

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 11-K

[X] Annual Report Pursuant to Section 15 [d] of the Securities Exchange Act of 1934

For the fiscal year ended December 30, 2003

or

[] Transition Report Pursuant to Section 15 [d] of the Securities Exchange Act of 1934

For the transition period from ______ to _____

Commission File Number 001-04801

PROCESSED

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BARNES GROUP INC. RETIREMENT SAVINGS PLAN

Barnes Group Inc. 123 Main Street P.O. Box 489 Bristol, Connecticut 06011-0489



SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Benefits Committee of the Board of Directors of Barnes Group Inc. has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Barnes Group Inc.
Retirement Savings Plan
(Registrant)

Date: June 25, 2004

Lawrence W. O'Brien

Member of the Benefits Committee

of Barnes Group Inc.

CONSENT OF INDEPENDENT AUDITORS

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

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 33-30229; 33-20932) of Barnes Group Inc. of our report dated June 25, 2004 relating to the financial statements which are included in the Annual Report on Form 11-K of Barnes Group Inc. Retirement Savings Plan.

Peter W. Brown

Peter W. Brown, CPA's

June 25, 2004

BARNES GROUP INC.
RETIREMENT SAVINGS PLAN
FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 30, 2003
And DECEMBER 30, 2002
with
INDEPENDENT AUDITORS' REPORT

BARNES GROUP INC.

RETIREMENT SAVINGS PLAN

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Peter W. Brown

Certified Public Accountants
and Consultants

Independent Auditors' Report

The Benefits Committee Barnes Group Inc. Retirement Savings Plan

We have audited the accompanying statements of net assets available for benefits of Barnes Group Inc. Retirement Savings Plan (the "Plan") as of December 30, 2003 and 2002 and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 30, 2003 and 2002, and the changes in net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of Assets Held for Investment Purposes and Reportable Transactions are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedules have been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Bristol, Connecticut June 25, 2004 Polon Born

BARNES GROUP INC. RETIREMENT SAVINGS PLAN STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS December 30, 2003 and 2002

ACCEPTEG	<u>2003</u>	2002
ASSETS	•	
Cash and cash equivalents	\$ 3,651,270	\$ 3,284,914
Investments (Note 3):	185,491,261	87,618,741
Receivables: Employer contributions Participant contributions Participant loans Interest Total Receivables Total Assets	$ \begin{array}{r} 1,418,261 \\ 17,586 \\ 4,147,782 \\ \hline \underline{} \\ 5,583,629 \\ \end{array} $ 194,726,160	0 0 2,938,875 20,241 2,959,116 93,862,771
LIABILITIES		
Other payables	0	467,517
Net Assets Available for Benefits	\$194,726,160	<u>\$93,395,254</u>

BARNES GROUP INC. RETIREMENT SAVINGS PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS For the Years Ended December 30, 2003 and 2002

	<u>2003</u>	2002
Additions To Net Assets		
Net Investment Income: Interest and dividend income	\$ 2,907,873	\$ 2,670,985
Net appreciation (depreciation) in fair value of investments Total Net Investment Income	<u>49,212,009</u> 52,119,882	<u>(15,389,719)</u> (12,718,734)
Total Not invosiment income		(12,710,751)
Contributions:		
Employer match	2,985,009	2,945,088
Participant	8,242,528	7,634,647
Profit Sharing	1,335,847	0
Total Contributions	12,563,384	10,579,735
Other Income:		
Interest on participant loans	183,135	200,205
Total Income	64,866,401	(1,938,794)
Plan Mergers	47,594,828	0
Total Additions To Net Assets	112,461,229	(1,938,794)
Deductions From Net Assets		
Attributed To		
Participant withdrawals	11,051,920	
Administrative fees	<u>78,403</u>	<u>57,550</u>
Total deductions from net assets	11,130,323	13,617,070
Net Increase (Decrease)	101,330,906	(15,555,864)
Net Assets Available for Benefits		
Beginning of Period	93,395,254	108,951,118
Dogaming of Forton		100,001,110
End of Period	<u>\$194,726,160</u>	<u>\$ 93,395,254</u>

1. Description of Plan:

The Barnes Group Inc. Voluntary Investment Plan (the "Plan") commenced on April 1, 1984. The Plan was amended in 1988 to change the name to the Barnes Group Inc. Guaranteed Stock Plan, to provide for the investment of Plan assets primarily in Barnes Group Inc. (the "Company") common stock, to extend availability to Barnes Aerospace employees and to reflect other modifications. In 1989, the Plan was amended to become an employee stock ownership plan.

