted diluted earnings per share	\$ 1.42	\$ 1.19	\$ 2.05

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.

The Company adopted SFAS 133, "Accounting for Derivative Instruments and Hedging Activities," as amended, on January 1, 2001. The standard requires that all derivative instruments be recorded on the balance sheet at fair value. The accounting for changes in the fair value depends on how the derivative is used and designated. In accordance with the transition provisions of SFAS 133, the Company recorded a \$400 gain on January 1, 2001, which was entirely offset by a loss recorded on the re-measurement of underlying balance sheet items. There was no transition adjustment to other non-owner changes to equity.

Foreign currency contracts qualify as fair value hedges of unrecognized firm commitments, or cash flow hedges of recognized assets and liabilities or anticipated transactions. Gains and losses on derivatives are recorded directly to earnings or other non-owner changes to equity, depending on the designation. Amounts recorded to 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 is 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, 2002, the fair value of derivatives held by the Company was a net liability of \$1,833. During 2002, losses of \$279 included in other non-owner changes to equity were reclassified to earnings. Amounts in other non-owner changes to equity expected to be reclassified to earnings within the next year are not material. During 2002, gains or losses related to hedge ineffectiveness were immaterial. Foreign currency transaction gains included in income were \$1,172, \$1,874 and \$1,012 in 2002, 2001 and 2000, respectively, inclusive of gains and losses on foreign currency derivatives.

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

Stock-Based Compensation: The Company has stock-based employee compensation plans, which are described more fully in Note 15. The Company accounts for those plans under the recognition and measurement principles of APB Opinion 25, "Accounting for Stock Issued to Employees," and related Interpretations. The following table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of SFAS 123, "Accounting for Stock-Based Compensation," to stock-based employee compensation.

		2002	2001		2000
Net income, as reported	\$ 2	7,151	\$ 19,121	\$ (	35,665
Add: Stock-based employee compensation expense					
included in reported net income, net of related tax effects		1,589	1,227		431
Deduct: Stock-based employee compensation expense					
determined under fair value based method for all awards,					
net of related tax effects		5,970)	 (4,962)	(	3,108)
Pro forma net income	_ \$ 2	2,770	\$ 15,386	\$	32,988
Earnings per share:					
Basic – as reported	\$	1.45	\$ 1.03	\$	1.92
Basic – pro forma		1.21	.83		1.78
Diluted – as reported		1.42	1.01		1.90
Diluted – pro forma		1.18	.81		1.76

The fair value of each stock option grant on the date of grant has been estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	2002	2001	2000
Risk-free interest rate	3.69%	4.84%	6.65%
Expected life	4.0 years	4.3 years	5.0 years
Expected volatility	35%	35%	30%
Expected dividend yield	3.51%	3.40%	3.57%

The weighted-average grant date fair values of options granted during 2002, 2001 and 2000 were \$5.37, \$4.77 and \$4.44, respectively.

# 2. Acquisitions

During the past three years, the Company has acquired a number of businesses, all of which were accounted for using the purchase method. Accordingly, the results of operations of the acquired companies have been included in the consolidated results from their respective acquisition dates.

In May 2000, the Company purchased substantially all of the assets and liabilities of Curtis for \$63,363. Curtis, a distributor of MRO supplies and high-quality security products, was combined with Bowman Distribution to form Barnes Distribution. This business combination created a broader product offering, enhanced service capabilities and increased sales penetration for the business segment. The combination also created significant cost savings opportunities, primarily through headquarters and distribution center consolidations and increased purchasing leverage. A majority of these cost savings were realized in 2002. In connection with the Curtis acquisition, the Company incurred certain integration costs which are more fully discussed in Note 8.

In September 2000, the Company purchased substantially all of the assets and liabilities of Kratz-Wilde Machine Company and Apex Manufacturing Inc. (Kratz-Wilde/Apex) for \$40,938. Kratz-Wilde/Apex fabricates and machines intricate aerospace components for jet engines and auxiliary power units. These businesses are included in the Barnes Aerospace segment. This



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acquisition augmented Barnes Aerospace by extending product depth and customer penetration, and also provided an additional FAA-licensed aircraft engine repair facility.

In 2001, the Company completed two bolt-on acquisitions for a combined purchase price of \$3,830. In January 2001, the Company acquired Euro Stock. Euro Stock distributes standard springs through catalogs to customers located primarily in Europe. This business, which is included in the Barnes Distribution segment, expanded Barnes Distribution's presence in Europe and added a new sales channel through Euro Stock's product catalog. In November 2001, the Company acquired certain assets of Forward Industries, L.L.C., and its subsidiary Forward Industries, Ltd. Forward Industries designs and manufactures nitrogen gas springs that are used in the appliance, automotive, heating and cooling and electrical industries. This acquisition has been integrated with the Company's existing nitrogen gas spring business and is included in the Associated Spring segment. The acquisition broadened the nitrogen gas spring product line offering of Associated Spring.

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 \$2,000 will be paid in two equal installments in April 2003 and 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 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 premier 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.

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.

The 2002 and 2001 acquisitions provided incremental sales of \$39,659 in 2002. The 2001 and 2000 acquisitions provided incremental sales of \$60,860 in 2001. Pro forma net profit has not been presented for the 2002 and 2001 acquisitions because the results would not be significantly different than historical results.

The following table reflects the operating results of the Company for the year ended December 31, 2000, on a pro forma basis, which gives effect to the acquisitions of the two businesses acquired in 2000 at the beginning of the year. The pro forma results are not necessarily indicative of the operating results that would have occurred had the acquisitions been effective January 1, 2000; nor are they intended to be indicative of results that may occur in the future. The underlying pro forma information includes the amortization expense associated with the assets acquired, the Company's financing arrangements, certain purchase accounting adjustments and related income tax effects. The pro forma results do not include the effects of synergies and cost reduction initiatives related to the acquisitions.

