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

**FORM 10-K**

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

For the year ended December 31, 2004

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

For the transition period from  
to

Commission file number  
1-16411

**NORTHROP GRUMMAN CORPORATION**

(Exact name of registrant as specified in its charter)

**DELAWARE**  
(State or other jurisdiction of  
incorporation or organization)

**95-4840775**  
(I.R.S.  
Employer  
Identification  
Number)

**1840 Century Park East, Los Angeles, California 90067**  
**www.northropgrumman.com**

(Address of principal executive offices and internet site)

**(310) 553-6262**

(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock, \$1 par value	New York Stock Exchange Pacific Exchange
Series B Convertible Preferred Stock	New York Stock Exchange

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

None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes

No

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2).

Yes

No

As of June 30, 2004, 357,959,403 shares of Common Stock were outstanding, and the aggregate market value of the Common Stock (based upon the closing price of the stock on the New York Stock Exchange) of the registrant held by

nonaffiliates was approximately \$19,222 million.

As of March 1, 2005, 360,265,907 shares of Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the 2005 Annual Meeting of Stockholders. Part III

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Northrop Grumman Corporation (Northrop Grumman or the company) provides technologically advanced, innovative products, services, and solutions in defense and commercial electronics, nuclear and non-nuclear shipbuilding, information technology, mission systems, systems integration, and space technology. As prime contractor, principal subcontractor, partner, or preferred supplier, Northrop Grumman participates in many high-priority defense and commercial technology programs in the United States (U.S.) and abroad. The majority of the company's products and services are ultimately sold to the U.S. Government and the company is therefore affected by, among other things, the federal budget process.

**History**

Originally formed in California in 1939, Northrop Corporation was reincorporated in Delaware in 1985. In 1994, the company purchased the outstanding common stock of Grumman Corporation and, effective May 18, 1994, Northrop Corporation was renamed Northrop Grumman Corporation. On April 2, 2001, NNG, Inc., a newly formed Delaware holding company, exchanged its common shares for all of the outstanding Northrop Grumman Corporation common shares on a one-for-one basis, through a merger in which Northrop Grumman Corporation became a subsidiary of NNG, Inc. In connection with this merger, NNG, Inc. changed its name to Northrop Grumman Corporation and the former Northrop Grumman Corporation changed its name to Northrop Grumman Systems Corporation.

In 2001, the company purchased Litton Industries, Inc. (Litton), the Electronics and Information Systems Group of Aerojet-General Corporation (EIS), and 80.7 percent of Newport News Shipbuilding Inc. (Newport News). On January 18, 2002, the company acquired the remaining common shares of Newport News.

On December 11, 2002, the company issued 139 million shares in exchange for all outstanding shares of TRW Inc. (TRW), which consisted of two defense related businesses and an automotive business (Auto). This transaction was valued at approximately \$12.5 billion, including the assumption of TRW's debt of \$4.8 billion. On February 28, 2003, the company sold Auto to The Blackstone Group for \$3.3 billion in cash; a \$600 million face value payment-in-kind note, initially valued at \$455 million; and a 19.6 percent interest in the new enterprise, initially valued at \$170 million. The acquirer also assumed debt of approximately \$200 million. The cash received from the sale of Auto was adjusted from the sale agreement amount by cash sold with the business, preliminary purchase price adjustments, and an asset retained. Cash proceeds from the sale were primarily used to reduce debt. In January 2004, the restrictions on the investment in Auto were amended to provide the company more flexibility in monetization. In February 2004, the company's investment in Auto was diluted to 17.2 percent as a result of Auto's initial public offering. On October 10, 2004, the company reached an agreement with TRW Automotive Holdings Corp. to sell the payment-in-kind note and settle certain other contractual issues arising from the Auto sale. For additional information see Note 5 to the Consolidated Financial Statements in Part II, Item 8.

In connection with the acquisition of TRW, the company entered into a formal stipulation and consent decree with the U.S. Department of Justice that was filed in the U. S. District Court for the District of Columbia on December 11, 2002. Key provisions of the consent decree are intended to assure that the merger will not impede fair and open competition related to certain electronic satellite payloads. The consent decree does not require the divestiture of any businesses and permits the company to operate its businesses and those of TRW as planned.

During the third quarter of 2002, the company concluded that the Component Technologies (CT) businesses, which were acquired as part of the Litton acquisition, did not fit with the company's long-term plans and decided to sell these businesses. Accordingly, the businesses comprising the CT segment were classified as discontinued operations beginning in the third quarter of 2002. The company sold three of the CT businesses in 2003 and a

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fourth CT business in 2004. None of these sales, either individually or in the aggregate, had a material effect on the company's financial position or results of operations. The three remaining CT businesses consist of a manufacturer of complex printed circuit boards, an electronic connector manufacturer, and a European-based marketing group. During the third quarter of 2004, the company suspended its efforts to sell these businesses. Accordingly, the assets, liabilities, and results of operations of these businesses have been reclassified from discontinued to continuing operations for all periods presented. These businesses are reported under the segment entitled "Other."

**Summary Segment Financial Data**

In the following table of segment and major customer data, revenue from the U.S. Government includes revenue from contracts for which Northrop Grumman is the prime contractor, as well as those for which the company is a subcontractor and the ultimate customer is the U.S. Government. The company's discontinued operations are excluded from all of the data elements in this table, except for assets by segment. The 2002 income statement does not include TRW's post-acquisition results as they were not material. TRW backlog acquired and assets at December 31, 2002, are included in the following table. The following are certain factors to be considered when analyzing the segment financial data presented below.

*Foreign Sales* – Foreign sales amounted to approximately \$1.6 billion, \$1.8 billion, and \$1.4 billion, or 5.3 percent, 6.7 percent, and 8.1 percent of total revenue for the years ended December 31, 2004, 2003, and 2002, respectively. All of the company's segments engage in international business, for which the company retains a number of sales representatives and consultants who are not employees of the company. Foreign sales by their very nature are subject to greater variability in risk than the company's domestic sales, particularly to the U.S. Government. International sales and services subject the company to numerous stringent U.S. and foreign laws and regulations, including, without limitation, regulations relating to import-export control, repatriation of earnings, exchange controls, the Foreign Corrupt Practices Act, and the anti-boycott provisions of the U.S. Export Administration Act. Failure by the company or its sales representatives or consultants to comply with these laws and regulations could result in administrative, civil, or criminal liabilities and could in the extreme case result in suspension or debarment from government contracts or suspension of the company's export privileges, which could have a material adverse effect on the company.

*Unallocated Expenses* – The reconciling item captioned "Unallocated expenses" includes the portion of corporate, legal, environmental, state income tax, other retiree benefits, and other expenses not considered allowable under Cost Accounting Standards (CAS) and not allocated to the segments.

*Pension* – Pension expense is included in the segments' cost of sales to the extent that these costs are recognized under CAS. In order to reconcile from segment operating margin to total operating margin, these amounts are reported under the caption "Reversal of CAS pension expense included above." Total pension (expense) income, determined in accordance with accounting principles generally accepted in the United States of America, is reported separately as a reconciling item under the caption "Pension (expense) income."

*Goodwill* – During the second quarter of 2002, the company completed the first step of the required initial test for potential impairment of goodwill as of January 1, 2002. The company used a discounted cash flow approach, corroborated by comparative market multiples, where appropriate, to determine the fair value of its reporting units. The results indicated potential impairment only in the reporting units of the CT businesses due to unfavorable market conditions. Accordingly, the company recorded a non-cash charge of \$432 million, or \$1.84 per diluted share, which is reported as "Cumulative effect of accounting change." In 2002 and 2003, the company recorded non-cash charges of \$186 million, or \$.79 per diluted share, and \$47 million, or \$.13 per diluted share, respectively, for further impairment of the goodwill in the CT businesses. These impairments were determined based on the excess of the net carrying value of these businesses' net assets in comparison to the then current negotiated sale prices for each individual business.

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*Discontinued Operations* – During the third quarter of 2002, the company announced its intention to sell the businesses comprising its CT segment. As a result, these businesses were classified as discontinued operations beginning in the third quarter of 2002. Since that announcement, the company has sold all but three of the CT businesses. The remaining operations consist of a manufacturer of complex printed circuit boards, an electronic connector manufacturer, and a European-based marketing group. During the third quarter of 2004, the company suspended its efforts to sell these businesses. Accordingly, the assets, liabilities, and results of operations of these businesses have been reclassified from discontinued to continuing operations for all periods presented. These businesses are reported under the segment entitled “Other.” For additional information, see Notes 5 and 6 to the Consolidated Financial Statements in Part II, Item 8.

*Realignment* – Effective January 1, 2004, the company realigned businesses among three of its operating segments that possess similar customers, expertise, and capabilities. The realignment more fully leverages existing capabilities and enhances development and delivery of highly integrated information systems and services. Mission Systems’ Global Information Technology, Civil Systems, and Mission Systems Europe businesses were transferred to the Information Technology segment. Prior to January 1, 2004, the three business areas comprised Mission Systems’ Federal & Civil Information Systems business. The Defense Mission Systems (DMS) business within the Information Technology segment was transferred to the Mission Systems segment. Prior to January 1, 2004, DMS was contained within Information Technology’s Government Information Technology business. The Command, Control & Intelligence Systems business area of the Missions Systems segment transferred its Unmanned Air Vehicle business to the Air Combat Systems business area within the Integrated Systems segment. This realignment resulted in a decrease in 2003 sales of \$104 million for the Information Technology sector, an increase of \$57 million for the Mission Systems sector, and an increase of \$47 million for the Integrated Systems sector. For 2002, this realignment resulted in a decrease in sales of \$764 million for the Information Technology sector and an increase of \$764 million for the Mission Systems sector. For comparative purposes, all segment financial information contained within this Form 10-K has been restated to reflect this realignment.

Effective January 1, 2005, the company transferred management responsibility for two of the three remaining CT businesses to the Electronic Systems segment. These businesses consist of a manufacturer of complex printed circuit boards and an electronic connector manufacturer. The effect of this realignment on the Electronic Systems segment’s sales and operating margin is not significant.

*Reclassifications* – Certain amounts for 2003 and 2002 have been reclassified to conform to the 2004 presentation.

Table of Contents**NORTHROP GRUMMAN CORPORATION****RESULTS OF OPERATIONS BY SEGMENT AND MAJOR CUSTOMER**

	Year ended December 31		
	2004	2003	2002
<i>\$ in millions</i>			
<b>Sales and Service Revenues</b>			
<b>Electronic Systems</b>			
United States Government	\$ 3,761	\$ 3,481	\$ 2,959
Other customers	2,190	2,199	2,114
Intersegment sales	466	359	253
	<b>6,417</b>	6,039	5,326
<b>Ships</b>			
United States Government	6,108	5,276	4,445
Other customers	142	174	251
Intersegment sales	2	1	1
	<b>6,252</b>	5,451	4,697
<b>Information Technology</b>			
United States Government	4,102	3,824	2,971
Other customers	778	741	464
Intersegment sales	171	86	41
	<b>5,051</b>	4,651	3,476
<b>Mission Systems</b>			
United States Government	4,359	3,785	736
Other customers	283	132	9
Intersegment sales	305	255	19
	<b>4,947</b>	4,172	764
<b>Integrated Systems</b>			
United States Government	4,486	3,638	3,096
Other customers	204	181	161
Intersegment sales	52	28	16
	<b>4,742</b>	3,847	3,273
<b>Space Technology</b>			
United States Government	3,148	2,718	
Other customers	63	57	
Intersegment sales	58	48	
	<b>3,269</b>	2,823	
<b>Other</b>			
United States Government	2		
Other customers	227	190	200
Intersegment sales	1	1	
	<b>230</b>	191	200
Intersegment eliminations	<b>(1,055)</b>	(778)	(330)
Total revenue	<b>\$29,853</b>	\$26,396	\$17,406
<b>Operating Margin</b>			
Electronic Systems	\$ 670	\$ 590	\$ 434
Ships	389	295	306
Information Technology	301	269	191
Mission Systems	321	266	59
Integrated Systems	412	384	331
Space Technology	222	193	
Other	(3)	(74)	(271)
Non-segment factors affecting operating margin			

Unallocated expenses	(282)	(137)	(105)
Pension (expense) income	(350)	(568)	90
Reversal of CAS pension expense included above	338	265	100
Reversal of royalty income included above	(12)	(15)	(15)
<b>Total operating margin</b>	<b>\$ 2,006</b>	<b>\$ 1,468</b>	<b>\$ 1,120</b>

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<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Electronic Systems	\$ 6,706	\$ 6,018	\$ 5,930
Ships	5,668	4,839	5,286
Information Technology	5,300	4,854	4,140
Mission Systems	5,209	4,878	2,965
Integrated Systems	5,135	4,380	3,515
Space Technology	3,460	3,073	1,308
Other	216	187	194
Intersegment eliminations	(1,207)	(1,023)	(286)
Total contract acquisitions	\$30,487	\$27,206	\$23,052
<b>Capital Expenditures</b>			
Electronic Systems	\$ 146	\$ 173	\$ 263
Ships	220	136	76
Information Technology	29	30	45
Mission Systems	25	28	
Integrated Systems	111	158	134
Space Technology	123	105	
Other	3	2	7
General corporate	15	5	3
Total capital expenditures	\$ 672	\$ 637	\$ 528
<b>Depreciation and Amortization</b>			
Electronic Systems	\$ 245	\$ 229	\$ 226
Ships	148	142	147
Information Technology	51	47	44
Mission Systems	56	60	
Integrated Systems	94	86	78
Space Technology	132	115	
Other	2		21
General corporate	6	3	1
Total depreciation and amortization	\$ 734	\$ 682	\$ 517
	December 31,		
	2004	2003	
<i>\$ in millions</i>			
<b>Assets</b>			
Electronic Systems	\$ 5,761	\$ 5,660	
Ships	6,521	6,482	
Information Technology	3,467	3,386	
Mission Systems	5,121	5,188	
Integrated Systems	2,201	2,210	
Space Technology	4,625	4,717	
Other	82	173	
Segment assets	27,778	27,816	
General corporate	5,583	5,206	
Total assets	\$33,361	\$33,022	
<b>Funded Backlog</b>			
Electronic Systems	\$ 6,757	\$ 6,468	
Ships	9,165	9,749	
Information Technology	2,568	2,319	
Mission Systems	3,167	2,905	
Integrated Systems	4,691	4,298	
Space Technology	1,749	1,558	

Other	49	62
Intersegment eliminations	(584)	(431)
Total funded backlog	<b>\$27,562</b>	<b>\$26,928</b>

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****Organization, Products, and Services**

The company operates in seven business sectors: Electronic Systems, Newport News, Ship Systems, Information Technology, Mission Systems, Integrated Systems, and Space Technology. For financial reporting purposes, the Electronic Systems, Information Technology, Mission Systems, Integrated Systems, and Space Technology sectors are each reportable segments. In accordance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 131 – *Disclosures about Segments of an Enterprise and Related Information*, Newport News and Ship Systems are aggregated and reported as the Ships segment.

*Electronic Systems* – Electronic Systems is a leading designer, developer, and manufacturer of a wide variety of advanced defense electronics and systems. Electronic Systems provides airborne radar systems, secondary surveillance systems, inertial navigation systems and sensors, electronic warfare systems, precision weapons, air traffic control systems, air defense systems, communications systems, space systems, marine systems, oceanic and naval systems, integrated avionics systems, and automation and information systems. Headquartered in Linthicum, Maryland, the sector includes Aerospace Systems; Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) & Naval Systems; Defensive Systems; Navigation Systems; and Space Systems divisions. Operations not included in these divisions are reported as “Defense Other.” Key products include fire control radars for the F-16, F/A-22 and F-35 fighter aircraft, as well as for the Longbow Apache helicopter. Other principal products include the Airborne Warning and Control System (AWACS) radar, the 737 airborne early warning and control system, Joint Surveillance Target Attack Radar System (Joint STARS) air-to-ground surveillance radar sensor, Longbow Hellfire missile, tactical military radars, countrywide air defense systems, airborne electronic countermeasures systems, sophisticated undersea warfare systems, and naval propulsion and power generation systems. Electronic Systems has 120 locations worldwide, including 72 international offices, and approximately 24,000 employees.

*Newport News* – Newport News’ primary business is the design, construction, repair, maintenance, overhaul, life-cycle support, and refueling of nuclear-powered aircraft carriers and the design, life-cycle support, and construction of nuclear-powered submarines for the U.S. Navy. Newport News is the nation’s sole designer, builder, and refueler of nuclear-powered aircraft carriers and one of only two companies capable of designing and building nuclear-powered submarines. Major programs are the CVN 21 (next generation aircraft carrier), the Nimitz-class nuclear powered aircraft carriers, and the Virginia-class submarine program. The sector also provides after-market services for a wide array of naval and commercial vessels. Headquartered in Newport News, Virginia, the sector has approximately 19,500 employees.