Effective April 1, 2001 the Plan was merged with the Curtis Industries 401(k) Retirement Savings Plan and renamed the Barnes Group Inc. Retirement Savings Plan. Modifications to the Plan included expanded investment options, participant contributions are no longer required to be invested in Barnes Group Inc. stock and future investments made into Barnes Group Inc. stock will no longer be guaranteed.

Effective May 30, 2003, the Plan was amended and restated to incorporate all previous amendments and tax law changes.

Effective May 30, 2003, the Barnes Group Inc. Profit Sharing Plan and the Spectrum Plastic Molding Resources, Inc. 401(k) Profit Sharing Plan were merged into the Plan, with the Barnes Group Inc. Profit Sharing Plan retaining certain separate plan features. Also, effective December 1, 2003 the Kar Products, LLC Savings and Investment Plan was merged into the Plan.

The Plan was amended effective October 10, 2003 to allow diversification of pre April 1, 2001 employee contributions by participants and vested employer-matching contributions and to eliminate the guarantee.

Full-time salaried and non-union hourly United States employees of the Company are eligible to participate in the Plan. Members of collective bargaining units are not eligible to participate. Eligible employees may participate in the Plan on the first day of the month that follows or is coincident with their date of hire.

Subject to certain restrictions which may be applied to highly compensated employees, participants must elect to make contributions to the Plan through payroll deductions of between 1% and 75% (in whole percentages) of their Plan compensation. Such contributions may be made on a pre-tax or after-tax basis. After-tax contributions are not subject to matching Company contributions and the combined pre and after tax deduction cannot exclude 75% of Plan compensation (the after-tax portion of which cannot exceed 10% of Plan compensation). A participant may also elect to increase or reduce the amount of contributions at anytime.

All Profit Sharing contributions are made by Barnes Group Inc. For Barnes Distribution, Company contributions are at its discretion, based on the performance of Barnes Distribution. For all other participating divisions, a minimum contribution is required equal to 3 1/2% of each eligible employee's paid compensation which includes base wages, overtime, shift differential and commissions.

1. <u>Description of Plan (continued)</u>:

The Company match is equal in value to 50% of the participants' pre-tax contribution up to 6% of their Plan compensation. The matching Company contribution is invested directly in Barnes Group Inc. common stock and is restricted from diversification until the participant becomes 100% vested. Effective January 1, 2004, the vesting schedule was revised so that a participant is 100% vested in company match after two completed years of service with the Company. Participants are always 100% vested with respect to their own contributions. Participants vest in the remaining Company match as follows:

Completed Years of Service	Vesting Percentage
Under 1 year	0%
2 years	20%
3 years	50%
4 years	75%
5 or more years	100%

In addition, Company contributions become 100% vested upon death, permanent disability or when the participant reaches age 55.

Participant account balances are invested in one or more of the following investment funds of the Plan:

(a) Company Stock Fund - a fund consisting of the Company's common stock and either cash equivalents or short-term investments.

Frank Russell Trust Company Funds up to June 2003:

- (b) Fixed Income Fund a fund consisting of guaranteed investment contracts issued by insurance companies or financial institutions.
- (c) Common Stock Fund Large Cap- a fund consisting of common stocks of the 1,000 largest capitalized U.S. Companies.
- (d) Balanced Fund a fund consisting of approximately 50% of investments similar to those in the Common Stock Fund and 50% of government and corporate bonds.
- (e) Value Fund a fund consisting of investments in the common stocks of large capitalization U.S. Companies identified as value stocks. Value stocks represent companies whose market price is low relative to one or more valuation factors such as earnings, yield or book value.
- (f) Growth Fund a fund consisting of investments in the common stocks of large capitalization U.S. Companies identified as growth stocks. Growths stocks represent companies whose stock is selling at above-market multiples due to a record of consistent, above-average profitability and growth.

1. Description of Plan (continued):

- (g) International Equity Fund a fund consisting of investments in the common stocks of well-established companies based in countries with well-developed economics and financial markets such as Europe, Japan and Australia.
- (h) Common Stock Fund Small Cap a fund consisting of investments in common stocks of smaller capitalized U.S. Companies.