(Unaudited)	2000
Net sales	\$798,652
Income before income taxes	48,309
Net income	35,449
Per common share:	
Basic	\$ 1.91
Diluted	1.89

# 3. Subsequent Event

On February 6, 2003, the Company acquired Kar Products, a leading full-service distributor of MRO supplies to industrial, construction, transportation and other markets. The acquisition expands both the geographic scope and product line reach of the Barnes Distribution segment. Kar Products has a diversified customer base that operates in all 50 states, Puerto Rico and Canada, further enhancing

Barnes Distribution's leadership position within the MRO market and its international presence. The purchase price of \$78,500 was financed through a combination of \$4,000 of cash, \$56,000 of debt and \$18,500 (923,506 shares) of Barnes Group common stock. The Company expects to achieve a number of post-acquisition cost savings and other synergies through headquarters and infrastructure consolidation. The costs related to the consolidation efforts have not been finalized and therefore are not included in the pro forma data that follows.

The Company is in the process of obtaining third-party valuations of certain assets acquired with Kar Products. Thus, the allocation of the purchase price is subject to refinement. Any amounts attributable to such assets are expected to be finalized during 2003. The following pro forma data summarize the combined balance sheets of the Company and Kar Products as if the acquisition had occurred at December 31, 2002.

(Unaudited)	As Reported	Kar (1)	Other (2)	Pro forma
_				
Current assets	\$238,637	\$ 29,543	\$ (4,000)	\$264,180
Non-current assets	249,299	7,052		256,351
Goodwill	164,594	50,247_		214,841
Total assets	\$652,530	\$ 86,842	\$ (4,000)	\$735,372
Current liabilities	\$132,079	\$ 8,342	\$	\$140,421
Long term debt	214,125		56,000	270,125
Other liabilities	98,106			98,106
Stockholders' equity/net assets	208,220	78,500	(60,000)	226,720
Liabilities and stockholders' equity	\$652,530	\$ 86,842	\$ (4,000)	\$735,372

<sup>(1)</sup> The Kar amounts represent the estimated fair values of the assets acquired and liabilities assumed.

# 4. Inventories

Inventories at December 31 consisted of:

	2002	2001	
Finished goods	\$ 58,244	\$ 51,839	
Work-in-process	16,993	18,370	
Raw materials and supplies	13,572	15,512	
	\$ 88,809	\$ 85,721	

Inventories valued by the LIFO method aggregated \$58,506 and \$66,092 at December 31, 2002 and 2001, respectively. If LIFO inventories had been valued using the FIFO method, they would have been \$12,567 and \$13,135 higher at those dates.

# 5. Property, Plant and Equipment

Property, plant and equipment at December 31 consisted of:

	2002	2001	
Land	\$ 9,087	\$ 4,046	
Buildings	79,578	74,191	
Machinery and equipment	340,647	328,402	
	429,312	406,639	
Less accumulated depreciation	269,872	253,696	
	\$ 159,440	\$152,943	

Depreciation expense was \$29,304, \$30,008 and \$30,314 for 2002, 2001 and 2000, respectively.



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<sup>(2)</sup> Other includes the acquisition financing. The net increase in shareholders equity reflects the \$18,500 issuance of shares.

# 6. Goodwill and Other Intangible Assets

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

	Associated Spring	Barnes Aerospace	Barnes Distribution	Total BGI
January 1, 2001	\$71,416	\$26,127	\$58,124	\$155,667
Goodwill acquired	(1,120)	6,275	3,230	8,385
Goodwill amortization	(1,791)	(987)	(1,438)	(4,216)
December 31, 2001	68,505	31,415	59,916	159,836
Goodwill acquired	7,872	(515)	(2,599)	4,758
December 31, 2002	\$76,377	\$30,900	\$ 57,317	\$164,594

During 2002, an additional \$1,035 of goodwill was recognized related to Associated Spring's November 2001 acquisition of Forward Industries assets, related primarily to an adjustment to the fair value of the equipment acquired, and \$6,837 million for the April 2002 acquisition of Spectrum. No goodwill resulted in connection with the acquisition of Seeger-Orbis. Goodwill related to the Barnes Aerospace 2000 acquisition of Kratz-Wilde/Apex decreased \$515 in 2002, the result of the reduction of accrued acquisition costs. Also in 2002, goodwill was reduced by \$2,599 related to Barnes Distribution's Curtis acquisition. This reduction relates primarily to an adjustment to the reorganization accrual and inventory valuation.

In 2001, Associated Spring's goodwill related to the acquisition of the nitrogen gas spring business was reduced by \$1,272, reflecting the adjustment to accrued acquisition costs. Initial goodwill of \$152 was recorded for the acquisition of certain assets of Forward Industries. The \$6,275 increase in goodwill resulted from the completion of the purchase price allocation to the Barnes Aerospace segment valuation of inventories, backlog and fixed assets, offset by a \$700 purchase price adjustment. Barnes Distribution's business reorganization of Curtis, acquired in 2000, and the completion of the purchase price allocation resulted in \$2,332 of additional goodwill being recognized. In addition, \$898 of goodwill was recorded in Barnes Distribution related to the acquisition of Euro Stock.

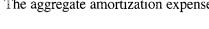
At December 31, 2002, \$80,524 of goodwill is tax deductible.

Acquired Intangible Assets: Intangible assets, other than goodwill, consist of registered trademarks, purchased in the acquisition of the nitrogen gas spring business in 1999, and registered trademarks and patents purchased in the 2002 acquisitions of Seeger-Orbis and Spectrum. The amounts attributable to these intangible assets are included in the purchase price allocations.

Trademarks acquired with the purchase of the nitrogen gas spring business are being amortized over their estimated useful lives of 30 years. At December 31, 2002, the gross carrying amount of trademarks was \$4,395 and accumulated amortization was \$488. The aggregate amortization expense is approximately \$146 in each of the years 2003 through 2007.

Intangible assets that were acquired with Seeger-Orbis were \$3,047 and consist of trademarks and patents with estimated useful lives of 30 and 15 years, respectively. The accumulated amortization at the end of 2002 was \$197. The aggregate amortization expense is approximately \$236 in each of the years 2003 through 2007.

Intangible assets that were acquired with Spectrum were \$2,400 and consist primarily of trademarks with estimated useful lives of 30 years. The accumulated amortization at the end of 2002 was \$57. The aggregate amortization expense is \$87 in each of the years 2003 through 2007.