*Ship Systems* – Ship Systems is one of the nation’s leading full service systems providers for the design, engineering, construction, and life cycle support of major surface ships for the U.S. Navy, U.S. Coast Guard, international navies, and for commercial vessels of all types. Major programs for the U.S. Navy include the WASP LHD 1 Class and San Antonio LPD 17 Class amphibious assault ships, the Arleigh Burke DDG 51, and next generation DD(X) destroyers. The company is also a partner in the Coast Guard’s Deepwater modernization program. Major programs for the U.S. Coast Guard include the Maritime Security Cutter – Large (WMSL), the Maritime Security Cutter – Medium (WMSM), and the Maritime Coastal Patrol Cutter (WPC). Ship Systems also produces double-hulled crude oil tankers. Ship Systems is headquartered in Pascagoula, Mississippi, with primary operations in Pascagoula, Mississippi; New Orleans, Louisiana; Gulfport, Mississippi; and Tallulah, Louisiana, as well as in-fleet support offices in the U.S. and Japan. Ship Systems has approximately 19,700 employees.

*Information Technology* – Information Technology is a premier provider of advanced information technology (IT) solutions, engineering, and business services for government and commercial customers. The segment consists of four lines of business: Government Information Technology, Enterprise Information Technology, Commercial Information Technology, and Technology Services. Government Information Technology covers a wide range of large-scale systems integration, solutions, and services programs. This work is performed for government customers at the Department of Defense, federal, state, and local levels, and covers C4ISR, training and simulation, science

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### **NORTHROP GRUMMAN CORPORATION**

and technology, and information systems markets. Enterprise Information Technology focuses on the delivery and integration of commercially available computers, networks, hardware, software, and peripherals to government and commercial customers. Commercial Information Technology provides complete IT outsourcing services directed at the commercial marketplace and also provides public safety and information services to state and local governments. Technology Services includes base and range support, training and simulation, and information systems. In addition, the sector provides IT services internally to all Northrop Grumman sectors. Headquartered in northern Virginia, Information Technology has approximately 18,500 employees in over 130 locations worldwide.

*Mission Systems* – Mission Systems is a leading global system integrator of complex, mission-enabling systems for government, military, and business clients. The organization's technology leadership spans three business areas: Command, Control & Intelligence Systems, Missile Systems, and Technical and Management Services. Products and services are focused on the fields of Command, Control, Communications, Computers and Intelligence (C4I), strategic missiles, missile and air defense, airborne reconnaissance, intelligence management and processing, electro-magnetic and infrared analysis, communications, and decision support systems. Headquartered in Reston, Virginia, Mission Systems has approximately 17,800 employees in more than 150 locations worldwide.

*Integrated Systems* – Integrated Systems is a leader in the design, development, and production of airborne early warning, electronic warfare and surveillance, and battlefield management systems. Integrated Systems includes the Air Combat Systems, Airborne Early Warning and Electronic Warfare Systems, and Airborne Ground Surveillance and Battle Management Systems business areas. Integrated Systems is the prime contractor for the Joint STARS advanced airborne targeting and battle management system, Global Hawk, and B-2 Spirit stealth bomber. The sector has principal roles in the F/A-18 Hornet strike fighter and F-35 joint strike fighter programs. Integrated Systems is upgrading the EA-6B Prowler electronic countermeasures aircraft and produces the E-2C Hawkeye early warning aircraft. Headquartered in El Segundo, California, Integrated Systems has approximately 15,000 employees.

*Space Technology* – Space Technology develops and integrates a broad range of systems at the leading edge of space, defense, and electronics technology. The sector supplies products primarily to the U.S. Government that play an important role in maintaining the nation's security and leadership in science and technology. Space Technology's business areas focus on the design, development, manufacture, and integration of spacecraft systems and subsystems, electronic and communications payloads, advanced avionics systems, and high energy laser systems and subsystems. Headquartered in Redondo Beach, California, Space Technology has approximately 9,300 employees.

*Other* – The segment entitled "Other" includes the assets, liabilities, and results of operations of the three remaining CT businesses. These businesses consist of a manufacturer of complex printed circuit boards, a connector manufacturer, and a European-based marketing group. Effective January 1, 2005, two of these operations were integrated into, and reported under, the Electronic Systems segment. The European-based marketing group will continue to be reported under "Other." The effect of this realignment on the Electronic Systems segment's sales and operating margin is not significant. At December 31, 2004, the "Other" segment had 800 employees.

*Corporate* – The company's principal executive offices are located at 1840 Century Park East, Los Angeles, California 90067. Total corporate employees are approximately 800. The company's telephone number is (310) 553-6262. The company's home page on the Internet is [www.northropgrumman.com](http://www.northropgrumman.com). The company makes web site content available for information purposes, which is not incorporated by reference into this Form 10-K.

### **Customers and Revenue Concentration**

The company's primary customer is the U.S. Government. Revenue from the U.S. Government accounted for approximately 87 percent, 86 percent, and 82 percent of total revenues in 2004, 2003, and 2002, respectively. No other customer accounted for more than 10 percent of total revenue during any period presented. No product or service accounted for more than 10 percent of total revenue during any period presented.

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**NORTHROP GRUMMAN CORPORATION**

**Patents**

The following summarizes the approximate number of the company's patents as of December 31, 2004:

	Owned	Pending	Total
U.S patents	3,500	635	<b>4,135</b>
Foreign patents	2,100	1,700	<b>3,800</b>
Total	5,600	2,335	<b>7,935</b>

Patents developed while under contract with the U.S. Government may be subject to use or control by the customer. In addition, the company licenses intellectual property to, and from, third parties. Management believes the company's ability to conduct its operations would not be materially affected with the loss of any particular intellectual property right.

**Seasonality**

No material portion of the company's business is considered to be seasonal. The timing of revenue recognition is determined upon several factors including the timing of contract acquisitions, customer funding, the incurrence of contract costs, cost estimation, and unit deliveries. See "Revenue Recognition" in Part II, Item 7.

**Raw Materials**

The most significant raw material required by the company is steel used primarily for ship building. The company has mitigated supply risk by negotiating long-term agreements with a number of steel suppliers. In addition, the company has mitigated price risk related to its steel purchases through certain contractual arrangements with the U.S. Government. While the company has generally been able to timely obtain key raw materials required in its production processes, a significant delay in receipt of these supplies by the company could have a material adverse effect on the company's results of operations.

**Government Regulation**

The U.S. Government, and other governments, may terminate any government contract and, in general, subcontracts, at their convenience as well as for default based on performance. In the event of termination for the government's convenience, contractors are normally protected by provisions covering reimbursement for costs incurred subsequent to termination. The company is involved in a lawsuit concerning a contract terminated for convenience – see "Other Matters" in Part I, Item 3.

Certain programs with the U.S. Government that are prohibited by the customer from being publicly discussed in detail are referred to as "restricted" in this Form 10-K. The consolidated financial statements and financial information contained within this Form 10-K reflect the operating results of restricted programs under accounting principles generally accepted in the United States of America.

International business is subject to import-export control and local foreign statutes. Changes in regulation or political environment may affect the company's ability to conduct business in foreign markets including investment, procurement, and repatriation of earnings.

**Research and Development**

Company-sponsored research and development activities primarily include independent research and development (IR&D) efforts related to government programs. IR&D expenses are included in general and administrative costs and are allocated to U.S. Government contracts. Company-sponsored research and development expenses totaled \$504 million, \$429 million, and \$283 million in 2004, 2003, and 2002, respectively. Customer-sponsored research and development expenses are charged directly to the related contracts.

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The company believes that it maintains good relations with its 125,400 employees, of which approximately 20 percent are covered by 32 collective bargaining agreements. During 2004, the company successfully re-negotiated 14 collective bargaining agreements. The company currently expects to complete re-negotiation of 3 collective bargaining agreements in 2005. It is not expected that these negotiations will, either individually or in the aggregate, have a material adverse effect on the company's results of operations.

**Environmental Matters**

Federal, state, and local laws relating to the protection of the environment affect the company's manufacturing operations. The company has provided for the estimated cost to complete remediation where the company has determined that it is probable that the company will incur such costs in the future to address environmental impact at current or formerly owned operating facilities or at sites where it has been named a Potentially Responsible Party (PRP) by the Environmental Protection Agency or similarly designated by other environmental agencies. It is difficult to estimate the timing and ultimate amount of environmental cleanup costs to be incurred in the future due to the uncertainties regarding the extent of the required cleanup and the status of the law, regulations, and their interpretations.

In order to assess the potential impact on the company's financial statements, management estimates the possible remediation costs that reasonably could be incurred by the company on a site-by-site basis. Such estimates take into consideration the professional judgment of the company's environmental engineers and, when necessary, consultation with outside environmental specialists. In most instances, only a range of reasonably possible costs can be estimated. However, in the determination of accruals, the most probable amount is used when determinable and the minimum is used when no single amount is more probable. The company records accruals for environmental cleanup costs in the accounting period in which the company's responsibility is established and the costs can be reasonably estimated. The company does not anticipate and record insurance recoveries before collection is probable.

Management estimates that at December 31, 2004, the range of reasonably possible future costs for all environmental remediation sites is \$278 million to \$411 million, of which \$281 million has been accrued. Environmental accruals are recorded on an undiscounted basis. At sites involving multiple parties, the company provides environmental accruals based upon its expected share of liability, taking into account the financial viability of other jointly liable parties. Environmental expenditures are expensed or capitalized as appropriate. Capitalized expenditures relate to long-lived improvements in currently operating facilities. In addition, should other PRPs not pay their allocable share of remediation costs, the company may have to incur costs in addition to those already estimated and accrued, which could have a material adverse effect on the company's financial position, results of operations, or cash flows. The company has made the investments it believes necessary in order to comply with environmental laws.

**Available Information**

Throughout this Form 10-K, the company incorporates by reference information from parts of other documents filed with the Securities and Exchange Commission (SEC). The SEC allows the company to disclose important information by referring to it in this manner, and you should review this information.

The company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and proxy statement for the annual shareholders' meeting, as well as any amendments to those reports, are available free of charge through the company web site as soon as reasonably practicable after electronic filing of such material with the SEC. You can learn more about the company by reviewing the company's SEC filings on the company web site. The company's SEC reports can be accessed through the investor relations page of the company web site at [www.northropgrumman.com](http://www.northropgrumman.com).

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The SEC also maintains a web site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy statements and other information regarding SEC registrants, including Northrop Grumman. The public may read and copy any materials filed by the company with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

**Item 2. Properties**

At December 31, 2004, the company had approximately 54 million square feet of floor space comprised of approximately 2,338 buildings/structures and land at 556 separate locations, primarily in the United States, for the purpose of manufacturing, warehousing, research and testing, administration and various other productive and facility uses. Of the total square footage at December 31, 2004, 56 percent was company-owned, 40 percent was leased, and 4 percent was government-owned or leased. At December 31, 2004, the company leased to other third parties approximately 961,000 square feet of its owned and leased facilities, and had vacant floor space of approximately 1.14 million square feet in the process of being disposed.

At December 31, 2004, the business operating segments had major operations at the following locations:

**Electronic Systems** – Huntsville, AL; Tempe, AZ; Azusa, San Jose, Sunnyvale, and Woodland Hills, CA; Norwalk, CT; Apopka, FL; Warner Robins, GA; Elk Grove and Rolling Meadows, IL; Westwood, MA; Annapolis, Baltimore, Belcamp, Elkridge, Gaithersburg, Hagerstown, Linthicum, and Sykesville, MD; Ocean Springs, MS; Melville and Williamsville, NY; Cincinnati, OH; and Clinton, TN; Garland, TX; Salt Lake City, UT; and Charlottesville, VA. Outside United States locations in France, Germany, Italy, Norway, and United Kingdom.

**Ships** – San Diego, CA; Avondale, Harahan, Harvey, Tallulah, and Waggaman, LA; Gulfport and Pascagoula, MS; and Newport News, VA.

**Information Technology** – Hawthorne, CA; Lafayette, CO; Washington, DC; Atlanta, GA; Reading, MA; Annapolis Junction, Greenbelt, and Rockville, MD; Bethpage and Bohemia, NY; Brook Park and Fairborn, OH; Oklahoma City, OK; Knoxville, TN; Dallas, TX; and Arlington, Chantilly, Fairfax, Falls Church, Herndon, McLean, and Reston, VA.

**Mission Systems** – Huntsville, AL; Carson, Huntington Beach, McClellan, Redondo Beach, San Bernardino, San Diego, San Jose, San Pedro, Sunnyvale, Van Nuys, and West Sacramento, CA; Aurora and Colorado Springs, CO; Washington, DC; Columbia, Elkridge, and Lanham, MD; Bellevue, NE; Albuquerque, NM; Kettering, OH; Middletown, RI; Clearfield, UT; and Arlington, Chantilly, Chester, Dahlgren, Fairfax, Newport News, Reston, Stafford, Vienna, and Virginia Beach, VA.

**Integrated Systems** – Sierra Vista, AZ; Carson, El Segundo, Fort Tejon, Hawthorne, Palmdale, Rancho Bernardo, and San Diego, CA; Jacksonville, Melbourne and St. Augustine, FL; Lake Charles, LA; Hollywood, MD; New Town, ND; Bethpage and Hicksville, NY; Lexington, SC; and Irving, TX.

**Space Technology** – El Segundo, Manhattan Beach, Redondo Beach and San Diego, CA; Warner Robins, GA; St. Charles, MO; and Charlotte, NC.

**Other** – Fairfield, CA; Wallingford, CT; Haverhill, MA; and Springfield, MO. Outside United States locations in China, Malaysia, and United Kingdom.

**Corporate** – Brea and Los Angeles, CA; Olathe, KS; Englewood, NJ; York, PA; Marshall, TX; and Arlington, VA. Outside United States locations in Canada and United Kingdom.

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The following table provides a summary of floor space available to the company at December 31, 2004:

<i>Square feet</i>	Owned	Leased	Government Owned/Leased	Total
Electronic Systems	8,739,139	3,866,544		<b>12,605,683</b>
Ships	13,114,908	1,947,971	74,322	<b>15,137,201</b>
Information Technology	32,673	4,252,378		<b>4,285,051</b>
Mission Systems	394,154	5,041,891		<b>5,436,045</b>
Integrated Systems	3,970,097	3,759,593	1,969,293	<b>9,698,983</b>
Space Technology	3,193,863	2,251,522	4,656	<b>5,450,041</b>
Other	208,673	388,209		<b>596,882</b>
Corporate	547,760	524,188		<b>1,071,948</b>
<b>Total</b>	<b>30,201,267</b>	<b>22,032,296</b>	<b>2,048,271</b>	<b>54,281,834</b>

The company believes its properties are well maintained and in good operating condition and that the productive capacity of the company's properties is adequate to meet current contractual requirements for the foreseeable future.

**Item 3. Legal Proceedings**

Various claims and legal proceedings arise in the ordinary course of business and are pending against the company and its properties. The company is a defendant in lawsuits alleging personal injury as a result of exposure to asbestos integrated into its premises and certain historical products. Many of these claims have been dismissed with no payment and the remaining resolved claims have involved amounts that were not material either individually or in the aggregate. Based upon the information available, the company does not believe that the resolution of any of these proceedings will have a material adverse effect on its financial position, results of operations, or cash flows.

Departments and agencies of the U.S. Government have the authority to investigate various transactions and operations of the company, and the results of such investigations may lead to administrative, civil, or criminal proceedings, the ultimate outcome of which could be fines, penalties, repayments or compensatory or treble damages. U.S. Government regulations provide that certain findings against a contractor may lead to suspension or debarment from future U.S. Government contracts or the loss of export privileges for a company or an operating division or subdivision. Suspension or debarment could have a material adverse effect on the company because of its reliance on government contracts. Based on available information, the company does not believe, but can give no assurance, that any matter resulting from a U.S. Government investigation would have a material adverse effect on its financial position, results of operations, or cash flows.

In August 1992, in U.S. ex rel. Rex Robinson v. Northrop Grumman Corporation, the United States District Court for the Northern District of Illinois unsealed a complaint brought by four individuals in the name of the United States of America. The action was filed on August 10, 1989, seeking damages under the *qui tam* provision of the civil False Claims Act. The relators also sought damages as individuals for alleged retaliation. On March 1, 2005, the company agreed with the government to settle the False Claims Act case for \$62 million. The company also agreed to settle the relators' personal claims, including their claim for attorney fees, and to reimburse the government for previously billed legal costs incurred by the company. As a result of the settlement, the company recorded a pre-tax charge of \$35 million in the fourth quarter of 2004 and expects to pay a total of \$99 million in the first quarter of 2005.

**Other Matters**

In the event of contract termination for the government's convenience, contractors are normally protected by provisions covering reimbursement for costs incurred on the program. The company received a termination for

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convenience notice on the Tri-Service Standoff Attack Missile (TSSAM) program in 1995. In December 1996, the company filed a lawsuit against the U.S. Government in the U.S. Court of Federal Claims seeking the recovery of approximately \$750 million for uncompensated performance costs, investments, and a reasonable profit on the program. In prior years, the company had charged to operations in excess of \$600 million related to this program. Northrop Grumman is unable to predict whether it will realize some or all of its claims, none of which are recorded on its balance sheet, from the U.S. Government related to the TSSAM contract.