Fidelity Management Trust Company (Fidelity Funds):

- (i) Stable Value Fund a fund consisting of investments in insurance company and other financial institutions investment contracts and in fixed income securities.
- (j) Fidelity Equity Income Fund a fund consisting of at least 80% of investments in income-producing equity securities, which tend to lead to investment in large cap value stocks. The fund may also invest in other equity and debt securities.
- (k) Spartan Total Market Index Fund a fund consisting of at least 80% of investments in common stocks included in the Wilshire 5000 Total Market Index.
- (l) Spartan U.S. Equity Index Fund a fund consisting of at least 80% of investments in common stocks included in the S&P 500 Index.
- (m) Fidelity Blue Chip Growth Fund a fund consisting of investments in common stocks of well-known and established companies, with at least 80% invested in blue chip companies.
- (n) Fidelity Dividend Growth Fund a fund consisting of at least 80% of investments in equity securities; primarily common stock of companies that pay dividends.
- (o) Fidelity Small Cap Independence Fund a fund consisting of at least 80% of investments in securities of companies with small market capitalization.
- (p) Fidelity Diversified International Fund a fund consisting of investments in foreign securities.
- (q) Fidelity Freedom Funds six funds, with a target fund retirement date. Each Freedom Fund invests in a combination of underlying Fidelity Stock, bond and money market mutual funds with varying time horizons.
- (r) Fidelity Managed Income Portfolio a fund consisting of fixed income investments.

1. Description of Plan (continued):

Income of each fund is reinvested in that fund, except certain dividends of Barnes Group Inc. stock may be paid to participants.

Participants have several options to withdraw their contributions and earnings thereon, including hardship withdrawals and loans. Such withdrawals and loans are subject to certain rules and restrictions.

Distributions of Plan benefits may be made in a lump sum or in installments over a maximum of fifteen years.

Effective January 1, 2002, Riggs Bank became Trustee for all Plan assets. Effective June 1, 2003 Fidelity Management Trust Company became the Trustee for all Plan assets. The Benefits Committee, appointed by the Board of Directors of the Company, is responsible for the general administration of the Plan.

The Company presently intends to continue the Plan indefinitely; however, the Company's Board of Directors may terminate the Plan at any time. Upon termination of the Plan, all participants become fully vested in all Company contributions and earnings credited to their accounts as of the date of such termination.

2. Summary of Significant Accounting Policies:

The financial records of the Plan are maintained on the accrual basis of accounting.

The preparation of financial statements in conformity with generally accepted accounting principles requires the plan administrator to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Significant policies related to investments are summarized below:

The fair value of investments in the Company's common stock is based upon published quotations.

The fair value of investments in common trust funds and interest in registered investments are determined by the custodian of those funds on the basis of the fair values of the underlying net assets.

Net appreciation (depreciation) in fair value of investments represents increases or decreases in value resulting from realized and unrealized gains and losses.

The Participant loans are valued at cost, which approximates fair value.

2. Summary of Significant Accounting Policies: - continued

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis, and dividends are recorded on the ex-dividend date.

The following investments represent 5% or more of the Plan's net assets:

	<u>2003</u>	<u>2002</u>
Barnes Group Inc. Common Stock	<u>\$91,448,899</u>	<u>\$64,451,157</u>
Fidelity Managed Income Portfolio Fund	\$33,172,832	<u>\$0</u>
Fidelity Dividend Growth Fund	<u>\$21,642,664</u>	<u>\$0</u>
Fidelity Freedom 2020 Fund	<u>\$11,537,899</u>	<u>\$0</u>
Frank Russell Trust Investment Contract Fund	\$0	<u>\$10,886,946</u>

Participation in any investment fund other than Barnes Group Stock after April 1, 2001 will generate investment return to the participant net of investment fees. The Company pays all fees associated with investments in Barnes Group Stock. Before April 1, 2001 the Company paid all expenses of administering the Plan. Effective January 1, 2002, administrative and management fees of the Plan, except for those associated with investments in Barnes Group Stock, are paid from Plan assets.

3. <u>Investments:</u>

The Plan has investments in Barnes Group Inc. common stock, other short-term investments, and in Fidelity Funds as of December 30, 2003.