Accrued Liabilities

Accrued liabilities at December 31 consisted of:

2002	2001
\$ 16,063	\$ 13,503
9,315	9,283
36,475	36,332
\$ 61,853	\$ 59,118
	\$ 16,063 9,315 36,475



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# 8. Business Reorganization Accruals

Business reorganization accruals are included in accrued liabilities.

In connection with the Curtis acquisition in May 2000, the Company incurred certain integration costs. The Company recorded total costs of \$6,405 related primarily to lease consolidation costs, facility closure costs and reductions in personnel. At December 31, 2001, \$5,537 remained as liabilities related to future lease payments and facility closure costs. During 2002, \$2,010 of the accrual was utilized in connection with warehouse closures. In addition, \$2,030 of accruals were reduced with a corresponding reduction to goodwill. As of December 31, 2002, an accrual of approximately \$1,497 remained which related to future lease payments, which will continue through the remaining lives of the leases.

During the fourth quarter of 2001, the Company recorded pretax charges of \$4,842, primarily for Associated Spring, related to actions aimed at reducing the Company's infrastructure. Such actions included the closure of an Associated Spring plant in Texas. Additional costs to transfer certain retained business to other Associated Spring plants in 2002 were not accruable in 2001 and were recognized as incurred in 2002. The 2001 charges included \$179 recorded in cost of sales and \$4,663 in selling and administrative expenses, and related to net workforce reductions of approximately 122 salaried and hourly employees, the elimination of approximately 128,500 square feet of facilities and the disposal of assets. At December 31, 2001, the accrual balance of \$2,223 related to facility holding costs and severance. During 2002, \$1,695 of the accrual was utilized. As of December 31, 2002, the remaining balance of \$528 related to post-closure holding costs for the Texas plant, which is currently for sale.

# 9. Debt and Commitments

Long-term debt at December 31 consisted of:

	2002		2001
	Carrying	Fair	Carrying
	Amount	Value	Amount
7.13% Notes, including interest swap	\$ 19,028	\$ 18,724	\$ 25,000
7.66% Notes	24,500	24,530	24,500
7.80% Notes	45,500	44,861	45,500
9.34% Notes, including deferred gain	64,379	61,066	61,741
2.15% Notes	20,205	20,198	22,200
Revolving Credit	32,000	32,000	40,000
Industrial Revenue Bonds	7,000	7,000	7,000
Borrowings under lines of credit	6,000	6,000	_
Capital leases	2,350	2,350	_
	220,962	216,729	225,941
Less current maturities	(6,837)	(6,837)	(47,576)
Total	\$214,125	\$209,892	\$ 178,365

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.

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 increased the effective interest rate of the borrowing to 5.5%. On December 30, 2002, the Company prepaid the next four consecutive semi-annual installments totaling Yen 349.2 million (U.S. equivalent \$2,917). As a result of this prepayment, there are no scheduled principal payments due on the Yen note until June 2005. The Company also



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paid \$475 in settlement of the corresponding forward contracts. The fair value of the remaining forward contracts at December 31, 2002, was a liability of approximately \$2,029.

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 carrying values of other long-term debt and notes payable approximate their fair market values.

In June 2002, the Company replaced its revolving credit agreement with a new three-year agreement with 11 banks that allows borrowings up to \$150,000 under Notes due June 14, 2005. A fee of 0.45% per annum is paid on the unused portion of the commitments. The Company had \$32,000 borrowed under this agreement at an interest rate of 3.05% at December 31, 2002. The Company also has available approximately \$15,000 in uncommitted short-term bank credit lines, of which \$6,000 and \$5,500 was borrowed at December 31, 2002 and 2001, respectively. The interest rate on these borrowings was 2.38% and 2.78% at December 31, 2002 and 2001, respectively.

The Industrial Revenue Bonds, due in 2008, have variable interest rates. The interest rates on this borrowing were 1.70% and 1.80% at December 31, 2002 and 2001, 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 \$18,750 of 7.13% fixed-rate Senior Notes to variable-rate debt equal to LIBOR plus 425 basis points. The effective rate of the borrowing was 5.71% on December 31, 2002. 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 approximately \$278 at December 31, 2002.

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

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 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%.

At December 31, 2002, the Company classified \$6,000 of borrowings under lines of credit due within one year as long-term debt. The Company has both the intent and the ability, through its revolving credit facility, to refinance this amount on a long-term basis.

Long-term debt, excluding the fair value of the swap and the deferred gain on the terminated swap, is payable as follows: \$6,837 in 2003, \$6,884 in 2004, \$46,389 in 2005, \$39,089 in 2006, \$44,606 in 2007 and \$72,500 thereafter.

In addition, the Company had outstanding letters of credit totaling \$3,668 at December 31, 2002.

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, dividends or treasury stock purchases the Company can make under such agreements.

Under the most restrictive borrowing capacity covenant in any agreement, \$27,600 of additional capacity was available at December 31, 2002. Under the most restrictive net worth covenant in any agreement, \$8,409 was available for dividends or acquisitions of common stock at December 31, 2002. The future level of dividend payments is a function of future net income and the issuance of common stock. The acquisition of Kar Products included the issuance of \$18,500 of Company common stock on February 6, 2003, which increased equity and the amount of net worth available for dividends dollar for dollar.

As of December 31, 2002, the Company is required to maintain a ratio of Total Debt to EBITDA, as defined in the revolving credit agreement, of not more than 3.0 times. This ratio requirement will increase to 3.25 at March 31, 2003, and will return to 3.0 at December 31, 2003. The actual ratio at December 31, 2002, was 2.66 times.

Interest paid was \$9,496, \$16,076 and \$17,945 in 2002, 2001 and 2000, respectively. The amount paid in 2002 reflects the \$4,702 of cash received for the swap termination. Interest capitalized was \$128, \$163 and \$188 in 2002, 2001 and 2000, respectively, and is being depreciated over the lives of the related fixed assets.