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

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

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

- (a) Market Price of and Dividends on the Registrant's Common Equity and Related Stockholder Matters and Recent Sales of Unregistered Securities.

*Market Information and Dividends* – The information required by this Item is in Note 19 to the Consolidated Financial Statements in Part II, Item 8.

*Holdings* – The approximate number of common shareholders was 40,110 as of February 28, 2005.

*Securities Authorized for Issuance Under Equity Compensation Plans* – The information required by this Item is in Note 17 to the Consolidated Financial Statements in Part II, Item 8.

*Recent Sales of Unregistered Securities* – The company did not sell any unregistered securities in the past three years.

- (b) Use of Proceeds.

No information is required in response to this item.

- (c) Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

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The table below summarizes the company's repurchases of common stock during the three months ended December 31, 2004:

<b>Issuer Purchases of Equity Securities</b>				
<b>Period</b>	<b>Total Number of Shares Purchased<sup>(1)</sup></b>	<b>Average Price Paid per Share<sup>(2)</sup></b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</b>	<b>Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs</b>
October 1, 2004, through October 31, 2004	148,500	\$ 53.06	148,500	\$ 1 billion
November 1, 2004, through November 30, 2004	1,003,600	\$ 56.38	1,003,600	\$ 944 million
December 1, 2004, through December 31, 2004	4,473,600	\$ 56.43	4,473,600	\$ 691 million
<b>Total</b>	<b>5,625,700</b>	<b>\$ 56.33</b>	<b>5,625,700</b>	

(1) On August 20, 2003, the company's Board of Directors authorized a share repurchase program of \$700 million of its outstanding common stock. This share repurchase program was completed on October 5, 2004, and resulted in the retirement of 14.4 million shares of common stock, with \$500 million of the repurchases occurring in 2004.

On October 26, 2004, the company's Board of Directors authorized a share repurchase program of up to \$1 billion of its outstanding common stock, which commenced in November 2004 and is expected to be completed over a twelve to eighteen-month period.

Share repurchases take place at management's discretion and under pre-established non-discretionary programs from time to time, depending on market conditions, in the open market, and in privately negotiated transactions. The company retires its common stock upon repurchase and has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

(2) Includes commissions paid.

**Item 6. Selected Financial Data**

The data for 2000 presented in the following table has been adjusted to exclude the company's discontinued operations except for number of employees at year-end, floor space, and all balance sheet data, including net working capital (deficit), total assets, notes payable to banks and long-term debt, long-term obligations and preferred stock, and shareholders' equity. All data presented for the periods 2001 through 2003 has been adjusted to exclude discontinued operations except for floor space, net working capital (deficit), current ratio, and total assets. As the company suspended its efforts to sell the remaining three Component Technologies businesses in the third quarter of 2004, the assets, liabilities and results of operations of these businesses have been reclassified from discontinued to continuing operations for all periods presented.

The comparability of amounts in the following table is affected by the significant acquisitions of Litton Industries, Inc. and Newport News Shipbuilding Inc. in 2001, and TRW, Inc. in 2002.

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All per share data in the following table has been adjusted for all periods presented for the two-for-one stock split of the company's common stock in 2004.

**Selected Financial Data**

<i>\$ in millions, except per share</i>	Year ended December 31				
	2004	2003	2002	2001	2000
<b>Summary of Operations</b>					
Sales and service revenues					
United States Government	\$25,966	\$22,722	\$14,207	\$10,417	\$6,662
Other customers	3,887	3,674	3,199	2,782	956
Total revenue	\$29,853	\$26,396	\$17,406	\$13,199	\$7,618
Operating margin	\$ 2,006	\$ 1,468	\$ 1,120	\$ 977	\$1,098
Income from continuing operations before cumulative effect of accounting change	1,093	758	455	422	625
<b>Per Share Amounts</b>					
Basic earnings per share, from continuing operations before cumulative effect of accounting change	\$ 3.04	\$ 2.04	\$ 1.86	\$ 2.39	\$ 4.43
Diluted earnings per share, from continuing operations before cumulative effect of accounting change	2.99	2.03	1.83	2.37	4.41
Cash dividends per common share	.89	.80	.80	.80	.80
<b>Year-end Financial Position</b>					
Total assets	\$33,361	\$33,022	\$42,331	\$20,818	\$9,622
Net working capital (deficit)	684	(623)	4,428	(64)	(162)
Notes payable to banks and long-term debt	5,158	5,891	9,635	5,489	1,615
Total long-term obligations and preferred stock	10,438	10,876	16,580	8,331	3,015
<b>Financial Ratios</b>					
Operating margin as a percentage of total revenue	6.7%	5.6%	6.4%	7.4%	14.4%
Income from continuing operations before cumulative effect of accounting change as a percentage of					
Total revenue	3.7	2.9	2.6	3.2	8.2
Average assets	3.3	2.0	1.4	2.8	6.6
Average shareholders' equity	6.7	5.0	4.2	7.5	17.4
Current ratio	1.11 to 1	.90 to 1	1.39 to 1	.99 to 1	.94 to 1
Notes payable to banks and long-term debt as a percentage of shareholders' equity	30.9%	37.3%	67.3%	74.3%	41.2%
<b>Other Financial Information</b>					
Company-sponsored research and development expenses	\$ 504	\$ 429	\$ 283	\$ 331	\$ 318
Depreciation	508	455	347	254	175
Amortization of purchased intangibles	226	227	170	134	92
Maintenance and repairs	398	244	153	165	96
Rent expense	456	472	307	215	122
Payroll and employee benefits	12,529	11,018	6,989	4,945	2,581
<b>Other Non-financial Information</b>					
Number of employees at year-end	125,400	123,400	118,100	93,400	39,300
Number of shareholders at year-end	40,158	39,345	28,212	17,880	11,750
Floor area ( <i>in millions of square feet</i> )					
Owned	30.2	31.6	32.4	30.4	14.3
Commercially leased	22.0	21.5	21.3	16.2	9.8
Leased from United States Government	2.0	2.0	2.1	2.7	2.9

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**NORTHROP GRUMMAN CORPORATION**

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

**OVERVIEW**

Northrop Grumman provides technologically advanced, innovative products, services, and solutions in defense and commercial electronics, nuclear and non-nuclear shipbuilding, information technology, mission systems, systems integration, and space technology. As a prime contractor, principal subcontractor, partner, or preferred supplier, Northrop Grumman participates in many high-priority defense and commercial technology programs in the United States and abroad. Northrop Grumman conducts most of its business with the United States (U.S.) Government, principally the Department of Defense (DoD). The company also conducts business with foreign governments and makes domestic and international commercial sales.

**2004 Results**

Selected financial highlights are presented in the table below.

<i>\$ in millions, except per share</i>	<b>2004</b>	2003
Sales and service revenues	<b>\$29,853</b>	\$26,396
Operating margin	<b>2,006</b>	1,468
Income from continuing operations	<b>1,093</b>	758
Net income	<b>1,084</b>	866
Diluted earnings per share from continuing operations	<b>2.99</b>	2.03
Diluted earnings per share	<b>2.97</b>	2.32
Net cash provided by operating activities	<b>1,936</b>	798

**Sales and Service Revenues**

Sales in 2004 increased approximately \$3.5 billion, or 13 percent, over 2003 due to higher revenue in each of the company's business segments, including sales growth of 23 percent at Integrated Systems, 19 percent at Mission Systems, 16 percent at Space Technology, and 15 percent at Ships. The revenue growth at Integrated Systems was due primarily to increases of 51 percent and 16 percent in the Airborne Early Warning/Electronic Warfare Systems and Air Combat Systems business areas, respectively. The Mission Systems increase was driven by a 24 percent increase in the Command, Control and Intelligence Systems business area and a 19 percent increase in the Missile Systems business area. The increase in Space Technology revenues was led by increases of 41 percent, 22 percent, and 18 percent in its Software Defined Radios, Civil Space, and Intelligence, Surveillance, and Reconnaissance business areas, respectively. Revenue growth at Ships was due primarily to increases of 34 percent in the Amphibious and Auxiliary business area, 26 percent in the Surface Combatants business area, and 16 percent in the Submarines business area.

**Operating Margin**

Operating margin for 2004 increased \$538 million, or 37 percent, as compared with 2003, reflecting a \$389 million increase in operating performance from the segments and a decrease of \$218 million in pension expense, which were partially offset by \$145 million in higher unallocated expenses.

The 2004 operating margin includes a pre-tax charge of \$60 million for increased projected costs for the F-16 Block 60 fixed-price development program and a pre-tax charge of \$52 million for increased projected costs for the Multi-role Electronically Scanned Array (MESA) radar system for the Australian Defence Force's Project Wedgetail fixed-price development program, both reported in the Electronic Systems segment. Operating margin for 2003 included a pre-tax charge of \$69 million for the commercial Polar Tanker program reported in the Ships segment, a pre-tax charge of \$40 million for the F-16 Block 60 fixed-price development program reported in the Electronic Systems segment, and a pre-tax charge of \$31 million for the adjustment to fair market value of the remaining Component Technologies (CT) businesses reclassified to continuing operations.

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Operating margin for 2004 includes pension expense recognized in accordance with accounting principles generally accepted in the United States of America totaling \$350 million, a decrease of 38 percent from 2003 primarily due to improved 2003 asset returns partially offset by a lower discount rate and a lower than expected long-term rate of return on plan assets. Pension expense allocated to contracts pursuant to U.S. Government Cost Accounting Standards (CAS) increased operating margin by \$338 million in 2004 and \$265 million in 2003.

The increase in unallocated expenses is primarily due to higher legal costs, which include 2004 provisions related to the resolution of the Allison Gas Turbine and Robinson litigation (see Note 16 to the Consolidated Financial Statements in Part II, Item 8), as well as higher mark-to-market stock compensation expense and deferred state income taxes.

**Income from Continuing Operations**

Income from continuing operations for 2004 increased \$335 million, or 44 percent, as compared with 2003. This increase reflects improved operating margin performance and \$66 million in lower interest expense due to a reduction in fixed-rate debt as a result of the company's debt restructuring plan, which was substantially completed by the end of the second quarter of 2003. These increases were partially offset by several one-time charges in 2004 recorded in Other, net, including a \$15 million foreign currency exchange loss on the liquidation of a subsidiary loan, a \$13 million expense related to the early retirement of \$250 million 9.375 percent debentures due 2024, and a \$9 million loss on the sale of the payment-in-kind note receivable from TRW Automotive Holdings Corp.

The company's effective tax rate on income from continuing operations for 2004 was 32 percent compared to 28 percent for 2003. The higher rate in 2004 is primarily due to the reduced effect of research and development tax credits. The company recognized research and development tax credits of \$20 million and \$51 million for the years ended December 31, 2004, and 2003, respectively.

**Net Income**

Net income for 2004 increased \$218 million, or 25 percent, as compared with 2003, which included a \$117 million decrease from discontinued operations. The results of discontinued operations for 2003 included the January and February operating results of TRW's automotive business (Auto), which was sold in February 2003. The loss on disposal of discontinued operations in 2004 was primarily due to the resolution of indemnities and other contractual issues resulting from previously disposed entities. The gain on disposal of discontinued operations in 2003 resulted from sales of certain CT businesses during the year.

**Diluted Earnings per Share**

Diluted earnings per share for 2004 was \$2.97 per share, an increase of 28 percent from \$2.32 per share in 2003. Earnings per share are based on weighted average diluted shares outstanding of 365.0 million for 2004 and 368.4 million for 2003.

**Net Cash Provided by Operating Activities**

Net cash provided by operating activities in 2004 increased \$1.1 billion as compared with 2003. Net cash provided by operating activities in 2004 includes contributions to the company's pension plans totaling \$623 million, of which \$250 million was voluntarily pre-funded in the fourth quarter, as compared to contributions of \$329 million in 2003. Net cash provided by operating activities in 2003 includes a \$1 billion tax payment related to the completion of the B-2 Engineering and Manufacturing Development (EMD) contract.

**Outlook**

United States defense contractors have benefited from the upward trend in overall defense spending over recent years. While the current defense budget forecast shows a slower rate of growth than in prior years, and certain

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programs in which the company participates may be subject to potential reductions, the company believes that its portfolio of technologically advanced, innovative products, services, and solutions in systems integration, defense electronics, information technology, advanced aircraft, shipbuilding, and space technology will generate revenue growth in 2005 and beyond. In 2005, based on total backlog (funded and unfunded) of approximately \$58 billion as of December 31, 2004, and its opportunity to win future programs, the company expects sales to range between \$31 billion and \$31.5 billion and continued improvements in net income and net cash provided by operating activities over 2004. The major industry and economic factors that will affect the company's future performance are described in the following paragraphs.

**Industry Factors**

While Northrop Grumman is subject to the usual vagaries of the marketplace, it is also affected by the unique characteristics of the defense industry and by certain elements peculiar to its own business mix. Northrop Grumman, along with Lockheed Martin Corporation (Lockheed Martin), The Boeing Company (Boeing), Raytheon Company (Raytheon), and General Dynamics Corporation (General Dynamics) are among the largest companies in the defense industry at this time. Northrop Grumman competes against these and other companies for a number of programs, both large and small. Intense competition and long operating cycles are both key characteristics of Northrop Grumman's business and the defense industry. It is common in this industry for work on major programs to be shared among a number of companies. A company competing to be a prime contractor may, upon ultimate award of the contract, turn out to be a subcontractor. It is not uncommon to compete with a peer company and, simultaneously on other contracts, to be either a supplier to or a customer of such competitor. The nature of major defense programs, conducted under binding contracts, allows companies that perform well to benefit from a level of program continuity unknown in many industries.

The company's success in the competitive defense industry depends upon its ability to develop and market its products, as well as its ability to provide the people, facilities, equipment, and financial capacity needed to deliver those products with maximum efficiency. It is necessary to maintain, as the company has, sources for raw materials, fabricated parts, electronic components, and major subassemblies. In this manufacturing and systems integration environment, effective oversight of subcontractors and suppliers is as vital to success as managing internal operations. Northrop Grumman's operating policies are designed to achieve these objectives.

**Economic Opportunities, Challenges, and Risks**

The defense of the United States and other North Atlantic Treaty Organization (NATO) countries requires the ability to respond to one or more regional conflicts, terrorist acts, or threats to homeland security, and is increasingly more dependent upon proactive threat identification. Such engagements may require unilateral or cooperative initiatives ranging from passive surveillance to active engagement, deterrence, policing, or peacekeeping. In addition, the DoD's strategy continues to be affected by the general public's concern for placing military or civilian personnel at risk. As a result of these trends, both the United States and other NATO countries are increasingly relying on sophisticated weapon systems that provide long-range surveillance and intelligence, battle management, and precision strike capabilities combined with the ability to rapidly deploy complete defensive platforms around the world. Accordingly, defense procurement spending is expected to be weighted towards the development and procurement of advanced electronics and software that enhance the capabilities of individual weapons systems and provide for the real-time integration of individual surveillance, information management, strike, and battle management platforms.

United States defense contractors have benefited from the upward trend in overall defense spending over recent years. Defense spending in NATO countries has stabilized, while those countries continue to increase their focus upon the development and procurement of advanced electronics and information systems capabilities. Although the ultimate size of future defense budgets remains uncertain, the 2006 budget submitted by the President of the United States indicates that the defense budget will increase approximately \$83 billion, or 20 percent, over the next five years. While this budget includes proposed reductions for certain programs in which the company

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### **NORTHROP GRUMMAN CORPORATION**

participates (for example, CVN21, DD(X), Kinetic Energy Interceptors, and Virginia-class submarines), the company believes that spending on recapitalization and transformation of homeland security and defense assets will continue to be a national priority, with particular emphasis on areas involving intelligence, surveillance, and reconnaissance, and national missile defense.

Substantial new competitive opportunities for the company include space-based radar, transformational communication system, and several international and homeland security programs. The company continues to focus on operational and financial performance for continued growth in 2005 and beyond.

U.S. Government programs in which Northrop Grumman either participates, or strives to participate, must compete with other programs for consideration during our nation's budget formulation and appropriation processes. Budget decisions made in this environment will have long-term consequences for the size and structure of Northrop Grumman and the entire defense industry.

Northrop Grumman has historically concentrated its efforts in high technology areas such as stealth, airborne surveillance, battle management, precision weapons, systems integration, defense electronics, and information technology. Through its acquisitions of Litton Industries, Inc. (Litton), Newport News Shipbuilding Inc. (Newport News), and TRW, Inc. (TRW), the company now has a significant presence in federal and civil information systems; the manufacture of a broad range of ships including aircraft carriers and submarines; space technology; command, control & intelligence (C2I), and missile systems. The company believes that its programs are a high priority for national defense, but there remains the possibility that one or more of them may be reduced, extended, or terminated.