The investments in Company Stock consisted of the following:

	<u>2003</u>	2002
Barnes Group Inc. Common Stock	<u>\$91,448,899</u>	<u>\$64,451,157</u>

3. Investments: - continued

The Investments in the Fidelity Funds consisted of the follow	wing:		
•	<u>2003</u>	<u>2002</u>	
Stable Value Fund	\$3,313,340	\$	0
Fidelity Equity-Income Fund	\$ 3,863,042	\$	0
Spartan Total Market Index Fund	\$ 152,637	\$	0
Spartan U.S. Equity Index Fund	<u>\$ 1,459,681</u>	\$	0
Fidelity Blue Chip Growth Fund	<u>\$ 6,998,304</u>	\$	0
Fidelity Dividend Growth Fund	<u>\$21,642,664</u>	\$	0
Fidelity Small Cap Independence Fund	\$ 5,256,429	\$	0
Fidelity Diversified International Fund	\$ 3,961,023	\$	0
Fidelity Freedom Income Fund	\$ 907,279	\$	0
Fidelity Freedom 2000 Fund	\$ 326,858	\$	0
Fidelity Freedom 2010 Fund	\$ 609,911	\$	0
Fidelity Freedom 2020 Fund	\$11,537,899	\$	0
Fidelity Freedom 2030 Fund	\$ 675,331	\$	0
Fidelity Freedom 2040 Fund	\$ 165,132	\$	0
Fidelity Managed Income Portfolio Fund	\$33,172,832	\$	0

3. Investments: - continued

The Investments in the Frank Russell Trust Funds consisted of the following:

•	<u>2003</u>	2002
Frank Russell Trust Investment Contract Fund	<u>\$0</u>	<u>\$10,886,946</u>
Frank Russell Trust Equity I Fund	\$ 0	\$ 3,357,587
Frank Russell Trust Domestic Moderate Balanced Fund	\$0	<u>\$ 2,427,727</u>
Frank Russell Trust Value Fund	<u>\$0</u>	<u>\$ 1,627,355</u>
Frank Russell Trust Growth Fund	<u>\$0</u>	<u>\$ 1,847,610</u>
Frank Russell Trust International Fund	<u>\$0</u>	\$ 991,023
Frank Russell Trust Equity II Fund	\$0	\$ 2,029,336
Investments Total	<u>\$185,491,261</u>	\$87,618,741

4. Loan Fund:

Participants may elect to take loans from their accumulated vested account balances in the Plan subject to certain limitations. The loans are withdrawn from the participant's fund balance(s) based upon the percentages in which they were invested and in a sequence as prescribed by the Plan. Interest is charged on the loans at a rate determined quarterly at prime (at Chase Manhattan Bank) plus 50 basis points (5.25% and 6.5% for loans issued during the quarters ended December 31, 2003 and 2002). Interest charges commence sixty days subsequent to the initial loan date.

Loan repayments are made in equal periodic installments for a period not to exceed five years and are invested on the participant's behalf in the investment funds per the participant's investment elections. At December 2003 and 2002 there were 620 and 618, respectively, loan fund participants with loans outstanding.

5. Net Appreciation (Depreciation) in Fair Value:

The Plan's investments (fair value as determined by quoted market prices) including gains and losses on investments bought and sold, as well as held during the year, appreciated (depreciated) in value as follows:

	<u>2003</u>	<u>2002</u>
Equity Securities (Barnes Group Inc.)	\$40,178,094	\$(13,278,735)
Commingled pooled funds	9,033,915	(2,110,984)
	\$49,212,009	\$(15,389,719)

6. Withdrawals and Forfeitures:

During 2003 and 2002, participant withdrawals amounted to \$11,051,920 and \$13,559,520, respectively. If a participant terminates his employment with the Company, the portion of Company contributions not vested is forfeited. Such forfeitures, which amounted to \$204,498 and \$253,206 in 2003 and 2002, respectively, are used to reduce Company contributions.

7. Federal Income Taxes:

The U.S. Treasury Department has determined, most recently as of May 28, 2002, that the Plan as originally adopted and amended through January 1, 2002 is a qualified plan under the applicable provisions of the Internal Revenue Code and as such is exempt from federal income taxes. The Plan has been amended since receiving the determination letter. However, the Plan administrator and the Plan's tax counsel believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Employees are not taxed currently on Company contributions to the Plan, contributions made under the salary deferral provisions of the Plan, or on income earned by the Plan. Internal Revenue Service and applicable State regulations in effect in the year participant distributions are made determine the tax status of such distributions.