# 10. Pension and Other Postretirement Benefits

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). Plan assets consist primarily of common stocks and fixed income investments, including 616,310 shares of Company stock. Additionally, 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, non-union employees of Barnes Distribution Canada and union employees of Associated Spring-Milwaukee. Company contributions under these plans are based primarily on the performance of the business units and employee compensation. The Spectrum defined contribution plan was terminated effective January 1, 2003. Contribution expense under these defined contribution plans was \$1,727, \$1,803 and \$1,447 in 2002, 2001 and 2000, respectively. Most U.S. salaried and non-union hourly employees are eligible to participate in the Company's 401(k) program. See Note 15 for further discussion of this plan.

In accordance with SFAS 87, "Employers' Accounting for Pensions," the Corporation has recorded a non-cash minimum pension liability adjustment for underfunded plans of \$25,920 at December 31, 2002, representing the excess of the unfunded accumulated benefit obligation ("ABO") over previously recorded pension cost liabilities. The minimum pension liability adjustment is included in accrued retirement benefits on the balance sheet. An after-tax charge of \$16,822 is 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 of equity securities held by the pension trusts.

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.

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

			Ot	her
	Pensions		Postretirem	ent Benefits
	2002	2001	2002	2001
Benefit obligation, January 1	\$264,261	\$245,250	\$72,060	\$73,676
Service cost	8,034	7,436	726	562
Interest cost	18,622	18,224	5,231	5,114
Amendments	3,538		3,914	
Actuarial loss	8,980	11,013	9,999	848
Benefits paid	(17,554)	(16,612)	(7,905)	(8,083)
Acquisition	3,851	_		_
Curtailment	(576)			_
Foreign exchange rate changes	2,675	(1,050)	15	(57)_
Benefit obligation, December 31	\$291,831	\$264,261	\$84,040	\$72,060
Projected benefit obligations related to plans				
with benefit obligations in excess of assets	\$274,644	\$ 20,603		
Accumulated benefit obligations related to plans				
with accumulated benefit obligations in				
excess of assets	\$120,007	\$ 18,704		



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

	Pe	nsions	
	2002	2001	
Fair value of plan assets, January 1	\$307,135	\$324,370	
Actual return on plan assets	(45,642)	(346)	
Company contributions	1,836	821	
Plan participants' contributions	156	138	
Benefits paid	(17,554)	(16,612)	
Foreign exchange rate changes	1,368	(1,236)	
Fair value of plan assets, December 31	\$247,299	\$307,135	_
A cost unlosed to mlane unith manifested have St			
Assets related to plans with projected benefit	4	_	
obligations in excess of plan assets	\$224,392	\$_7,705_	
Assets related to plans with accumulated benefit			_
obligations in excess of plan assets	\$ 83,795	\$ 7,705	

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

			(	Other	
	Pensions		Postretirement Benefit		
	2002	2001	2002	2001	
Funded status	\$(44,532)	\$ 42,874	\$ (84,040)	\$ (72,060)	
Adjustments for unrecognized:					
Net (gains) losses	62,045	(24,888)	21,981	13,486	
Prior service costs (benefits)	7,742	5,365	3,112	(2,245)	
Net asset at transition	(114)	(292)			
Prepaid (accrued) benefit cost	\$ 25,141	\$ 23,059	\$ (58,947)	\$ (60,819)	

Amounts recognized in the accompanying balance sheets consist of:

			(	Ither
	Pensions		Postretirement Benefits	
	2002	2001	2002	2001
Other assets:				
Prepaid benefit cost	\$ 29,996	\$ 34,421	\$	\$
Intangible asset	6,524			_
Accrued liabilities	(1,082)	(1,082)	(9,042)	(8,594)
Accrued retirement benefits	(36,217)	(10,280)	(49,905)	(52,225)
Accumulated other non-owner changes to equity	25,920			
Prepaid (accrued) benefit cost	\$ 25,141	\$ 23,059	\$ (58,947)	\$ (60,819)

Pension 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.

Significant assumptions used in determining pension and other postretirement expense and the funded status of the plans were:

2002	2001	2000	
6.75%	7.25%	7.75%	
9.50%	9.75%	9.75%	
4.50%	4.50%	4.75%	
	6.75% 9.50%	6.75% 7.25% 9.50% 9.75%	6.75% 7.25% 7.75% 9.50% 9.75% 9.75%

Pension and other postretirement benefit expenses consisted of the following:

		Pensions		Other Postretirement B	Renefits
	2002	2001	2000	2002 2001	2000
Service cost	\$ 8,034	\$ 7,436	\$ 6,264	\$ 776 \$ 562	\$ 481
Interest cost	18,622	18,224	17,707	5,231 5,114	5,148
Expected return on plan assets	(30,153)	(29,130)	(27,601)		_
Amortization of transition assets	(191)	(442)	(1,636)		_
Recognized (gains) losses	(1,499)	(2,934)	(3,420)	731 253	144
Curtailment	(572)	_	· · ·		_
Prior service cost (benefits)	1,169	1,096	1,113	(718) (1,320)	(1,321)
Benefit (credit) cost	\$ (4,590)	\$ (5,750)	\$ (7,573)	\$ 6,020 \$ 4,609	\$ 4,452

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 14% at December 31, 2002, decreasing gradually to an ultimate rate of 5% at December 31, 2012. A one percentage point change in the assumed healthcare cost trend rate would have changed the ABO by approximately \$1,490 at December 31, 2002, and would have changed the 2002 aggregate of the service and interest cost components of postretirement benefit expense by approximately \$45.