The company provides certain product warranties that require repair or replacement of non-conforming items for a specified period of time. Most of the company's product warranties are provided under government contracts, the costs of which are generally recoverable from the customer.

Prime contracts with various agencies of the U.S. Government and subcontracts with other prime contractors are subject to numerous procurement regulations, including the False Claims Act and The International Traffic in Arms Regulation promulgated under the Arms Export Control Act, with noncompliance found by any one agency possibly resulting in fines, penalties, debarment, or suspension from receiving additional contracts with all U.S. Government agencies. Given the company's dependence on U.S. Government business, suspension or debarment could have a material adverse effect on the company.

### **ORGANIZATION, PRODUCTS, AND SERVICES**

The company is aligned into seven business sectors: Electronic Systems, Newport News, Ship Systems, Information Technology, Mission Systems, Integrated Systems, and Space Technology. For financial reporting purposes, each business sector is a reportable segment with the exception of Newport News and Ship Systems, which are aggregated and reported as the Ships segment in accordance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 131 – *Disclosures about Segments of an Enterprise and Related Information*.

On October 17, 2002, the company announced its intention to sell the businesses comprising its CT segment. As a result, these businesses were classified as discontinued operations beginning in the third quarter of 2002. Since that announcement, the company has sold all but three of the CT businesses. The remaining operations consist of a manufacturer of complex printed circuit boards, a connector manufacturer, and a European-based marketing group. During the third quarter of 2004, the company suspended its efforts to sell these businesses. Accordingly, the assets, liabilities, and results of operations of these businesses have been reclassified from discontinued to continuing operations for all periods presented. These businesses are reported under the segment entitled "Other." For additional information, see Notes 5 and 6 to the Consolidated Financial Statements in Part II, Item 8.

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Segment reporting for Mission Systems and Space Technology, TRW businesses acquired on December 11, 2002, commenced in the first quarter of 2003, as the 2002 results of operations for these new segments were not significant.

Effective January 1, 2004, the company realigned businesses among three of its operating segments. For additional information, see Realignment discussion located in the "Summary Segment Financial Data" section in Part I, Item 1.

Effective January 1, 2005, the company transferred management responsibility for two of the three remaining CT businesses to the Electronic Systems segment. These businesses consist of a manufacturer of complex printed circuit boards and an electronic connector manufacturer. The effect of this realignment on the Electronic Systems segment's sales and operating margin is not significant.

**Electronic Systems**

The Electronic Systems segment, headquartered in Linthicum, Maryland, develops, produces, and supports high performance sensors, intelligence and processing, and navigation systems operating in all environments from undersea to outer space. It also develops, produces, and supports power, power control, and ship controls for naval combatants. The segment is comprised of five major business areas: Aerospace Systems; Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) & Naval Systems; Defensive Systems; Navigation Systems; Government Systems; Space Systems; and three smaller business areas referred to collectively as "Defense Other."

*Aerospace Systems* – Aerospace Systems products include sensors and integrated sensor suites which meet military surveillance and precision-strike needs. Products cover a wide variety of radar systems for fighter and surveillance aircraft as well as helicopters. Fire control and navigation radars include systems for the F-16, C-130, B-1B, Apache Longbow and F/A-22 aircraft as well as other key avionics systems for the F-16 Block 60 and the F-35 Joint Strike Fighter. Airborne surveillance radar systems include the Airborne Warning and Control System (AWACS) radar, the MESA, the Multi-Platform Radar Technology Insertion Program (MP-RTIP), and the E-2C Radar Modernization Program (RMP). Other product areas include precision guided munitions for artillery and Unmanned Aerial Vehicle (UAV) delivery, night vision goggles, and weapon sights.

*C4ISR & Naval Systems* – C4ISR & Naval Systems is a systems oriented business consisting of subsystems and major systems integration programs in C4ISR sensors and processing, ship power propulsion and control systems, and air defense/air traffic control systems. Principal programs include: intelligence, surveillance and reconnaissance processing systems; bridge management and controls for naval combatants and commercial marine customers; large air defense systems for foreign states; launch tubes for Trident submarines; the Advanced SEAL Delivery System mini-submarine; power generation systems for aircraft carriers; and propulsion systems for the Virginia-class submarine.

*Defensive Systems* – Defensive Systems provides electronic and infrared countermeasure systems, targeting systems, automatic test equipment, simulation products, and laser systems. Specific products include radar warning receivers, self-protection jammers, special receivers, and integrated electronic warfare systems for protecting fixed-wing and rotary-wing aircraft. Countermeasure products also include the Directional Infrared Countermeasures system, which protects military and commercial fixed-wing and rotary-wing aircraft from shoulder-launched, infrared-guided threats. Defensive Systems also provides test systems and training facilities that emulate radars of potential adversaries.

*Navigation Systems* – Navigation Systems supplies international and domestic defense and commercial markets with navigation and positioning systems, flight certified computers, multifunction displays, friend-or-foe identification interrogators/transponders, and integrated avionics packages. Its products are used in commercial space and aircraft

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applications as well as in military air, land, sea, and space systems. Key programs include: integrated avionics for the U.S. Marine Corps attack and utility helicopters as well as U.S. Navy E-2; navigation and positioning systems for the U.S. Air Force F/A-22, Eurofighter, U.S. Navy MH-60, Joint U.S. Air Force-U.S. Navy unmanned combat aerial systems, Airbus and Bombardier commercial aircraft, and military/scientific space applications; computers, displays, transponders and friend-or-foe identification for military applications such as the C-17, Eurofighter and MH-60; and fiber-optic acoustic systems for underwater surveillance for Virginia-class submarines.

*Government Systems* – Government Systems provides products and services for domestic and international defense and government agencies. Products include postal automation and material handling systems, air traffic control communications systems, satellite ground stations, information security, and a variety of security sensors and systems in support of Homeland Defense. Key programs include: Advanced Flat Sorting Machines, International Sorting Centers, Civil Communications, Air Traffic Control Satellite Communications Terminals, United States Postal Service Bio-Detection, and Hazardous Duty Robots.

*Space Systems* – Space Systems products include visible, infrared, and radio frequency payloads and the associated ground processing for remote sensing applications, such as environmental monitoring, missile warning, and surveillance. Principal programs include the Space-Based Infrared Surveillance (SBIRS) program, payloads for restricted programs, the Defense Meteorological Satellite Program (DMSP), the National Polar-Orbiting Operational Environmental Satellite System (NPOESS), and the Defense Support Program (DSP).

*Defense Other* – Other product and service lines in the Electronic Systems segment include communications, homeland defense, and logistics. It also includes Systems Development and Technology, which develops next-generation technologies that support Electronic Systems' market areas and position the segment in key developing markets, such as defense against chemical and biological warfare, cyberspace and signals intelligence, electro-optics and infrared systems, coherent ladar (laser based radar) technologies, and C4ISR.

#### **Ships**

The Ships segment combines two operating sectors, Newport News, headquartered in Newport News, Virginia, and Ship Systems, headquartered in Pascagoula, Mississippi, and includes the following products and services: Surface Combatants; Aircraft Carriers; Amphibious and Auxiliary; Submarines; Commercial and International; and Services and Other.

*Surface Combatants* – Ship Systems builds Surface Combatants, which includes the design and construction of the Arleigh Burke DDG 51 Class Aegis guided missile destroyers; design of DD(X), the Navy's future transformational surface combatant class; and the Coast Guard's Deepwater Modernization Program. The latter two programs were awarded in 2002. Ship Systems is one of two prime contractors designing and building DDG 51 Class destroyers, which provide primary anti-aircraft and anti-ship missile protection for the U.S. Navy fleet. Seven Arleigh Burke Class Destroyers are currently under construction with an additional four ships in backlog. The DD(X) program is a \$2.9 billion contract to develop and test eleven Engineering Development Models (EDMs) including an Integrated Electric Propulsion System (IPS), an all-composite low signature deckhouse with embedded radar and communication apertures, a new stealthy hull form, and a new Peripheral Vertical missile Launching System (PVLS). The contract further provides for incorporating these advanced technologies into the design of the next generation destroyer, DD(X). These technologies are also to be incorporated into the next generation cruiser, CG(X), and many ships already in the fleet, as well as other future new ship classes. Construction of the first DD(X) is scheduled to begin in late 2007 or early 2008. The current DD(X) acquisition plan calls for a dual source sharing of the production phase between the company and Bath Iron Works, a wholly owned subsidiary of General Dynamics. The Navy has indicated that a near-term competition for a single source contract would be a more economical solution. The Navy's determination is subject to approval by the DoD. In addition, Ship Systems and Lockheed Martin are joint venture partners for the Coast Guard's Deepwater Modernization Program. Ship Systems has design and production responsibility for all surface ships, including three new classes of cutters. The program is a 20-year program with the surface ship content having an estimated revenue value of \$8.1 billion.

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*Aircraft Carriers* – Newport News is the nation's sole designer, builder, and refueler of nuclear-powered aircraft carriers. The U.S. Navy's newest carrier, the *USS Ronald Reagan*, was redelivered to the fleet in May 2004. Construction on the last carrier in the Nimitz class, the *USS George H. W. Bush*, continues with the christening scheduled to occur in 2006 and delivery to the U.S. Navy in 2008. Advanced design and preparation continues for the new generation carrier, CVN 21, which will incorporate transformational technologies that will result in manning reductions, improved war fighting capability, and a new nuclear propulsion plant design. The company also provides ongoing maintenance for the U.S. Navy aircraft carrier fleet through overhaul, refueling, and repair work. Newport News is currently performing the overhauling and refueling of the *USS Dwight D. Eisenhower* with redelivery to the U.S. Navy anticipated in early 2005. Planning for the *USS Carl Vinson* refueling and overhaul is underway. The *USS Carl Vinson* is expected to arrive at Newport News in late 2005.

*Amphibious and Auxiliary* – Amphibious and Auxiliary programs include the design and construction of amphibious assault ships for the U.S. Navy, including the WASP LHD 1 Class and the San Antonio LPD 17 Class. Ship Systems is the sole provider for the LHD class of large-deck, 40,500-ton multipurpose amphibious assault ships, which serve as the centerpiece of an Amphibious Ready Group. Currently, the LHD 8 is under construction and is a significant upgrade from the preceding seven ships. The design and production of the LHD 8 is a \$1.6 billion program with delivery scheduled for 2007. Ship Systems is also the sole provider of the LPD 17 class of ships, which function as amphibious transports. There are five LPD 17 ships currently under construction. The initial ship is expected to be delivered in mid-2005.

*Submarines* – Newport News is one of only two companies capable of designing and building nuclear-powered submarines. In February 1997, the sector and Electric Boat, a wholly owned subsidiary of General Dynamics, reached an agreement to cooperatively build the first four Virginia-class nuclear attack submarines over the next 10 years. The lead ship, *USS Virginia*, was delivered to the U.S. Navy and commissioned into the fleet in October 2004. Newport News christened the *USS Texas* in July 2004, as progress continues on the remaining two boats of the first block, *USS Hawaii* and *USS North Carolina*. Electric Boat and Newport News were awarded a construction contract in August 2003, which was subsequently modified in January 2004, for the second block of six Virginia-class submarines. Second block planning and long lead material procurement is underway on the first three boats of the second block. Component material procurement for boats six through ten is also underway. Construction has begun on the first two boats of the second block, *USS New Hampshire* and *USS New Mexico*.

*Commercial and International* – Ship Systems is under contract to produce five double-hulled tankers, of which four ships have been delivered. These tankers each transport one million barrels of crude oil from Alaska to west coast refineries and are fully compliant with the Oil Pollution Act of 1990. The remaining ship is expected to be delivered in the fourth quarter of 2005.

*Services and Other* – Newport News and Ship Systems also provide after-market services, including on-going maintenance and repair work, for a wide array of naval and commercial vessels. The company has ship repair facilities in the U.S. Navy's largest homeports of Norfolk, Virginia, and San Diego, California.

### **Information Technology**

The Information Technology segment, headquartered in northern Virginia, consists of four lines of business: Government Information Technology; Enterprise Information Technology; Commercial Information Technology; and Technology Services.

*Government Information Technology* – This business area covers a wide range of large-scale systems integration, solutions, and services programs for government customers across the DoD, federal civilian agencies, state and local, and national intelligence agencies. These programs encompass C4ISR, infrastructure systems and services, applied sciences and technology, and training and simulation. Government Information Technology is also the lead business area for the company's Homeland Security (HLS) efforts. HLS solutions include emergency

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operations centers, identity management and identification/authentication, port and border security, training and exercises, cyber-warfare modeling, HLS requirements and optimization of systems, and consequence management.

C4ISR capabilities include mission planning and rehearsal, battle management command and control systems, tactical communications, satellite systems and applications, and wireless communications solutions. Infrastructure systems and services provides enterprise communications and infrastructure systems, information technology (IT) outsourcing, network operations center IT services, logistics systems, mission support systems, commercial services, and information assurance to a broad range of customers in both the government and commercial marketplaces. In the applied sciences and technology market, products include laser and imaging systems, weapons of mass destruction threat reduction analysis and simulation, systems analysis and modeling, health and applied science systems, and high-performance computing. In the training and simulation market, the sector is a prime developer and operator of modeling, simulation and analysis systems, computer-driven war-gaming and training, flight simulations, knowledge management systems, and mission readiness exercises.

*Enterprise Information Technology* – Enterprise Information Technology provides advanced solutions and complex IT products and professional services to both public sector and commercial customers, specifically in two core market segments: enterprise computing and multiservice networking and security.

*Commercial Information Technology* – Commercial Information Technology provides IT managed services directed at the commercial market (desktop and server management, hardware and software maintenance, help desk support, system and network administration, and network design) and a wide variety of systems, solutions and services for the state and local marketplace, including emergency response solutions, citizen security systems, and traffic management systems.

*Technology Services* – Technology Services includes logistics and weapons range support, training and simulation, facilities management services, flight systems and simulation services, mission integration and planning support, operational support of simulation-enhanced training programs, systems integration, information security, data center management, and systems engineering and networking.

#### **Mission Systems**

The Mission Systems segment, headquartered in Reston, Virginia, is a leading global system integrator of complex, mission-enabling systems. The segment consists of three lines of business: C2I Systems; Missile Systems; and Technical and Management Services.

*Command, Control & Intelligence Systems* – C2I Systems provides a variety of command, control, communications, computers, and intelligence support to the various branches of the U.S. Department of Defense. Offerings include signals intelligence and exploitation systems, system engineering and integration, data collection and operations and maintenance, modeling and product generation, system simulation and integration and test, spacecraft C2 systems, payload control and terminal software, Army and tactical global combat service support, Army management information systems, joint service nuclear, biological and chemical reconnaissance systems, and tactical operation centers, interoperable C2 solutions, mission planning applications, tactical data link products, global command and control systems, interoperability engineering, intelligence gathering, and naval systems engineering support and integration.

*Missile Systems* – Missile Systems supports the U. S. integrated Missile Defense system and the Intercontinental Ballistic Missile (ICBM) Program. The integrated Missile Defense system market includes shooters, sensors, battle management command and control, communications, modeling and simulation, and test and evaluation. For this market, the segment provides war games, modeling and simulation, system test and integration, and missile system engineering to the Missile Defense Agency, Boeing, and Lockheed Martin. As prime contractor for the Kinetic Energy Interceptors (KEI) program, the segment is leading development and test activities focused on the boost

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phase element of the Missile Defense Agency's global layered missile defense system. As prime contractor for the ICBM Program Office, the segment offers ICBM domain knowledge, program management, systems engineering and integration, and sustainment and modernization services.

*Technical and Management Services* – Technical and Management Services primarily supports the U.S. Department of Defense and the U. S. Department of Homeland Security. Products and services offered include full life cycle design and information systems integration and operations, electromagnetic and infrared analysis, decision support with modeling tools, systems effectiveness evaluation, engineering prototypes and integration, simulation modeling for training resource allocation, multi-media training design and delivery, operational support of war fighting and peacekeeping (e.g., linguists and subject matter experts), base operating services, equipment maintenance, logistics and administrative support and freight forwarding services, biometrics, biological agent detection, maneuver and logistics training, force-on-force exercise development and control, force modernization and integration, and equipment training and fielding.

#### **Integrated Systems**

The Integrated Systems segment, headquartered in El Segundo, California, designs, develops, produces, and supports fully missionized integrated systems and subsystems in the areas of battlespace awareness, command and control systems, and integrated combat systems. The segment is organized into the following product lines: Air Combat Systems (ACS), which includes Unmanned Systems; Airborne Early Warning and Electronic Warfare (AEW/EW) Systems; and Airborne Ground Surveillance and Battle Management (AGS/BM) Systems.