8. Company Stock Transactions:

In 2003, the Plan purchased on the open market 2,400 shares of Barnes Group Inc. common stock at a cost of \$50,270. The Plan also sold on the open market 352,197 shares at a market value of \$7,930,055. The Plan received 13,023 shares as matching contributions from the Company.

In 2002, the Plan purchased on the open market 10,056 shares of Barnes Group Inc. common stock at a cost of \$210,633. The Plan also sold on the open market 369,053 shares at a market value of \$8,309,584. The Plan received 129,122 shares as matching contributions from the Company.

The Plan owned 2,830,359 shares of Barnes Group Inc. common stock or approximately 13.2% of the outstanding common shares of the Company at December 30, 2003. The Plan owned 3,167,133 shares of Barnes Group Inc. common stock or approximately 16.9% of the outstanding common shares of the Company at December 30, 2002.

EXHIBITS

The following schedule is required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

BARNES GROUP INC. RETIREMENT SAVINGS PLAN

Schedule H, Line 4i (Form 5500) Financial Schedules EIN # 06-0247840 PLAN # 012 Schedule of Assets (Held at End of Year) December 30, 2003

(a)(b)	(c)	Number of Units	(d)	(e)
Identity	Description	Shares	Cost	Current <u>Value</u>
*Fidelity Management Trust Company	Stable Value Fund	3,313,340	\$3,313,340	\$3,313,340
*Fidelity Management Trust Company	Fidelity Equity-Income Fund	77,649	3,419,786	3,863,042
*Fidelity Management Trust Company	Spartan Total Market Index Fund	5,103	143,215	152,637
*Fidelity Management Trust Company	Spartan U.S. Equity Index Fund	37,038	1,395,194	1,459,681
*Fidelity Management Trust Company	Fidelity Blue Chip Growth Fund	176,591	6,354,878	6,998,304
*Fidelity Management Trust Company	Fidelity Dividend Growth Fund	792,772	18,853,979	21,642,664
*Fidelity Management Trust Company	Fidelity Small Cap Independence Fund	293,001	4,562,024	5,256,429
*Fidelity Management Trust Company	Fidelity Diversified International Fund	164,222	3,524,449	3,961,023
*Fidelity Management Trust Company	Fidelity Freedom Income Fund	81,811	899,971	907,279
*Fidelity Management Trust Company	Fidelity Freedom 2000 Fund	27,747	325,924	326,858
*Fidelity Management Trust Company	Fidelity Freedom 2010 Fund	46,844	598,441	609,911
*Fidelity Management Trust Company	Fidelity Freedom 2020 Fund	886,167	9,968,754	11,537,899
*Fidelity Management Trust Company	Fidelity Freedom 2030 Fund	52,149	651,247	675,331
*Fidelity Management Trust Company	Fidelity Freedom 2040 Fund	21,843	158,895	165,132
*Fidelity Management Trust Company	Fidelity Managed Income Portfolio Fund	33,172,832	33,172,832	33,172,832
*Fidelity Management Trust Company	Barnes Group Inc. Common Stock	2,830,359	39,331,158	91,448,899
Loan Fund Participant loans	4.25 – 10.5%	0	0	4,147,782

^{*} Party-in-interest to the Plan

BARNES GROUP INC.
RETIREMENT SAVINGS PLAN
Schedule H, line 4j
(Form 5500)
Financial Schedules
EIN #06-0247840
Plan #012
Schedule of Reportable Transactions
For the Year Ended December 30, 2003

Cumulative Transactions Exceeding 5% of Current Value of Plan Assets

(h) (I) Current Net GAAP Value Gain or (loss)	\$11,902,302 \$(821,845)	©10 650 244 ©180 352
GAAP Cost <u>Of Asset</u>	\$12,724,147	610 478 802
(d) Selling Price	\$11,902,302	610,650,044
(c) Purchase Price	N/A	lan Assets
(b) Description	FRTC Investment Contract (36 Sales)	Single Transaction Exceeding 5% of Current Value of Plan
(a) <u>Identity</u>	*Frank Russell Trust Company	Single Transaction Exc

* Party-in-interest to the Plan

Trust Company