# 11. Income Taxes

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

	2002	2001	2000	
Income before income taxes:	-		, L	
U.S.	\$ 7,120	\$ 2,368	\$ 19,763	
International	25,991	21,091	28,827	
Income before income taxes	\$ 33,111	\$ 23,459	\$48,590	
-				
Income tax provision:				
Current:		_		
U.S. – federal	\$ 4,870	\$ (3,407)	\$ 2,353	
U.S. – state	2,213	(713)	674	
International	4,050	3,699	4,035	
	11,133	(421)	7,062	
Deferred:				
U.S. – federal	(4,350)	4,470	3,726	
U.S. – state	(1,751)	1,121	683	
U.S. – state rate reduction			1,181	
International	928	(832)	273	
	(5,173)	4,759	5,863	
Income tax provision	\$ 5,960	\$ 4,338	\$12,925	



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS



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

	As	sets	Liabilities	
	2002	2001	2002	2001
Allowance for doubtful accounts	\$ 512	\$ 756	\$	\$
Depreciation and amortization	(13,279)	(9,023)	1,791	2,930
Inventory valuation	6,593	7,472	1,007	782
Postretirement/postemployment costs	22,548	23,325	(265)	(249)
Tax loss carry-forwards	28,156	10,762		-
Other	2,129	(2,883)	4,158	3,293
	46,659	30,409	6,691	6,756
Valuation allowance	(8,025)	(7,924)	_	
	\$ 38,634	\$ 22,485	\$6,691	\$6,756
Current deferred income taxes	\$ 16,024	\$ 16,702	\$ 946	\$ 688
Non-current deferred income taxes	22,610	5,783	5,745	6,068
	\$ 38,634	\$ 22,485	\$6,691	\$6,756

The deferred income tax assets will be realized through reversals of existing taxable temporary differences with the remainder, net of the valuation allowance, dependent on future income. Management believes that sufficient income will be earned in the future to realize the remaining net deferred income tax assets. Tax loss carry-forwards of \$67,523 have remaining carry-forward periods ranging from two years to unlimited. The Company has tax credit carry-forwards of \$4,097, with remaining carry-forward periods ranging from one to 10 years.

The Company has not recognized deferred income taxes on \$149,937 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.

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

	2002	2001	2000	
U.S. federal statutory income tax rate	35.0%	35.0%	35.0%	
State taxes (net of federal benefit)	0.9	1.1	1.8	
State tax rate reduction	_	_	1.6	
Foreign losses without tax benefit	3.6	3.6	0.8	
Tax on foreign operations	(16.0)	(22.8)	(12.7)	
NASCO equity income	(0.4)	0.1	(0.5)	
Export sales benefit	(1.3)	(1.5)	(0.9)	
ESOP dividend	(5.8)	<del></del>		
Other	2.0	3.0	1.5	
Consolidated effective income tax rate	18.0%	18.5%	26.6%	

Income taxes paid, net of refunds, were \$1,906, \$2,046 and \$7,165 in 2002, 2001 and 2000, respectively.

# 12. 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, which comprises foreign currency translation adjustments, deferred gains and losses related to certain derivative instruments and the minimum pension liability adjustment. The components of accumulated other non-owner changes to equity follow:

	Foreign	Unrealized	Minimum	
	Currency	Losses on	Pension	
	Translation	Hedging	Liability	
	Adjustments	Activities	Adjustment	Total
Balance, January 1, 2000	\$ (23,887)	\$	\$	\$ (23,887)
2000 Change	3,070			3,070
December 31, 2000	(20,817)			(20,817)
2001 Change	(1,244)	(662)		(1,906)
December 31, 2001	(22,061)	(662)		(22,723)
2002 Change	1,236	(502)	(16,822)	(16,088)
December 31, 2002	\$ (20,825)	\$ (1,164)	\$ (16,822)	\$ (38,811)

# 13. Common Stock

In 2002, 2001 and 2000, 414,944 shares, 290,591 shares and 351,237 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 RSP. In addition, 119,048 shares and 17,500 shares were issued from treasury in 2002, in connection with the acquisition of Spectrum and for the payment of charitable contributions, respectively. In 2002, 2001 and 2000, the Company acquired 56,888 shares, 436,502 shares and 594,406 shares, respectively, of the Company's common stock at a cost of \$1,147, \$8,798 and \$9,197, 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.

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 earnings 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.

# 14. Preferred Stock

At December 31, 2002 and 2001, the Company had 3,000,000 shares of preferred stock authorized, none of which were outstanding.

### 15. Stock Plans

Most U.S. salaried and non-union hourly employees are eligible to participate in the Company's 401(k) plan. Effective April 1, 2001, the 401(k) plan, previously called the Barnes Group Inc. Guaranteed Stock Plan (GSP), was amended and renamed the Barnes Group Inc. Retirement Savings Plan (RSP). The RSP continues to provide for the investment of employer and employee contributions in the Company's common stock and also provides other investment alternatives for employee contributions. Employee contributions to the RSP for investment in the Company's



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common stock after March 31, 2001, are no longer guaranteed a minimum rate of return. However, the Company continues to guarantee a minimum rate of return on certain pre-April 1, 2001, assets of the plan (see Note 18).

The Company contributes an amount equal to 50% of employee contributions up to 6% of eligible compensation plus any guarantee payment. Employees may elect to contribute additional amounts up to a total of 10% of eligible compensation. The Company expenses all contributions made to the RSP. The Company recognized expense of \$2,990, \$3,560 and \$2,295 in 2002, 2001 and 2000, respectively. As of December 31, 2002, the RSP held 3,167,133 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 62,741, 62,691, and 75,052 in 2002, 2001 and 2000, respectively. As of December 31, 2002, 256,527 additional shares may be purchased.

The 1991 Barnes Group Stock Incentive Plan (1991 Plan) authorizes 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 terminate without being exercised become available for future grants under the 1991 Plan. A maximum of 1,945,984 common shares are subject to issuance under this plan after December 31, 2002. As of December 31, 2002 and 2001, there were 171,832 and 627,421 shares, respectively, available for future grant under the 1991 Plan.

The Barnes Group Inc. Employee Stock and Ownership Program (2000 Plan) was approved on April 12, 2000, and subsequently amended on April 10, 2002, by the Company's stockholders. The 2000 Plan permits 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 have been authorized and reserved. Options granted under the 2000 Plan that terminate without being exercised become available for future grants under the 2000 Plan. A maximum of 3,292,333 common shares are subject to issuance under this plan after December 31, 2002. As of December 31, 2002 and 2001, there were 749,432 and 325,125 shares, respectively, available for future grants under the 2000 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 104,806 common shares are subject to issuance under the Key Plan after December 31, 2002.

Compensation cost related to these plans was \$2,588, \$1,974 and \$798 in 2002, 2001 and 2000, respectively. The Company recorded, in additional paid-in capital, tax benefits related to stock options of \$1,148, \$650 and \$776 in 2002, 2001 and 2000, respectively.