*Air Combat Systems* – The principal programs in ACS are subcontractor work on the F/A-18 and F-35 programs, and the Multi-Platform Radar Technology Insertion Program (MP-RTIP) and prime contract work on the B-2 Program. For the F/A-18, ACS is responsible for approximately 40 percent of the aircraft, including the full integration of the center and aft fuselage and vertical tail sections and associated subsystems. For the F-35, ACS is responsible for the detailed design and integration of the center fuselage and weapon bay, a large part of systems engineering, mission system software, ground and flight test support, signature/low observables development, and support of modeling and simulation activities. ACS is the prime systems integration contractor for the MP-RTIP, which will provide advanced radar capabilities for both the Global Hawk Unmanned Aerial Vehicle and the latest Air Force Multi Sensor Command and Control Aircraft (E-10A). ACS is embarking on a robust radar and avionics upgrade program for the B-2 bomber and is a prime integrator for all Logistics support activities including Program Depot Maintenance.

The principal programs at ACS's Unmanned Systems (UMS) consist of the Global Hawk, J-UCAS, and the Vertical Takeoff Unmanned Air Vehicle (VTUAV). UMS is the prime contractor for these product lines with the exception of the VTUAV Future Combat Systems (FCS). The Global Hawk is a high altitude, long endurance unmanned aerial reconnaissance system. The purpose of the J-UCAS program is to demonstrate the technical feasibility, military utility, and operational value for a networked system of high performance and weaponized unmanned air vehicles to effectively and affordably prosecute 21st century combat missions. VTUAV is a vertical takeoff and landing tactical UAV system in development and low-rate initial production and consists of two versions – the Fire Scout for the U.S. Navy and the FCS for the U.S. Army.

*Airborne Early Warning and Electronic Warfare Systems* – AEW Systems principal products include the E-2C (Hawkeye) and Advanced Hawkeye aircraft. The Hawkeye is the U.S. Navy's airborne battle management command and control mission system providing airborne early warning detection, identification, tracking, targeting and communication capabilities. The company is currently delivering E-2C aircraft to the U.S. Navy and international customers under a multiyear contract, and has also been awarded a follow-on multi-year contract for eight additional aircraft to be delivered to the U.S. Navy through 2009. The company is developing the next generation capability including radar, mission computer, vehicle, and other system enhancements called the Advanced Hawkeye under a system development and demonstration contract with the U.S. Navy.

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EW Systems principal products include the EA-6B (Prowler) and EA-18G electronic attack aircraft. The EA-6B is currently the armed services' only offensive tactical radar jamming aircraft. EW Systems has developed the next generation mission system for this aircraft under the ICAP (Increased Capability) III contract currently in the final test and evaluation phase. Low-rate initial production for ICAP III Kits has been authorized. In addition, the company has received a contract to incorporate the ICAP III mission system into a F/A-18 platform designated the EA-18G. Integrated Systems is the principal subcontractor to Boeing for this program currently in the system development and demonstration phase.

*Airborne Ground Surveillance and Battle Management Systems* – AGS/BM Systems is the prime contractor on the Joint Surveillance Target Attack Radar System (Joint STARS) program. Joint STARS detects, locates, classifies, tracks, and targets potentially hostile ground movement in all weather conditions. It is designed to operate around the clock in constant communication through secure data links with Air Force command posts, Army mobile ground stations, or centers for military analysis far from the point of conflict. One aircraft remains in the delivery contract, scheduled for delivery in early 2005. As Joint STARS nears the end of its production, a follow-on system, the E-10A Multi-Sensor Command & Control Aircraft (MC2A), is in development and will include the MP-RTIP radar. AGS/BM Systems was selected as the prime contractor for the E-10A Weapon System Integration program by the U.S. Air Force in 2003. In September 2004, AGS/BM Systems was awarded a major Battle Management Command & Control (BMC2) subsystem contract.

#### **Space Technology**

The Space Technology sector, headquartered in Redondo Beach, California, develops a broad range of systems at the leading edge of space, defense, and electronics technology. The sector provides products primarily for the U.S. government that contribute significantly to the nation's security and leadership in science and technology. The Space Technology business primarily consists of the following major business areas: Intelligence, Surveillance & Reconnaissance (ISR); Civil Space; Software Defined Radios; Satellite Communications (SatCom); Missile & Space Defense; and Technology.

*Intelligence, Surveillance & Reconnaissance* – In the ISR business area, the sector's capabilities give the nation's monitoring systems a global reach and enhance national security. Addressing requirements in space-based intelligence, surveillance, and reconnaissance systems, the sector provides mission and system engineering, satellite systems, and mission operations. Customers are predominantly restricted, as are the major programs. The Defense Support Program (DSP) is also part of this business area, and has been monitoring ballistic missile launches for the U.S. Air Force for decades.

*Civil Space* – The Civil Space business area produces and integrates space-based systems, instruments, and services primarily for the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA), and other governmental agencies. These systems are primarily used for space science, earth observation and environmental monitoring, and exploration missions. A variety of systems and services are provided, including mission and system engineering services, spacecraft and instrument systems, mission operations, and propulsion systems. Major programs include the National Polar-orbiting Operational Environmental Satellite System (NPOESS), the James Webb Space Telescope (JWST), Prometheus I (formally the Jupiter Icy Moons Orbiter), the Earth Observing System (EOS), and the legacy Chandra space telescope program.

*Software Defined Radios* – Space Technology's Software Defined Radios business area is at the forefront of radio technology, and designs, develops, and produces advanced integrated Communications, Navigation and Identification (CNI) systems, radios, and avionics integration software. The sector's avionics systems represent the "eyes and ears" of the F/A-22 Raptor jet fighter and F-35 Joint Strike Fighter.

*Satellite Communications* – The SatCom business area includes complex satellite communication payloads. Key customers are satellite prime contractors in support of the DoD and other government agencies. Major programs

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include the Advanced Extremely High Frequency (AEHF) payload, and the communication payload for the legacy Milstar program, currently in operation.

*Missile & Space Defense* – The Missile & Space Defense business area produces space, air, and ground-based systems that detect, track, and destroy missiles. Key capabilities and products include system integration, spacecraft design and development, and high energy laser systems and subsystems. Primary customers include the Missile Defense Agency (MDA), the Air Force, the Army, and other prime contractors. Major programs include the Space Tracking and Surveillance System (STSS), Airborne Laser (ABL), and Mobile Tactical High Energy Laser (MTHEL).

*Technology* – The Technology business area consists primarily of government funded research and development (R&D) contracts in support of the five business areas described above.

**BUSINESSES ACQUIRED**

The current composition of Northrop Grumman Corporation is the result of a series of strategic acquisitions, mergers, and divestitures.

*Litton and Newport News* – In 2001, the company purchased Litton, the Electronics and Information Systems Group of Aerojet-General Corporation (EIS), and 80.7 percent of Newport News. On January 18, 2002, the company acquired the remaining shares of Newport News.

*TRW* – In December 2002, the company purchased 100 percent of the common stock of TRW valued at approximately \$12.5 billion, including the assumption of TRW's debt of \$4.8 billion. The company issued approximately 139 million shares of its common stock, with cash paid in lieu of any fractional share of the company's stock, which otherwise would be issued to the TRW shareholders.

The consolidated financial statements as of December 31, 2002, reflect preliminary estimates of the fair market value for purchased intangibles, retiree benefits assets and liabilities, and debt as well as preliminary estimates of adjustments necessary to conform TRW to the company's accounting policies. Auto was included in the total TRW valuation and was valued and recorded at its sale price, which represents its fair market value. As of December 31, 2003, the company completed the fair market value and accounting conformance evaluation process for TRW and recorded an aggregate increase to goodwill of \$1.6 billion.

**BUSINESSES SOLD AND DISCONTINUED OPERATIONS**

*TRW Auto* – On February 28, 2003, the company sold Auto to The Blackstone Group for \$3.3 billion in cash, a \$600 million face value payment-in-kind note, initially valued at \$455 million, and a 19.6 percent interest in the new enterprise, initially valued at \$170 million. The acquirer also assumed debt of approximately \$200 million. The cash received from the sale of Auto was adjusted from the sale agreement amount by cash sold with the business, purchase price adjustments, and an asset retained. Cash proceeds from the sale were primarily used to reduce debt. In January 2004, the restrictions on the investment in Auto were amended to provide the company more flexibility in monetization. In February 2004, the company's investment in Auto was diluted to 17.2 percent as a result of Auto's initial public offering.

On October 10, 2004, the company reached an agreement with TRW Automotive Holdings Corp. to sell the payment-in-kind note and settle certain other contractual issues arising from the Auto sale. At the date of the agreement, the note, including accrued interest, had a carrying value of \$543 million. The company also resolved

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an indemnification of other postretirement employee benefits pursuant to the Auto sale agreement, and agreed to pay The Blackstone Group \$52.5 million. As a result of the agreement, the company recorded a \$9 million after-tax charge to continuing operations relating to the sale of the note, and a \$6 million after-tax charge to discontinued operations related to the settlement of the indemnification and other contractual issues. In November 2004, the company received \$493.5 million for the sale of the note, which was net of \$40.5 million for settlement of the contractual issues, and paid \$52.5 million for settlement of the indemnification.

*Goodrich* – The company assumed through its acquisition of TRW certain post-closing liabilities retained by TRW in connection with TRW’s October 2002 sale of its Aeronautical Systems business to Goodrich Corporation (Goodrich). The company and Goodrich agreed to a settlement to resolve certain post-closing liabilities related to warranty, customer claims, and certain other matters in exchange for a payment to Goodrich of \$99 million. This settlement resulted in a fourth quarter 2004 after-tax charge to discontinued operations of \$15 million. The settlement excludes amounts associated with claims that Goodrich may assert against the company relating to the Airbus A380 actuation systems development program and certain other liabilities retained by TRW under the original acquisition agreement.

*Discontinued Operations* – During the third quarter of 2002, the company concluded that the CT businesses, which were acquired as part of the Litton acquisition, did not fit with the company’s long-term plans and decided to sell these businesses. Accordingly, the businesses comprising the CT segment were classified as discontinued operations beginning in the third quarter of 2002. The company sold three of the CT businesses in 2003 and a fourth CT business in 2004. None of these sales, either individually or in the aggregate, had a material effect on the company’s financial position or results of operations. The three remaining CT businesses consist of a manufacturer of complex printed circuit boards, an electronic connector manufacturer, and a European-based marketing group. During the third quarter of 2004, the company suspended its efforts to sell these businesses. Accordingly, the assets, liabilities, and results of operations of these businesses have been reclassified from discontinued to continuing operations for all periods presented. These businesses are reported under the segment entitled “Other.”

*Northrop Grumman Canada* – On December 30, 2004, the company completed the sale of its Canadian navigation systems and space sensors systems businesses for \$65 million in cash, and recorded a \$9 million after-tax gain in discontinued operations. The assets and liabilities as well as the results of operations of the Canadian navigation systems and space sensors systems businesses were not material to any of the periods presented and have therefore not been reclassified as discontinued operations.

### **CONTRACTS**

The majority of the company’s business is generated from long-term government contracts for development, production, and service activities. Government contracts typically include the following negotiated cost: direct material, labor and subcontracting costs, and certain indirect costs including allowable general and administrative costs. Unless otherwise specified in a contract, costs billed to contracts with the U.S. Government are determined under the Federal Acquisition Regulations (FAR) and government CAS as allowable and allocable costs. Examples of costs incurred by the company and not billed to the U.S. Government based on the FAR and CAS unallowable clauses include, but are not limited to: certain legal costs, mark-to-market stock compensation expense, lobbying costs, charitable donations, and advertising costs.

The company’s long-term contracts typically fall into one of two broad categories:

*Cost Reimbursement or Cost-Type Contracts* – Cost-type contracts provide for reimbursement of allowable costs incurred plus a fee that represents profit. Cost-type contracts generally require that the contractor use best efforts to accomplish the scope of the work within some specified time and some stated dollar limitation.

*Fixed-Price Contracts* – A fixed-price contract is a contract in which the price is a pre-determined negotiated amount and not generally subject to adjustment because of costs incurred by the contractor.

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The following table summarizes 2004 revenue recognized by contract type and customer:

Contract Type (\$ in millions)	U.S. Government	Other Customers	Total	Percent of Total
Cost-Type	\$ 17,813	\$ 525	\$18,338	61%
Fixed-Price	8,153	3,362	11,515	39
Total	\$ 25,966	\$ 3,887	\$29,853	100%

#### **Contract Fees**

Negotiated contract fee structures, for both cost-type and fixed-price contracts may include, but are not limited to: fixed-fee amounts, cost sharing arrangements to reward or penalize for either under or over cost target performance, positive award fee, and negative penalty arrangements. Profit margins may vary materially depending on the negotiated contract fee arrangements, percentage of completion of the contract, the achievement of performance objectives, and the stage of performance at which the right to receive fees, particularly under incentive and award fee contracts, is finally determined.

#### **Contract Risk**

Due to their nature, fixed-price contracts inherently have more risk than cost-type contracts and therefore generally carry higher profit margins. Cost-type contracts may carry risk to the extent of their specific contract terms and conditions relating to performance award fees and negative performance incentives. The more significant risk factors relating to the company's contracts are fixed-price development contracts and negative performance incentive provisions included in certain cost-type and fixed-price contracts.

*Fixed-Price Development Contracts* – Fixed-price development work inherently has more uncertainty as to future events than production and therefore more variability in estimates of costs to complete the development stage. As work progresses through the development stage into production, the risks associated with estimating the costs of development are reduced. In addition, successful performance of fixed-price development contracts, which include production units, is subject to the company's ability to control cost growth in meeting production specifications and delivery rates. While management uses its best judgment to estimate costs associated with fixed-price development programs, future events could result in either upward or downward adjustments to those estimates. Examples of the company's significant fixed-price development contracts include the F-16 Block 60 combat avionics program and the MESA radar system for the Australian Defence Force's Project Wedgetail program, both of which are performed by the Electronic Systems segment. It is also not unusual in the Ships segment for the company to negotiate fixed-price production follow-on contracts before the development effort has been completed and learning curves fully realized on existing contracts. Examples of negotiated fixed-price follow-on production options or contracts are the Polar Tanker program and the Virginia-class submarine program.

*Positive Award Fees* – Certain contracts contain provisions consisting of award fee amounts based on performance criteria such as: cost, schedule, quality, and technical ingenuity. Award fees are determined and earned based on the subjective evaluation by the customer of the company's performance against such negotiated criteria. Award fee contracts are widely used throughout the company's operating segments; examples of significant long-term contracts with substantial negotiated award fee amounts are the KEI, NPOESS, F-35, LPD, and DD(X) programs.

*Negative Performance Incentive Provisions* – Certain contracts, primarily involving space satellite systems, contain provisions that entitle the customer to recover fees in the event of partial or complete failure of the system upon launch or subsequent deployment for a specified period of time. Under such terms, the company could be required to forfeit fees previously recognized and/or collected. The company has not experienced any significant losses in the last decade in connection with contract performance incentive provisions. However, if the company were to experience launch failures or complete satellite system failures in the future, such events could have a material impact on the company's financial position, results of operations, or cash flows.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****Compliance and Monitoring**

On a regular basis, the company monitors its policies and procedures with respect to its contracts to ensure consistent application under similar terms and conditions as well as compliance with all applicable government regulations. In addition, costs incurred and allocated to contracts with the U.S. Government are routinely audited by the Defense Contract Audit Agency.

**CRITICAL ACCOUNTING POLICIES, ESTIMATES, AND JUDGMENTS**

The company's significant accounting policies are outlined in Note 1 to the Consolidated Financial Statements (see Part II, Item 8 of this Form 10-K). The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, and expenses, as well as the disclosure of contingent assets and liabilities. Management is responsible for evaluating the propriety of its estimates, judgments, and accounting methods as new events occur. Management believes that its policies, estimates, and judgments have been consistently applied in a manner that provides the reader of the company's financial statements with a fair presentation of information, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Management periodically reviews the company's critical accounting policies, estimates, and judgments with the audit committee of its board of directors. Principal accounting practices that involve a higher degree of judgment or complexity are outlined below.

**Revenue Recognition****Overview**

The company generally recognizes revenue from its long-term contracts under the cost-to-cost and the units-of-delivery measures of the percentage-of-completion method of accounting. The percentage-of-completion method recognizes income as work on a contract progresses. For most contracts, sales are calculated based on the percentage of total costs incurred in relation to total estimated costs at completion of the contract. For certain contracts with large up-front purchases of material, primarily in the Ships segment, sales are generally calculated based on the percentage that direct labor costs incurred bear to total estimated direct labor costs. The units-of-delivery measure is a modification of the percentage-of-completion method, which recognizes as revenue the contract price of units of a basic production product delivered during a period, and as the cost of product sales the costs allocable to the delivered units; costs allocated to undelivered units are reported in the balance sheet as inventoried costs.

The use of the percentage-of-completion method depends on the ability of the company to make reasonably dependable cost estimates for the design, manufacture, and delivery of its products and services. Such costs are typically incurred over a period of several years, and estimation of these costs requires the use of judgment. Sales under cost-type contracts are recorded as costs are incurred. Revenue relating to service contracts is recognized as the services are performed.