Data relating to options granted under these plans follow:

	2002		20	2001		2000	
		Average		Average		Average	
	Number	Exercise	Number	Exercise	Number	Exercise	
	of Shares	Price	of Shares	Price	of Shares	Price	
Outstanding, January 1	3,374,792	\$19.61	2,471,992	\$19.74	1,808,775	\$20.70	
Granted	1,242,843	\$22.66	1,447,681	\$18.81	1,207,622	\$16.88	
Exercised	616,348	\$17.81	379,435	\$17.11	324,036	\$12.75	
Cancelled	53,396	\$23.13	165,446	\$20.33	220,369	\$22.22	
Outstanding, December 31	3,947,891	\$20.80	3,374,792	\$19.61	2,471,992	\$19.74	
Exercisable, December 31	2,065,666	\$21.29	1,388,325	\$21.34	899,926	\$21.36	

The following table summarizes information about stock options outstanding at December 31, 2002:

	Options	Options E	xercisable		
Range of		Average	Average		Average
Exercise	Number	Remaining	Exercise	Number	Exercise
Prices	of Shares	Life (Years)	Price	of Shares	Price
\$10 to \$19	1,554,404	7.56	\$17.46	645,363	\$16.94
\$19 to \$23	1,069,164	6.60	\$20.75	918,458	\$20.88
\$23 to \$31	1,324,323	7.87	\$24.75	501,845	\$27.63

Incentive stock rights under the 1991 Plan (rights) and restricted stock awards under the 2000 Plan and Key Plan (awards) 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 stock units and rights are credited with dividend equivalents, which are converted into additional units or rights, as the case may be. All rights have up to a five-year vesting period. In 2002, 213,300 rights and awards were granted; 14,609 rights and awards were credited to holders for dividend equivalents; 25,028 rights and awards, which include dividend equivalents, were converted to an equivalent number of shares of common stock; and 16,000 rights and awards were forfeited. As of December 31, 2002, there were 451,857 rights and awards outstanding.

Under the Non-Employee Director Deferred Stock Plan 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, 6,000 and 12,000 shares granted to new directors in 2002, 2001 and 2000, respectively. There are 54,000 shares reserved for issuance under this plan.

Total shares reserved for issuance under all stock plans aggregated 5,653,650 at December 31, 2002.

# 16. Average Shares Outstanding

Net income per common share is computed in accordance with SFAS 128, "Earnings per Share." Basic earnings per share is calculated using the weighted average number of common shares outstanding during the year. Diluted earnings per share reflect the assumed exercise and conversion of all dilutive securities. Shares held by the RSP are considered outstanding for both basic and diluted earnings per share. There are no adjustments to net income for purposes of computing income available to common stockholders for the years ended December 31, 2002, 2001 and 2000. A reconciliation of the average number of common shares outstanding used in the basic and diluted EPS computation follows:

	Average Common Shares Outstanding				
	2002	2001	2000		
Basic	18,750,442	18,506,247	18,568,359		
Dilutive effect of:					
Stock options	288,036	273,651	101,413		
Stock incentive units	127,431	122,869	104,307		
Non-Employee Director Stock Plan	19,423	17,201	17,148		
Diluted	19,185,332	18,919,968	18,791,227		

As of December 31, 2002, there were 3,947,891 stock options outstanding, of which 2,239,515 were considered dilutive and 1,708,376 were anti-dilutive.



Notes to Consolidated Financial Statements



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# 17. 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:

Associated Spring manufactures precision mechanical and nitrogen gas springs, manifold systems and other close-tolerance engineered metal components, principally for the electronics, telecommunications and transportation markets. Associated Spring's custom metal parts are sold in the U.S. and through its international subsidiaries. International manufacturing operations are located in Brazil, Sweden, Canada, Mexico, Germany, Singapore and China.

Barnes Aerospace supplies precision machined and fabricated components and assemblies for the aerospace and industrial gas turbine industries. Additionally, it refurbishes jet engine components for many of the world's commercial airlines and the military. 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.

Barnes Distribution is an international distributor of MRO supplies and a full-service provider of logistics management services for industrial, heavy equipment and transportation maintenance markets. Additionally, it distributes close-tolerance engineered metal components, principally manufactured by Associated Spring. Barnes Distribution, formerly known as Bowman Distribution, was formed from the combination of the Curtis acquisition and Bowman Distribution. Barnes Distribution's operations and markets are located primarily in the U.S., with additional locations in Canada, Europe, Asia, Mexico and Brazil. As indicated in Note 3, the Company acquired Kar Products, a leading full-service distributor of MRO supplies, on February 6, 2003. Kar Products will be included in the Barnes Distribution segment.

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.

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

	Associated	Barnes	Barnes		Total
	Spring	Aerospace	Distribution	Other	BGI
Revenues					
2002	\$ 321.7	\$ 183.0	\$ 286.7	\$ (7.4)	\$ 784.0
2001	279.2	200.4	298.4	(9.2)	768.8
2000	327.3	135.1	291.1	(13.5)	740.0
Operating profit					
2002	\$ 28.1	\$ 10.8	\$ 7.5	\$	\$ 46.4
2001	19.4	16.4	5.5		41.3
2000	44.0	8.0	12.9	_	64.9
Assets					
2002	\$ 283.8	\$ 123.9	\$ 168.5	\$ 76.3	\$ 652.5
2001	244.1	141.4	171.5	79.5	636.5
2000	273.6	130.1	178.6	54.6	636.9
Depreciation and amortiza					
2002	\$ 15.5	\$ 9.2	\$ 7.7	\$ 1.2	\$ 33.6
2001	16.8	9.7	9.9	0.6	37.0
2000	17.8	8.6	9.0	0.5	35.9
Capital expenditures					
2002	\$ 6.5	\$ 4.5	\$ 7.4	\$ 1.0	\$ 19.4
2001	8.7	10.0	6.0	0.2	24.9
2000	14.2	5.6	5.5	2.7	28.0

# Notes:

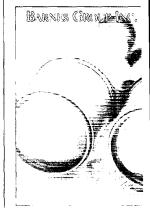
In 2002 and 2001, respectively, one customer accounted for 11% and 13% of the Company's total revenue. In 2000, sales from any one customer did not exceed 10% of the Company's total revenues.

"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 \$1.1 million, \$0.4 million and \$1.6 million in 2002, 2001 and 2000, respectively.

The assets of Associated Spring include the NASCO investment of \$9.9 million, \$9.4 million and \$10.0 million in 2002, 2001 and 2000, respectively.

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



Notes to Consolidated Financial Statements



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

	2002	2001	2000
Operating profit	\$ 46.4	\$ 41.3	\$ 64.9
Interest income	0.9	0.9	1.5
Interest expense	(14.8)	(16.2)	(15.1)
Other income (expense)	0.6	(2.5)	(2.7)
Income before income taxes	\$ 33.1	\$ 23.5	\$ 48.6

# Operations by Geographic Area

			Inter-	
Revenues	Domestic	International	geographical	Total BGI
2002	\$ 606.6	\$ 200.8	\$ (23.4)	\$ 784.0
2001	625.7	172.2	(29.1)	768.8
2000	580.6	186.3	(26.9)	740.0
Long-lived assets				
2002	\$ 269.7	\$ 121.6	\$	\$ 391.3
2001	266.4	107.8	_	374.2
2000	262.4	118.2		380.6

#### Notes:

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

Intergeographical sales are equally distributed between domestic and international.

# 18. Commitments and Contingencies

#### Leases

The Company has various noncancellable operating leases for buildings, office space and equipment. As discussed in Note 9, the Company assumed certain debt related to capital leases with the acquisition of Spectrum. The balance of this debt at December 31, 2002, was \$2,350. Rent expense was \$10,257, \$9,942 and \$9,127 for 2002, 2001 and 2000, respectively. Minimum rental commitments under noncancellable leases in years 2003 through 2007 are \$7,784, \$6,816, \$5,776, \$4,843 and \$1,960 and \$7,187 thereafter.

### Retirement Savings Plan

The Company continues to guarantee a minimum rate of return on certain pre-April 2001 assets of its 401(k) Retirement Savings Plan (the Plan). This guarantee will become a liability for the Company only if, and to the extent that, the value of the related Company stock does not cover the guaranteed asset value when an employee who had invested in the Barnes Group stock investment election or vested in the Company match, which is paid in Barnes Group stock, withdraws from the Plan.

The following table provides a number of hypothetical market values of the Company's stock compared to the estimated guarantee amounts based on those market values:

Stock Price	Plan	
 Per Share	Guarantee	
\$ 25.00	\$ 30	
20.00	400	
15.00	4,200	
10.00	13,100	
5.00	22,400	
0.00	33,300	

At December 31, 2002, the value of the Company's guarantee on these assets was approximately \$320.

# Restrictions on Stock Consideration for Spectrum

The sole shareholder of Spectrum received 119,048 shares of the Company's common stock as partial consideration for Spectrum. For the one-year period following the required holding period under the federal securities laws, the sole shareholder has agreed not to sell the Company shares received in the acquisition at a price below \$25.20 per share without the consent of the Company. In the event he sells any of the shares during that period with the consent of the Company or during the one month following that period, the Company will pay to him an amount equal to the difference between \$25.20 per share and a lesser price at which he sells such shares.

#### Product Warranties

The Company provides product warranties in connection with the sale of products. Product warranty liabilities were not significant as of December 31, 2002 and 2001.



NOTES TO
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# PRICEWATERHOUSE COPERS (R)



REPORT OF
INDEPENDENT
ACCOUNTANTS

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

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, changes in stockholders' equity and cash flows present fairly, in all material respects, the financial position of Barnes Group Inc. and its subsidiaries at December 31, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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.

As discussed in Note 1 to the Consolidated Financial Statements, the Company adopted Statement of Financial Accounting Standards, No. 142, "Goodwill and Other Intangible Assets," effective January 1, 2002.

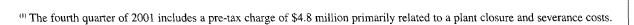
Hartford, Connecticut

January 31, 2003,

except for Note 3, which is as of February 6, 2003.

Pricewaterhous Corpus LZP

	First	Second	Third	Fourth	Full
(Dollars in millions, except per share of	lata) Quarter	Quarter	Quarter	Quarter <sup>(1)</sup>	Year
2002					
Net sales	\$194.2	\$209.4	<sup>\$</sup> 196.8	\$183.6	\$ 784.0
Gross profit <sup>(2)</sup>	63.9	67.2	62.3	60.6	254.0
Operating income	11.6	13.7	10.0	9.5	44.8
Net income	6.8	8.7	6.9	4.8	27.2
Per common share:					
Net income:					
Basic	\$ 0.37	\$ 0.46	\$ 0.37	\$ 0.25	\$ 1.45
Diluted	0.36	0.45	0.36	0.25	1.42
Dividends	0.20	0.20	0.20	0.20	0.80
Market prices (high-low)	\$26.35-21.60	\$25.80-21.00	\$23.38-18.45	\$22.90-17.50	\$26.35–17.50
2001					
Net sales	\$199.3	\$ 199.5	\$186.5	\$183.5	\$ 768.8
Gross profit <sup>(2)</sup>	66.7	65.6	61.3	55.7	249.3
Operating income	13.8	13.4	11.6	1.5	40.3
Net income	7.3	6.9	5.7	(0.8)	19.1
Per common share:					
Net income:					
Basic	\$ 0.39	\$ 0.37	\$ 0.31	\$ (0.04)	\$ 1.03
Diluted	0.39	0.36	0.30	(0.04)	1.01
Dividends	0.20	0.20	0.20	0.20	0.80
Market prices (high-low)	\$21.00-18.00	\$24.70-18.25	\$24.80-19.48	\$24.94-19.20	\$24.94-18.00



<sup>(2)</sup> Sales less cost of sales.