**Application of Accounting Principles**

The majority of the company's contracts are accounted for under the provisions of Accounting Research Bulletin No. 45 – *Accounting for Long-Term Construction-Type Contracts*, American Institute of Certified Public Accountants (AICPA) Statement of Position (SOP) No. 81-1 – *Accounting for Performance of Construction-Type and Certain Production-Type Contract*, the AICPA Audit and Accounting Guide, *Audits of Federal Government Contractors*, and AICPA SOP No. 97-2 – *Software Revenue Recognition*, as amended by SOP 98-9. These pronouncements apply to contracts for the construction of facilities, production of goods and services provided to the federal government, and arrangements to deliver software or software systems requiring significant production, modification, or customization.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****Cost Estimation**

The cost estimation process requires significant judgment and is based upon the professional knowledge and experience of the company's engineers, program managers, and financial professionals. Factors that are considered in estimating the work to be completed and ultimate contract recovery include the availability and productivity of labor, the nature and complexity of the work to be performed, the effect of change orders, the availability of materials, the effect of any delays in performance, availability and timing of funding from the customer, and the recoverability of any claims included in the estimates to complete. A significant change in an estimate on one or more programs could have a material effect on the company's financial position or results of operations. Contract cost estimates are updated at least annually and more frequently as determined by events or circumstances. Cost and revenue estimates for each significant contract are generally reviewed and reassessed quarterly.

**Performance Incentives and Award Fees**

Many contracts contain positive and negative profit incentives based upon performance relative to predetermined targets that may occur during or subsequent to delivery of the product. These incentives take the form of potential additional fees to be earned or penalties to be incurred. Incentives and award fees that can be reasonably estimated are recorded over the performance period of the contract. Incentives and award fees that cannot be reasonably estimated are recorded when awarded or at such time as a reasonable estimate can be made.

**Loss Provisions**

When estimates of total costs to be incurred on a contract exceed total estimates of revenue to be earned, a provision for the entire loss on the contract is recorded to cost of sales in the period the loss is determined. Loss provisions are first offset against costs that are included in inventoried assets, with any remaining amount reflected in liabilities.

**Other Changes in Estimates**

Other changes in estimates of contract sales, costs, and profits are recognized using the cumulative catch-up method of accounting. This method recognizes in the current period the cumulative effect of the changes on current and prior periods. Hence, the effect of the changes on future periods of contract performance is recognized as if the revised estimates had been the original estimates. A significant change in an estimate on one or more programs could have a material effect on the company's financial position or results of operations.

Additional details concerning the company's revenue recognition policy are in Note 1 to the Consolidated Financial Statements in Part II, Item 8.

**Purchase Accounting and Goodwill****Overview**

The purchase price of an acquired business is allocated to the underlying tangible and intangible assets acquired and liabilities assumed based upon their respective fair market values, with the excess recorded as goodwill. Such fair market value assessments require judgments and estimates that can be affected by contract performance and other factors over time that may cause final amounts to differ materially from original estimates. Adjustments to fair value assessments are recorded to goodwill over the purchase price allocation period with the exception of certain adjustments related to income tax uncertainties or restructuring activities, which may extend beyond the purchase price allocation period.

**Acquisition Accruals**

The company has established certain accruals in connection with indemnities and other contingencies from its acquisitions and divestitures. These accruals and subsequent adjustments have been recorded during the purchase

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price allocation period for acquisitions and as events occur for divestitures. The accruals were determined based upon the terms of the purchase or sales agreements and, in most cases, involve a significant degree of judgment. Management has recorded these accruals in accordance with its interpretation of the terms of the purchase or sale agreements, known facts, and an estimation of probable future events based on management's experience and consultation with outside experts.

**Goodwill**

The company evaluates the recoverability of recorded goodwill amounts annually, or when evidence of potential impairment exists, in accordance with SFAS No. 142 – *Goodwill and Other Intangibles Assets*. In order to test for potential impairment, the company uses a discounted cash flow analysis, corroborated by comparative market multiples where appropriate.

The principal factors used in the discounted cash flow analysis requiring judgment are the weighted average cost of capital (WACC) and the terminal value growth rate assumptions. The WACC takes into account the relative weights of each component of the company's consolidated capital structure (equity and debt) and represents the expected cost of new capital adjusted as appropriate to consider lower risk profiles associated with longer term contracts and barriers to market entry. The terminal value growth rates are applied to the final year of the discounted cash flow model. The terminal value growth rate used for testing purposes in 2004 approximates the estimated long-term inflation rate.

Due to the many variables inherent in the estimation of a reporting unit's fair value, differences in assumptions may have a material effect on the results of the company's impairment analysis. Differences in assumptions within a range considered by management to be reasonable, applied to the 2004 annual goodwill impairment tests, would not have resulted in a significant adjustment to recorded goodwill.

**Litigation and Contingencies****Overview**

In accordance with SFAS No. 5, *Accounting for Contingencies*, amounts are recorded as charges to earnings when management, after taking into consideration the facts and circumstances of each matter, including any settlement offers, has determined that it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. The ultimate resolution of any such exposure to the company may vary from earlier estimates as further facts and circumstances become known.

The company is subject to a range of claims, lawsuits, environmental and income tax matters, and administrative proceedings that arise in the ordinary course of business. Estimating liabilities and costs associated with these matters requires judgment and assessment based upon professional knowledge and experience of management and its legal counsel. See Note 16 to the Consolidated Financial Statements in Part II, Item 8.

**Environmental Accruals**

The company is subject to the environmental laws and regulations of the jurisdictions in which it conducts or conducted operations. The company records an accrual to provide for the costs of expected environmental obligations when management becomes aware that an expenditure will be incurred and the amount of the liability can be reasonably estimated. Factors which could result in changes to the company's environmental accruals and reasonably possible range of loss include: modification of planned remedial actions, increase or decrease in the estimated time required to remediate, discovery of more extensive contamination than anticipated, changes in laws and regulations affecting remediation requirements, and improvements in remediation technology.

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**NORTHROP GRUMMAN CORPORATION**

**Tax Contingency Accruals**

The company records accruals for tax contingencies when it is probable that a liability has been incurred and the amount of the contingency can be reasonably estimated based on specific events such as an audit or inquiry by a taxing authority. Changes in accruals associated with uncertainties arising from pre-acquisition years for acquired businesses are charged or credited to goodwill. Other adjustments to tax accruals are generally recorded in earnings in the period they are determined.

**Retirement Benefits**

**Overview**

Assumptions used in determining projected benefit obligations and the fair values of plan assets for the company's pension plans and other postretirement benefits plans are regularly evaluated by management in consultation with outside actuaries. In the event that the company determines that changes in the assumptions are warranted, future pension and postretirement benefit expenses could increase or decrease.

**Assumptions**

The principal assumptions that have a significant effect on the company's financial position and results of operations are the discount rate, the expected long-term rate of return on plan assets, and the health care cost trend rates.

*Discount Rate* – The discount rate represents the interest rate that should be used to determine the present value of future cash flows currently expected to be required to settle the pension and postretirement benefit obligations. The discount rate is generally based on the yield on high-quality corporate fixed-income investments. At the end of each year, the discount rate is primarily determined based on the results of a hypothetical long-term bond portfolio matching the expected cash inflows with the expected benefit payments. Taking into consideration the factors noted above, the company lowered the discount rate to 5.75 percent at December 31, 2004, from 6.25 percent at December 31, 2003.

*Expected Long -Term Rate of Return* – The expected long-term rate of return on plan assets represents the average rate of earnings expected on the funds invested to provide for anticipated benefit payments. For 2004, the company assumed an expected long-term rate of return on plan assets of 8.75 percent. On average, the actual return on plan assets over the long-term has exceeded 8.75 percent; however, for 2005, the expected long-term rate of return assumption was lowered from 8.75 percent to 8.5 percent, reflecting the generally expected moderation of long-term rates of return in the financial markets.

Differences in the discount rate and expected long-term rate of return on plan assets within the indicated range would have had the following impact on 2004 pension and postretirement benefit results:

<i>\$ in millions</i>	.25 Percentage Point Increase	.25 Percentage Point Decrease
Increase (decrease) to pension expense resulting from		
Change in discount rate	\$ (33)	\$ 41
Change in long-term rate of return on plan assets	(42)	42

*Health Care Cost Trend Rates* – The health care cost trend rates represent the annual rate of change in the cost of health care benefits based on estimates of health care inflation, changes in health care utilization or delivery patterns, technological advances, and changes in the health status of the plan participants. The company increased its expected health care cost trend rate to 10 percent for 2004 from 9 percent for 2003.

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### **NORTHROP GRUMMAN CORPORATION**

Differences in the health care cost trend rates within the indicated range would have had the following impact on 2004 postretirement benefit results:

<i>\$ in millions</i>	1 Percentage Point Increase	1 Percentage Point Decrease
Increase (decrease) from change in health care cost trend rates to		
Postretirement benefit expense	\$ 29	\$ (24)
Postretirement benefit liability	352	(293)

### **MANAGEMENT FINANCIAL MEASURES**

The company manages and assesses the performance of its business primarily through the following measures:

*Contract Acquisitions* – Contract acquisitions represent orders received during the period for which funding has been contractually obligated by the customer. Contract acquisitions tend to fluctuate from year to year and are determined by the size and timing of new and follow-on orders. In the year that a business is purchased, its existing funded order backlog as of the purchase date is reported as contract acquisitions.

*Sales* – Year-to-year sales vary less than contract acquisitions and reflect performance under new and ongoing contracts. For further information related to revenue recognition, refer to the Revenue Recognition discussion included in the “Critical Accounting Policies, Estimates, and Judgments” section of this Part II, Item 7.

*Segment Operating Margin* – Segment operating margin reflects the performance of segment contracts and programs. Excluded from this measure are certain costs not directly associated with contract performance, including the portion of pension expense/income that is not currently recognized under CAS, as well as the portion of corporate, legal, environmental, state income tax, other retiree benefits, and other expenses not considered allowable costs under CAS and therefore not allocated to the segments.

*Backlog* – Funded backlog represents unfilled orders for which funding has been contractually obligated by the customer. Unfunded backlog represents firm orders for which funding is not contractually obligated by the customer. Unfunded backlog excludes unexercised contract options and unfunded Indefinite Delivery Indefinite Quantity (IDIQ) orders.

### **SEGMENT OPERATING RESULTS**

*Realignment* – Effective January 1, 2004, the company realigned businesses among three of its operating segments that possess similar customers, expertise, and capabilities. The realignment more fully leverages existing capabilities and enhances development and delivery of highly integrated information systems and services. Mission Systems’ Global Information Technology, Civil Systems, and Mission Systems Europe businesses were transferred to the Information Technology segment. Prior to January 1, 2004, the three business areas comprised Mission Systems’ Federal & Civil Information Systems business. The Defense Mission Systems (DMS) business within the Information Technology segment was transferred to the Mission Systems segment. Prior to January 1, 2004, DMS was a part of Information Technology’s Government Information Technology business. The Command, Control & Intelligence (C2I) Systems business area of the Missions Systems segment transferred its Unmanned Air Vehicle business to the Air Combat Systems (ACS) business area within the Integrated Systems segment. This realignment resulted in a decrease in 2003 sales of \$104 million for the Information Technology sector, an increase of \$57 million for the Mission Systems sector, and an increase of \$47 million for the Integrated Systems sector. For 2002, this realignment resulted in a decrease in sales of \$764 million for the Information Technology sector and an increase of \$764 million for the Mission Systems sector.

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Certain prior year amounts in the tables within this section have been reclassified to conform to current year reporting.

**Electronic Systems**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Aerospace Systems	\$1,393	\$1,202	\$1,018
C4ISR & Naval Systems	1,377	1,299	1,843
Defensive Systems	1,153	1,018	830
Navigation Systems	886	852	741
Government Systems	856	652	516
Space Systems	486	440	615
Defense Other	555	555	367
	<b>\$6,706</b>	<b>\$6,018</b>	<b>\$5,930</b>
<b>Sales and Service Revenues</b>			
Aerospace Systems	\$1,577	\$1,621	\$1,437
C4ISR & Naval Systems	1,351	1,318	1,225
Defensive Systems	1,060	919	783
Navigation Systems	775	756	668
Government Systems	672	448	476
Space Systems	453	514	437
Defense Other	529	463	300
	<b>\$6,417</b>	<b>\$6,039</b>	<b>\$5,326</b>
<b>Segment Operating Margin</b>	<b>\$ 670</b>	<b>\$ 590</b>	<b>\$ 434</b>
<i>As a percentage of segment sales</i>	<b>10.4%</b>	<b>9.8%</b>	<b>8.1%</b>

**Contract Acquisitions**

2004 – Electronic Systems segment acquisitions increased \$688 million, or 11 percent, in 2004 as compared with 2003.

Principal acquisitions during 2004 included \$185 million for a restricted program in the Aerospace Systems business area, \$150 million for the Big Tree program in the C4ISR & Naval Systems business area, and additional funding of \$139 million for domestic and international postal automation programs in the Government Systems business area.

2003 – Electronic Systems segment acquisitions increased \$88 million, or 1 percent, in 2003 as compared with 2002.

Principal acquisitions during 2003 included \$224 million for the SBIRS High program in the Space Systems business area, \$187 million for the MESA 737 Turkey acquisition in the Aerospace Systems business area, \$181 million and \$144 million for the Trident SSGN and Virginia-class submarine programs, respectively, in the C4ISR & Naval Systems business area, and \$145 million for the MP-RTIP program included in the Other business area.

**Sales and Service Revenues**

2004 – Electronic Systems segment sales increased \$378 million, or 6 percent, in 2004 as compared with 2003. Government Systems revenue increased \$224 million, or 50 percent, due to higher sales of bio-detection systems and postal automation equipment, and Defensive Systems revenue rose \$141 million, or 15 percent, due to higher sales from the Litening program. Defense Other revenue increased \$66 million, or 14 percent, due to growth in restricted programs.

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For 2005, management expects high single-digit percentage sales growth over 2004.

2003 – Electronic Systems segment sales increased \$713 million, or 13 percent, in 2003 as compared with 2002. Aerospace Systems revenue increased \$184 million, or 13 percent, due to increased volume on the F-35, F-16 Block 60, F/A-22, and avionics restricted programs. Defensive Systems sales increased \$136 million, or 17 percent, in 2003 over 2002 primarily due to higher volume on the ALQ-135, Large Aircraft Infrared Countermeasures, MH-53, and Litening programs. The 2003 increase of \$163 million in the Defense Other business area was primarily due to higher volume on the MP-RTIP program.

**Segment Operating Margin**

2004 – Electronic Systems segment operating margin increased \$80 million, or 14 percent, in 2004 as compared with 2003. Operating margin in 2004 increased primarily due to increased sales volume and performance improvements in the postal automation business and bio-detection systems in the Government Systems business area, as well as higher sales volume, improved performance, and contract close-outs in the Defensive Systems and Defense Other business areas. These increases were partially offset by a \$60 million pre-tax charge in the Aerospace Systems business area for the F-16 Block 60 fixed-price development combat avionics program, reflecting a higher estimate of costs to complete the “Falcon Edge” electronic warfare suite, including the results of qualification testing and the impact of delays in supplies of integrated microelectronic assemblies, and a \$52 million pre-tax charge reflecting increased projected costs due to analysis of technical issues following systems engineering modeling and qualification testing for the MESA radar system for the Australian Defence Force’s Project Wedgetail fixed-price development program. Fixed-price development work inherently has more uncertainty as to future events than production and therefore more variability in estimates of costs to complete the work. As work progresses through the development stage into production, the risks associated with estimating the costs of development are reduced. While management has used its best judgment to estimate costs, future events could result in either upward or downward adjustments to those estimates. The F-16 Block 60 program is expected to be completed in 2007 and the Wedgetail program is expected to be completed in 2008.

For 2005, management expects moderate improvement in segment operating margin as a percentage of segment sales over 2004.

2003 – Electronic Systems segment operating margin increased \$156 million, or 36 percent, in 2003 as compared with 2002. The increase in operating margin in 2003 was primarily due to increased sales volume in Aerospace Systems’ F/A-22, F-35, and several restricted programs, as well as increased volume in the C4ISR & Naval Systems marine systems business. The Defensive Systems and Navigation Systems business areas also reported higher sales and improved operating performance. Operating margin for 2003 included a \$40 million pre-tax charge for the F-16 Block 60 fixed-price development combat avionics program due to cost growth associated with developing and acquiring the advanced microelectronics necessary to meet production specifications and delivery rates.