Quarterly Data (Unaudited)



SELECTED FINANCIAL DATA

	2002	2001	2000	1999	1998(1)
Per common share (2)					
Net Income					
Basic	\$ 1.45	\$ 1.03	\$ 1.92	\$ 1.47	\$ 1.72
Diluted	1.42	1.01	1.90	1.46	1.69
Dividends paid	0.80	0.80	0.79	0.75	0.69
Stockholders' equity (at year-end)	10.98	10.77	10.82	9.58	9.51
Stock price (at year-end)	20.35	23.99	19.88	16.31	29.25
For the year (in thousands)					
Net sales	\$ 784,036	\$768,821	\$740,032	\$622,356	\$651,183
Operating income	44,840	40,320	62,949	46,107	55,279_
As a percent of sales	5.7%	5.2%		7.49	
Income before income taxes	\$ 33,111	\$ 23,459	\$ 48,590	\$ 42,698	\$ 54,663
Income taxes	5,960	4,338	12,925	14,086	20,169
Net income	27,151	19,121	35,665	28,612	34,494
As a percent of					
average stockholders' equity	13.0%	9.5%		15.4%	
Depreciation and amortization	\$ 33,626	\$ 37,045	\$ 35,871	\$ 30,602	\$ 28,431
Capital expenditures	19,367	24,857	28,042	27,823	34,843
Average common shares outstanding (3)	18,750	18,506	18,568	19,418	20,096
Year-end financial position (in thousands)				<del></del>	
Working capital	\$ 106,558	\$ 72,931	\$114 <u>,5</u> 02	\$103,165	\$106,884
Current ratio	1.8 to 1	1.4 to 1	1.9 to 1	1.9 to 1	2.1 to 1
Property, plant and equipment	\$ 159,440	\$152,943	\$163,766	\$145,105	\$139,247
Total assets	652,530	636,505	636,941	516,282	418,904
Long-term debt (4)	220,962	225,941	230,000	140,000	51,000
Stockholders' equity	208,220	198,837	201,333	180,614	188,674
Debt as a percent of total capitalization (5)	51.5%	53.8%	54.1%	45.79	6 24.1%
Year-end statistics			<del></del>	<del></del>	
Employees	5,172	5,150	5,471	4,020	3,847

<sup>(1)</sup> Includes the \$12.9 million pretax, \$7.7 million after-tax charge (\$0.38 per share) against income related to the accelerated retirement package for the Company's former president.

<sup>(2)</sup> All per share data, other than earnings per common share, are based on common shares outstanding at the end of each year. Earnings per common share are based on weighted average common shares outstanding during each year.

<sup>(3)</sup> Basic shares.

<sup>(4)</sup> Long-term debt includes current and long-term portion.

<sup>(5)</sup> Debt includes all interest-bearing debt and total capitalization includes interest-bearing debt and stockholders' equity.

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John W. Alden Former Vice Cheirman, United Parcel Service OFAMerica, Inc. Addinta: Georgia

Thomas O. Barnes Chairman of the Board; Barnes Group Inc. Bristol, Connecticut

Gary G. Benanav
Chairman and Chairman and Chairman and Chairman and Chairman, New York Life Chairman; New York Life Chairman; New York Life New York, New York

William S. Birtstow, 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 Ghairman, Olin Corporation Norwalls Connecticus

Frank B. Grzeleddi
Former Managing Director,
Saugatuck Associates Inc.
Stamford, Connecticut
Former Vice Chairman,
Handy & Harman,
Rye, New York

Mylle-HEMengum Ighie Executive Officer, Extrue-Marketing Services, Norcross, Georgia

G. Jackson Rateliffe Chairman, Hubball Incorporated, Orange, Connecticut

# Officers

Executive 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 Counseland Secretary

Philip A. Goodridh Senior Mee President Corporate Development

Francis C. Boyle, Jr. Vice President, Commoller

Joseph D. DeForte Mice President, Tax

Lowrence W. O'Brien Mce President Treasurer

Omeraniams :

Leonard M. Carluca Vice President, Barnes Group Inc., and President, Associated Spring

A. Keith Drawatt
Vice President,
Barnes Group Inc.,
and President,
Barnes Distribution

Thomas P. Fodell
Vice President,
Barnes Group Inc.,
and Chief Operating
Officer, Associated
Spring

Gregory F. Milzefk Vice President, Barnes Group Inc., and President, Barnes Aerospace

Idelle K. Wolf.
Vice President,
Barnes Group Inc.
and Chief Operatin
Officer, Barnes
Distribution

# Corporate Information

Transfer Azeni and Registrar

Mellon Investor Services: ELE
Overpeck Centre

85 Challenger Road
Ridgefield Park, NJ 07660
Phone: 1-800-301-9519
(Continental U.S. 5 hly)
or 1-201-329-8660
www.melloninvestor.com
For the hearing-injoined,
1-800-231-5469

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

StockholderInquiries Address Changes Consolidations Lost Centificates Replacements

Certificate Fransfers:

All certificates should be sent certified or registered mail.

Dividend Ipvæstment/ Stødsholder Ipvæstment Plans:

Dividences on Bannes Group common stock may be automotically invested in additional shares.

Hand Deliveries:

Mellon <mark>Investor Services, LLC</mark> 120 Broadway, 13th Floor New York NY 10271

ck Exchange

New York Stock Exchange Stock Trading Symbol: B

Included in the S&P SmallCap 600 Index and Russell 2000 Index

Independent Accountants

Pricewaterhouse Goopers LLL2 100 Pearl Street Hartford, CL 06103 Investor Information

Barnes Group welcomes inquiries from stockholders, analysts and prospective investors. 10-Ks and other information pertaining to the Company are available on request. Those wishing to receive this information can obtain it via the internet or by requesting it from the Company. Phone and fax an index are listed below.

Contact:
Phillip J. Penn (for Investor Relations) or Monique B. Marchent (for Stockholder Relations)

Barnes Group Inc 123 Main St; P.O. Box 489 Bristol, CT 06017-0289-USA Phone: 1-860-583-7070. Fax: 1-860-589-3507

Communication: -

For press releases and tother information about the Company, go to our Internet address, www.barnesgroupinc.com or call our Fax-On-Demand Service at 1-800-311-4606.

Annual Meeting

Barnes Group Inc.'s annual meeting of stockholders will be held at 1-1-00 arms

Wednesday April 16, 2003, at The Hartford Warnington, Farmington, Connecticut.