Table of Contents**NORTHROP GRUMMAN CORPORATION****Ships**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Surface Combatants	<b>\$1,807</b>	\$1,569	\$1,641
Aircraft Carriers	<b>1,538</b>	941	1,622
Amphibious and Auxiliary	<b>983</b>	1,301	1,184
Submarines	<b>1,228</b>	895	828
Commercial and International	<b>41</b>	31	(4)
Services and Other	<b>135</b>	193	94
Intrasegment eliminations	<b>(64)</b>	(91)	(79)
	<b>\$5,668</b>	\$4,839	\$5,286
<b>Sales and Service Revenues</b>			
Surface Combatants	<b>\$2,010</b>	\$1,594	\$ 875
Aircraft Carriers	<b>1,901</b>	1,922	2,076
Amphibious and Auxiliary	<b>1,436</b>	1,069	845
Submarines	<b>730</b>	627	581
Commercial and International	<b>123</b>	123	224
Services and Other	<b>143</b>	163	194
Intrasegment eliminations	<b>(91)</b>	(47)	(98)
	<b>\$6,252</b>	\$5,451	\$4,697
<b>Segment Operating Margin</b>	<b>\$ 389</b>	\$ 295	\$ 306
<i>As a percentage of segment sales</i>	<b>6.2%</b>	5.4%	6.5%

**Contract Acquisitions**

2004 – Ships segment acquisitions increased \$829 million, or 17 percent, in 2004 as compared with 2003, primarily due to increased funding in the Aircraft Carriers and Submarines business areas. The principal acquisitions in 2004 were \$1.1 billion for the Virginia-class submarines program in the Submarines business area, and \$1 billion and \$524 million for the DD(X) and DDG programs, respectively, in the Surface Combatants business area. Acquisitions in 2004 also included \$583 million and \$397 million, respectively, for the LPD and LHD programs in the Amphibious and Auxiliary business area.

2003 – Ships segment acquisitions decreased \$447 million, or 8 percent, in 2003 as compared with 2002, primarily due to lower incremental funding received in 2003 for aircraft carrier refueling work. The principal acquisitions in 2003 were \$1.2 billion for the LPD program in the Amphibious and Auxiliary business area, and \$877 million and \$531 million related to the DD(X) and DDG programs, respectively, in the Surface Combatants business area.

**Sales and Service Revenues**

2004 – Ships segment sales increased \$801 million, or 15 percent, in 2004 as compared with 2003 due to higher revenue in the Surface Combatants, Amphibious and Auxiliary, and Submarines business areas. Surface Combatants revenue increased \$416 million, or 26 percent, due to higher revenue from the DD(X) and Deepwater programs partially offset by lower revenue from the DDG program. Amphibious and Auxiliary revenue increased \$367 million, or 34 percent, due to higher revenue from the LHD and LPD programs, and Submarines revenue increased \$103 million, or 16 percent, due to higher sales from the Virginia-class program.

For 2005, management expects a mid to high single-digit percentage sales decline as compared to 2004.

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### **NORTHROP GRUMMAN CORPORATION**

2003 – Ships segment sales increased \$754 million, or 16 percent, in 2003 as compared with 2002. This growth included a \$719 million increase for the Surface Combatants business area, which was primarily due to increased sales for the DD(X) and Deepwater programs. Amphibious and Auxiliary experienced an increase in sales during 2003 of \$224 million due to production ramp-up on the LPD 18, LPD 19, and LHD 8 programs. The \$154 million decrease in 2003 for Aircraft Carriers as compared to 2002 was largely due to the completion and delivery of the *USS Ronald Reagan*.

#### **Segment Operating Margin**

2004 – Ships segment operating margin increased \$94 million, or 32 percent, in 2004 as compared with 2003, due principally to a 2003 pre-tax charge of \$69 million for increased costs for the commercial Polar Tanker program, as well as increased sales volume and performance improvements in 2004 for the DD(X) and LHD programs in the Surface Combatants and Amphibious and Auxiliary business areas, respectively. The Polar Tanker charge included cost growth on the third tanker due to unusual weather delays and rework, and increased costs for changes in labor productivity estimates to complete the final two ships. The third tanker was delivered in the third quarter of 2003, the fourth tanker was delivered in the third quarter of 2004, and the fifth and final tanker is approximately 80 percent complete as of December 31, 2004, and is scheduled for delivery in the fourth quarter of 2005.

For 2005, management expects segment operating margin as a percentage of segment sales to be in the low 7 percent range.

2003 – Ships segment operating margin decreased \$11 million, or 4 percent, in 2003 as compared with 2002. The decrease included both a changing mix from production to development programs as well as the \$69 million pre-tax charge for the Polar Tanker program discussed above.

#### **Information Technology**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Government Information Technology	\$3,087	\$2,786	\$2,269
Enterprise Information Technology	881	872	766
Commercial Information Technology	770	698	588
Technology Services	688	611	621
Intrasegment eliminations	(126)	(113)	(104)
	<b>\$5,300</b>	<b>\$4,854</b>	<b>\$4,140</b>
<b>Sales and Service Revenues</b>			
Government Information Technology	\$3,004	\$2,625	\$1,948
Enterprise Information Technology	867	857	750
Commercial Information Technology	656	665	288
Technology Services	650	617	590
Intrasegment eliminations	(126)	(113)	(100)
	<b>\$5,051</b>	<b>\$4,651</b>	<b>\$3,476</b>
<b>Segment Operating Margin</b>	<b>\$ 301</b>	<b>\$ 269</b>	<b>\$ 191</b>
<i>As a percentage of segment sales</i>	<b>6.0%</b>	<b>5.8%</b>	<b>5.5%</b>

#### **Contract Acquisitions**

2004 – Information Technology segment acquisitions increased \$446 million, or 9 percent, in 2004 as compared with 2003, largely due to increased funding in the Government Information Technology and Commercial Information Technology business areas. Principal acquisitions in 2004 in the Government Information Technology business area were \$138 million for the National Geospatial Intelligence Agency Electrical

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Engineering program, \$104 million for the Immigration and Naturalization Service Technology Enterprise Automation Management Support program, and \$104 million for the Information Technology Support Services program. The Commercial Information Technology business area received funding of \$231 million for the Identification 1 program. The Technology Services business area received funding of \$283 million for the Joint Base Operations Support Contract (J-BOSC).

2003 – Information Technology segment acquisitions increased \$714 million, or 17 percent, in 2003 as compared with 2002, largely due to strong growth in the Government Information Technology business area. Principal acquisitions in 2003 in the Government Information Technology business area were \$104 million for the Information Technology Support Services program, \$98 million for Voyager, and \$92 million for the Immigration and Naturalization Service Technology Enterprise Automation Management Support program. The Commercial Information Technology business area received funding of \$120 million in connection with Vought. The Technology Services business area received funding of \$255 million for J-BOSC.

**Sales and Service Revenues**

2004 – Information Technology segment sales increased \$400 million, or 9 percent, in 2004 as compared with 2003 primarily due to higher revenue in the Government Information Technology and Technology Services business areas. Government Information Technology revenue increased \$379 million, or 14 percent, due to new business awards, including \$93 million for the National Geospatial Intelligence Agency Electrical Engineering program and \$45 million for the Defense Integrated Military Human Resources System program. Technology Services revenue increased \$33 million, or 5 percent, due to higher sales volume from the B-2 program.

For 2005, management expects nearly double-digit percentage sales growth over 2004.

2003 – Information Technology segment sales increased \$1.2 billion, or 34 percent, in 2003 as compared with 2002. The higher sales were primarily attributable to a \$677 million increase in the Government Information Technology business area due to increased volume on the Immigration and Naturalization Service Technology Enterprise Automation Management Support, Information Technology Support Services, and Land Information Warfare Activity programs. Enterprise Information Technology sales were \$107 million higher than 2002 due, in part, to increased purchases by the Department of Homeland Security.

**Segment Operating Margin**

2004 – Information Technology segment operating margin increased \$32 million, or 12 percent, in 2004 as compared with 2003 due to higher sales volume and improved performance in the Government Information Technology and Enterprise Information Technology business areas.

For 2005, segment operating margin as a percentage of segment sales is expected to be in the mid 6 percent range.

2003 – Information Technology segment operating margin increased \$78 million, or 41 percent, in 2003 as compared with 2002. The increase was primarily attributable to higher sales volume in the Government Information Technology business area.

Table of Contents**NORTHROP GRUMMAN CORPORATION****Mission Systems**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Command, Control & Intelligence Systems	\$3,008	\$2,987	\$1,644
Missile Systems	1,532	1,255	973
Technical and Management Services	680	678	382
Intrasegment eliminations	(11)	(42)	(34)
	<b>\$5,209</b>	<b>\$4,878</b>	<b>\$2,965</b>
<b>Sales and Service Revenues</b>			
Command, Control & Intelligence Systems	\$3,014	\$2,423	\$ 764
Missile Systems	1,288	1,082	
Technical and Management Services	699	700	
Intrasegment eliminations	(54)	(33)	
	<b>\$4,947</b>	<b>\$4,172</b>	<b>\$ 764</b>
<b>Segment Operating Margin</b>	<b>\$ 321</b>	<b>\$ 266</b>	<b>\$ 59</b>
<i>As a percentage of segment sales</i>	<b>6.5%</b>	6.4%	7.7%

**Contract Acquisitions**

2004 – Mission Systems segment acquisitions increased \$331 million, or 7 percent, in 2004 as compared with 2003, primarily due to increased funding in the Missile Systems business area. The principal acquisitions in 2004 included \$1 billion for the ICBM Prime Integration contract in the Missile Systems business area and \$133 million for restricted programs in the Command, Control & Intelligence Systems business area.

2003 – Mission Systems segment acquisitions during 2003 included several new business awards for restricted programs in the Command, Control & Intelligence Systems business area and the Kinetic Energy Interceptors contract awarded to the Missile Systems business area. Acquisitions for these two business areas accounted for over \$4.2 billion, or 87 percent, of total 2003 acquisitions. Acquisitions for 2002 represented backlog acquired as of the acquisition date of TRW.

**Sales and Service Revenues**

2004 – Mission Systems segment sales increased \$775 million, or 19 percent, in 2004 as compared with 2003 due to higher revenue in the Command, Control & Intelligence Systems and Missile Systems business areas. Command, Control & Intelligence Systems revenue increased \$591 million, or 24 percent, due to higher revenue from the Tactical Automated Security Systems II program and from various restricted programs. Missile Systems revenue increased \$206 million, or 19 percent, due to revenue from the Kinetic Energy Interceptors program and the XonTech acquisition.

For 2005, management expects mid single -digit percentage sales growth over 2004.

2003 – Approximately \$3.5 billion, or 84 percent, of 2003 sales were from the Command, Control & Intelligence Systems and Missile Systems business areas. The principal programs in the Command, Control & Intelligence Systems business area during 2003 were restricted. Missile Systems sales for 2003 were principally due to such programs as the ICBM Prime Integration contract, Ground-based Midcourse Defense, and the Joint National Integration Center .

**Segment Operating Margin**

2004 – Mission Systems segment operating margin increased \$55 million, or 21 percent, in 2004 as compared with 2003 due to higher sales volume in the Command, Control & Intelligence Systems and Missile Systems business areas.

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### **NORTHROP GRUMMAN CORPORATION**

For 2005, management expects moderate improvement in segment operating margin as a percentage of segment sales over 2004.

2003 – Approximately \$247 million, or 93 percent, of 2003 operating margin was derived from the Command, Control & Intelligence Systems and Missile Systems business areas.

#### **Integrated Systems**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Air Combat Systems	\$3,165	\$2,768	\$2,158
Airborne Early Warning and Electronic Warfare Systems	1,363	1,051	832
Airborne Ground Surveillance and Battle Management Systems	612	565	526
Intrasegment eliminations	(5)	(4)	(1)
	<b>\$5,135</b>	<b>\$4,380</b>	<b>\$3,515</b>
<b>Sales and Service Revenues</b>			
Air Combat Systems	\$2,874	\$2,469	\$1,915
Airborne Early Warning and Electronic Warfare Systems	1,273	841	759
Airborne Ground Surveillance and Battle Management Systems	600	541	600
Intrasegment eliminations	(5)	(4)	(1)
	<b>\$4,742</b>	<b>\$3,847</b>	<b>\$3,273</b>
<b>Segment Operating Margin</b>	<b>\$ 412</b>	<b>\$ 384</b>	<b>\$ 331</b>
<i>As a percentage of segment sales</i>	<b>8.7%</b>	<b>10.0%</b>	<b>10.1%</b>

#### **Contract Acquisitions**

2004 – Integrated Systems segment acquisitions increased \$755 million, or 17 percent, in 2004 as compared with 2003. The increase is mainly due to increased funding in the Air Combat Systems and Airborne Early Warning and Electronic Warfare Systems business areas. The principal acquisitions for Air Combat Systems during 2004 were \$792 million, \$709 million, and \$606 million for the Unmanned Systems, F/A-18, and F-35 programs, respectively. The principal acquisitions in the Airborne Early Warning and Electronic Warfare Systems and Airborne Ground Surveillance and Battle Management Systems business areas during 2004 were \$881 million and \$248 million for the E-2C and E-10A programs, respectively.

2003 – Integrated Systems segment acquisitions increased \$865 million, or 25 percent, in 2003 as compared with 2002. The increase was mainly due to higher acquisitions for the F-35 and Global Hawk programs, both included in the Air Combat Systems business area. The principal acquisitions for Air Combat Systems during 2003 were \$777 million, \$799 million, and \$613 million for the F/A-18, Unmanned Systems, and F-35 programs, respectively. The principal acquisitions in the Airborne Early Warning and Electronic Warfare Systems and the Airborne Ground Surveillance and Battle Management Systems business areas during 2003 were \$576 million and \$406 million for the E-2C and Joint STARS programs, respectively.

#### **Sales and Service Revenues**

2004 – Integrated Systems segment sales increased \$895 million, or 23 percent, in 2004 as compared with 2003 due to higher revenue in all business areas. Airborne Early Warning and Electronic Warfare Systems revenue increased \$432 million, or 51 percent, due to higher revenue from the E-2 Advanced Hawkeye and EA-18 programs; Air Combat Systems revenue increased \$405 million, or 16 percent, due to higher revenue from the F-35 program and Unmanned Systems; and Airborne Ground Surveillance and Battle Management Systems revenue increased \$59 million, or 11 percent, due to higher revenue from the E-10A program.

Table of Contents**NORTHROP GRUMMAN CORPORATION**

For 2005, management expects low to mid teens percentage growth in sales over 2004.

2003 – Integrated Systems segment sales increased \$574 million, or 18 percent, in 2003 as compared with 2002. Growth in 2003 principally included a \$554 million increase in Air Combat Systems due to increased volume on the F-35, Global Hawk, and MP-RTIP programs, and \$82 million in Airborne Early Warning and Electronic Warfare Systems related to the Advanced Hawkeye program. The sales decrease in 2003 of \$59 million in the Airborne Ground Surveillance and Battle Management Systems business area was mainly due to fewer Joint STARS aircraft in production.

**Segment Operating Margin**

2004 – Integrated Systems segment operating margin increased \$28 million, or 7 percent, in 2004 as compared with 2003. The increase was due primarily to higher sales volume in the Unmanned Systems and E-2 Advanced Hawkeye programs. The decrease in the Integrated Systems segment operating margin rate was due to a greater proportion of lower-margin development program revenue.

For 2005, management expects segment operating margin as a percentage of segment sales in the low to mid 8 percent range.

2003 – Integrated Systems segment operating margin increased \$53 million, or 16 percent, in 2003 as compared with 2002. The increase in operating margin in 2003 included increased sales volume from the F-35 and Global Hawk programs and improved operating performance on the E-2C program, partially offset by lower sales volume from the Joint STARS program.

**Space Technology**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Contract Acquisitions</b>			
Intelligence, Surveillance, & Reconnaissance	\$1,357	\$ 827	\$ 540
Civil Space	659	584	133
Software Defined Radios	520	638	148
Satellite Communications	398	532	230
Missile & Space Defense	400	316	206
Technology	226	241	51
Intrasegment eliminations	(100)	(65)	
	<b>\$3,460</b>	<b>\$3,073</b>	<b>\$1,308</b>
<b>Sales and Service Revenues</b>			
Intelligence, Surveillance, & Reconnaissance	\$1,041	\$ 881	
Civil Space	638	521	
Software Defined Radios	546	387	
Satellite Communications	486	472	
Missile & Space Defense	389	405	
Technology	221	203	
Intrasegment eliminations	(52)	(46)	
	<b>\$3,269</b>	<b>\$2,823</b>	
<b>Segment Operating Margin</b>	<b>\$ 222</b>	<b>\$ 193</b>	
<i>As a percentage of segment sales</i>	<b>6.8%</b>	<b>6.8%</b>	

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****Contract Acquisitions**

2004 – Space Technology segment acquisitions increased \$387 million, or 13 percent, in 2004 as compared with 2003. This increase was primarily due to increased funding for restricted programs in the Intelligence, Surveillance & Reconnaissance business area.

2003 – Space Technology segment acquisitions during 2003 primarily included \$827 million in the Intelligence, Surveillance & Reconnaissance business area, \$475 million related to NPOESS in the Civil Space business area, \$287 million related to the F/A-22 program in the Software Defined Radios business area, and \$502 million related to additional funding for the AEHF satellite in the Satellite Communications area. Acquisitions for 2002 included backlog acquired as of the acquisition date of TRW.

**Sales and Service Revenues**

2004 – Space Technology sales increased \$446 million, or 16 percent, in 2004 as compared with 2003 due to higher revenue in the Intelligence, Surveillance & Reconnaissance, Software Defined Radios, and Civil Space business areas. Intelligence, Surveillance & Reconnaissance revenue increased \$160 million, or 18 percent, due to increased volume from restricted programs. Software Defined Radios revenue increased \$159 million, or 41 percent, due to higher revenue from the F-35 and F/A-22 programs. Civil Space revenue increased \$117 million, or 22 percent, due to higher volume from the JWST and NPOESS programs.

For 2005, management expects a low single-digit percentage sales decline as compared to 2004.

2003 – Intelligence, Surveillance & Reconnaissance sales for 2003 were primarily from restricted programs. Approximately \$412 million, or 79 percent, of Civil Space sales were due to the NPOESS program. Sales for the Software Defined Radios business area included \$135 million and \$127 million related to the F-35 and F/A-22 programs, respectively. Approximately \$440 million, or 93 percent, of Satellite Communications sales was due to the AEHF program. Missile & Space Defense sales for 2003 include \$234 million and \$122 million related to the STSS Cycle I and ABL programs, respectively.

**Segment Operating Margin**

2004 – Space Technology segment operating margin increased \$29 million, or 15 percent, in 2004 as compared with 2003. This increase was driven primarily by increased volume and performance improvements on restricted programs in the Intelligence, Surveillance & Reconnaissance business area. Other significant increases in segment operating margin in 2004 were driven by increased sales volume from the F-35 and F/A-22 programs in the Software Defined Radios business area and the JWST and NPOESS programs in the Civil Space business area.

For 2005, management expects segment operating margin as a percentage of segment sales to be in the low 7 percent range.

2003 – Operating margin for the Space Technology segment in 2003 was \$193 million, or 7 percent, driven by strong margin performance in the Software Defined Radios and Intelligence, Surveillance & Reconnaissance business areas, and increased sales volume in all business areas.

**NON-SEGMENT FACTORS AFFECTING OPERATING MARGIN**

The company's operations substantially changed as a result of the TRW acquisition on December 11, 2002. The company's 2002 income statement does not include TRW's post-acquisition results because they were not material. The 2002 results reflect the first full year of operations of Litton, EIS, and Newport News, which were acquired in 2001. These acquisitions have significantly increased the size of the company and produced one of the largest defense contractors in the nation.

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### NORTHROP GRUMMAN CORPORATION

The components of operating margin are as follows:

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Operating Margin</b>			
Electronic Systems	\$ 670	\$ 590	\$ 434
Ships	389	295	306
Information Technology	301	269	191
Mission Systems	321	266	59
Integrated Systems	412	384	331
Space Technology	222	193	
Other	(3)	(74)	(271)
Non-segment factors affecting operating margin			
Unallocated expenses	(282)	(137)	(105)
Pension (expense) income	(350)	(568)	90
Reversal of CAS pension expense included above	338	265	100
Reversal of royalty income included above	(12)	(15)	(15)
<b>Total operating margin</b>	<b>\$2,006</b>	<b>\$1,468</b>	<b>\$1,120</b>

Operating margin as a percentage of total revenue was 6.7 percent, 5.6 percent, and 6.4 percent for 2004, 2003, and 2002, respectively. The primary factors affecting operating margin during these periods were the business acquisitions, operating segment performance, and changes in unallocated expenses and pension amounts.

#### **Unallocated Expenses**

2004 – Unallocated expenses increased \$145 million in 2004 as compared with 2003. The increase was due primarily to increased legal costs, including provisions related to the resolution of the Allison Gas Turbine and Robinson litigation (see Note 16 to the Consolidated Financial Statements in Part II, Item 8), as well as higher mark-to-market stock compensation expense and deferred state income taxes.

2003 – Unallocated expenses increased \$32 million in 2003, net of a \$17 million gain on the settlement of legal matters, as compared with 2002. The increase was due primarily to higher legal costs and increased estimates of unrecoverable costs. In 2003, the company settled two previously reserved civil False Claims Act cases, U.S. v. Newport News Shipbuilding, Inc. and U.S. Ex rel. Jordan, and recorded loss provisions for settlement offers on other legal matters, resulting in a net gain of \$17 million. The two settled cases required payments by the company of approximately \$80 million.

The \$60 million settlement amount allocated by the plaintiff to the Newport News Shipbuilding case was charged to an existing accrual established for the government's claim that Newport News had improperly charged certain independent research and development costs to its government contracts with respect to the years 1994 through 1999. The government filed a civil False Claims Act case against the company in February 2003 seeking single damages in excess of \$72 million, plus penalties, costs, and interest. The company accrued an amount for this matter determined in accordance with SFAS No. 5 – *Accounting for Contingencies*, after considering the facts and circumstances known to management at the time, including the potential for treble damages and penalties as provided in the False Claims Act. The accrual, when established, had no effect on the company's net income, as it was recorded as a liability on the balance sheet as part of the purchase accounting for Newport News, which was acquired in December 2001. The unused portion of the accrual of approximately \$120 million was reversed and, together with the loss provisions recorded for other legal matters, is included in the \$17 million net gain reported in "Unallocated expenses."

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****Pension (Expense) Income**

2004 – Pension expense decreased \$218 million in 2004 as compared with 2003. The decrease is primarily due to a higher return of more than 20 percent on plan assets in 2003, which improved the funded status of the company's pension plans, partially offset by lower 2004 assumptions for the expected long-term rate of return on plan assets and the discount rate.

Pension expense is included in the sectors' cost of sales to the extent that these costs are currently recognized under CAS. In order to reconcile from segment operating margin to total operating margin, these amounts are reported under the caption "Reversal of CAS pension expense included above."

For 2005, subject to refinements for participant census data and pay-as-you-go plans, management expects pension expense determined in accordance with accounting principles generally accepted in the United States of America to total approximately \$415 million. Pension expense recognized under CAS, which is generally recoverable under government contracts, is estimated to be \$365 million for 2005. Based on expected long-term returns available in the capital markets and lower long-term interest rates, the 2005 pension plan assumptions have been changed from the 2004 assumptions. The 2005 assumptions include an expected long-term rate of return on plan assets of 8.5 percent and a discount rate of 5.75 percent compared with the 2004 assumptions of 8.75 percent and 6.25 percent, respectively.

2003 – Operating margin in 2003 included pension expense of \$568 million as compared with pension income in 2002 of \$90 million. The increased pension expense was primarily due to a higher number of plan participants resulting from the acquisition of TRW as well as a negative return on plan assets of 10 percent in 2002.

Beginning in July 2003, the pension benefits for most employees, principally those participating in Northrop Grumman and Litton heritage plans, were based upon new criteria, whereby employees earn age and service points over the employment period. Subsequent to the 2003 initial phase-in, other exempt and non-exempt plans have been and continue to be conformed to the new model. No settlement or curtailments arose as a result of these changes. Union plans were not affected by these plan modifications.

**OTHER INCOME STATEMENT COMPONENTS****Interest Income**

2004 – Interest income in 2004 is comparable to 2003. Interest income for both years primarily included non-cash interest earned on the payment-in-kind note received in connection with the sale of Auto. On October 10, 2004, the company reached an agreement with TRW Automotive Holdings Corp. regarding the repurchase of the payment -in-kind note, at which time accrual of interest income from the note ceased.

2003 – Interest income increased \$49 million in 2003 as compared to 2002. The increase is primarily due to non-cash interest earned on the payment-in-kind note received in connection with the sale of Auto, interest earned on a tax refund, and interest earned on the temporary investment of excess cash.

**Interest Expense**

2004 – Interest expense decreased by \$66 million in 2004 as compared with 2003. The decrease is principally due to the effect of the company's debt reduction plan that was substantially completed in the second quarter of 2003. Also, on October 15, 2004, \$350 million of 8.625 percent notes matured and the company redeemed all of its outstanding \$250 million 9.375 percent debentures due in 2024. The decrease in interest expense related to the reduction of fixed-rate debt was partially offset by dividends payable on mandatorily redeemable preferred stock classified as interest expense beginning in the third quarter of 2003. This classification was required, on a prospective basis, upon the adoption of SFAS No. 150 – *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

2003 – Interest expense increased by \$75 million in 2003 as compared with 2002. The increase was principally the result of higher debt levels arising from the acquisition of TRW, net of the effect of the company's debt reduction plan, which was substantially completed in the second quarter of 2003.

**Income Taxes**

2004 – The company's effective tax rate on income from continuing operations for 2004 was 32 percent compared to 28 percent for 2003. The higher rate in 2004 is primarily due to the reduced effect of research and development tax credits. The company recognized research and development tax credits of \$20 million and \$51 million for the years ended December 31, 2004, and 2003, respectively. The effective tax rate for 2005 is expected to be between 33 and 34 percent.

2003 – The company's effective tax rate on income from continuing operations for 2003 was 28 percent compared to 38 percent during 2002. The lower rate in 2003 was primarily due to higher research tax credits.

**Discontinued Operations**

2004 – The company reported after-tax income from discontinued operations of \$3 million for 2004, compared to after-tax income of \$64 million for the same period of 2003. The income for the 2003 period was primarily attributable to Auto operating results, which were included in discontinued operations until Auto was sold in February 2003.

The businesses comprising the CT reporting segment were classified as discontinued operations beginning in the third quarter of 2002, and subsequently the company has sold all but three of these businesses. The remaining unsold businesses are a manufacturer of complex printed circuit boards and assemblies, an electronic connector manufacturer, and a European-based marketing group. During the third quarter of 2004, the company suspended its efforts to sell these remaining businesses and they were reclassified from discontinued to continuing operations. The operating results of these businesses are reported under the segment entitled "Other."

As a result of the reclassification, sales for 2003 increased \$191 million and income from continuing operations before cumulative effect of accounting change for 2003 decreased \$50 million. Income from continuing operations before cumulative effect of accounting change for 2003 includes a charge of \$31 million for the adjustment to fair market value of the remaining CT businesses reclassified from discontinued to continuing operations. The reclassification decreased 2003 diluted earnings per share from continuing operations to \$2.03 from \$2.16.

Effective January 1, 2005, two of these operations were integrated into, and reported under, the Electronic Systems segment. The European-based marketing group will continue to be reported under "Other." The effect of this realignment on the Electronic Systems segment's sales and operating margin is not significant.

2003 – The company reported after-tax income from discontinued operations of \$64 million, net of a goodwill impairment charge of \$47 million, during 2003. The \$44 million after-tax gain from disposal of discontinued operations is primarily attributable to the sale of two CT businesses. The gain (loss) on disposal of discontinued operations includes any gain or loss from completed dispositions, as well as the estimated loss from those businesses expected to be sold at a loss, where the sale had not yet been completed. Gains realized on the sale of any discontinued businesses are reported in the period in which the divestiture is complete.

**Cumulative Effect of Accounting Change**

Effective January 1, 2002, the company adopted SFAS No. 142 – *Goodwill and Other Intangible Assets*, which implemented required disclosure provisions and eliminated the amortization of goodwill. During the second quarter of 2002, the company completed the first step of the required initial test for potential impairment of

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### NORTHROP GRUMMAN CORPORATION

goodwill as of January 1, 2002. The company used a discounted cash flow approach, corroborated by comparative market multiples, where appropriate, to determine the fair value of its reporting units. The results indicated potential impairment only in the reporting units of the CT segment due to unfavorable market conditions. During the third quarter of 2002, the company completed the measurement of the CT goodwill impairment as of January 1, 2002, and recorded a noncash, after-tax charge of \$432 million, or \$1.87 per diluted share, which is reported as "Cumulative effect of accounting change."

### BACKLOG

Total backlog at December 31, 2004, was approximately \$58 billion. Total backlog includes both funded backlog (unfilled orders for which funding is contractually obligated by the customer) and unfunded backlog (firm orders for which funding is not currently contractually obligated by the customer). Unfunded backlog excludes unexercised contract options and unfunded Indefinite Delivery/Indefinite Quantity (IDIQ) orders. Major awards in unfunded backlog include the Kinetic Energy Interceptors program in the Mission Systems segment, the Virginia-class submarines program second block in the Ships segment, the NPOESS program in the Space Technology segment, the F-35 and E-2 Advanced Hawkeye programs in the Integrated Systems segment, and the J-BOSC program in the Information Technology segment.

The following table presents funded and unfunded backlog by segment at December 31, 2004:

<i>\$ in millions</i>	<b>Funded</b>	Unfunded	Total Backlog
Electronic Systems	\$ 6,757	\$ 2,290	\$ 9,047
Ships	9,165	3,841	13,006
Information Technology	2,568	3,358	5,926
Mission Systems	3,167	7,450	10,617
Integrated Systems	4,691	5,984	10,675
Space Technology	1,749	7,595	9,344
Other	49		49
Intersegment eliminations	(584)		(584)
<b>Total Segments</b>	<b>\$27,562</b>	<b>\$ 30,518</b>	<b>\$58,080</b>

Backlog is converted into the following years' sales as costs are incurred or deliveries are made. Approximately 64 percent of the 2004 year-end funded backlog is expected to be converted into sales in 2005. Total U.S. Government orders, including those made on behalf of foreign governments (FMS), comprised 86 percent, 87 percent, and 84 percent of the funded backlog at the end of 2004, 2003, and 2002, respectively. Total foreign customer orders, including FMS, accounted for 8 percent, 9 percent, and 13 percent of the funded backlog at the end of 2004, 2003, and 2002, respectively. Domestic commercial backlog represented 5 percent, 6 percent, and 5 percent of funded backlog at the end of 2004, 2003, and 2002, respectively.

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Funded backlog by business area with each segment is provided in the following table:

<i>\$ in millions</i>	December 31,	
	2004	2003
<b>Electronic Systems</b>		
Aerospace Systems	\$ 1,790	\$ 1,974
C4ISR & Naval Systems	1,388	1,362
Defensive Systems	1,250	1,157
Navigation Systems	1,013	902
Government Systems	796	612
Space Systems	223	190
Defense Other	297	271
	<b>6,757</b>	<b>6,468</b>
<b>Ships</b>		
Surface Combatants	3,058	3,261
Aircraft Carriers	2,571	2,934
Amphibious and Auxiliary	1,897	2,350
Submarines	1,568	1,070
Commercial and International	39	121
Services and Other	49	57
Intrasegment eliminations	(17)	(44)
	<b>9,165</b>	<b>9,749</b>
<b>Information Technology</b>		
Government Information Technology	1,434	1,351
Enterprise Information Technology	160	146
Commercial Information Technology	690	576
Technology Services	284	246
	<b>2,568</b>	<b>2,319</b>
<b>Mission Systems</b>		
Command, Control & Intelligence Systems	1,438	1,444
Missile Systems	1,390	1,146
Technical and Management Services	341	360
Intrasegment eliminations	(2)	(45)
	<b>3,167</b>	<b>2,905</b>
<b>Integrated Systems</b>		
Air Combat Systems	2,597	2,306
Airborne Early Warning and Electronic Warfare Systems	1,566	1,476
Airborne Ground Surveillance and Battle Management Systems	528	516
	<b>4,691</b>	<b>4,298</b>
<b>Space Technology</b>		
Intelligence, Surveillance, & Reconnaissance	802	486
Civil Space	217	196
Software Defined Radios	373	399
Satellite Communications	202	290
Missile & Space Defense	128	117
Technology	94	89
Intrasegment eliminations	(67)	(19)
	<b>1,749</b>	<b>1,558</b>
<b>Other</b>	49	63
Intersegment eliminations	(584)	(432)
<b>Total funded backlog</b>	<b>\$27,562</b>	<b>\$26,928</b>

Table of Contents**NORTHROP GRUMMAN CORPORATION****LIQUIDITY AND CAPITAL RESOURCES****Contractual Obligations**

The following table presents the company's contractual obligations as of December 31, 2004, and the estimated timing of future cash payments:

<i>\$ in millions</i>	<b>Total</b>	<b>2005</b>	<b>2006 - 2007</b>	<b>2008 - 2009</b>	<b>2010 and beyond</b>
Long-term debt (fixed rate)	\$ <b>5,068</b>	\$ 33	\$1,284	\$ 580	\$ 3,171
Interest payments on long-term debt	<b>4,181</b>	343	594	557	2,687
Operating leases	<b>1,819</b>	386	532	383	518
Purchase obligations <sup>(1)</sup>	<b>8,437</b>	5,714	1,922	340	461
Other long-term liabilities <sup>(2)</sup>	<b>714</b>	185	282	53	194
<b>Total contractual obligations</b>	<b>\$20,219</b>	\$6,661	\$4,614	\$1,913	\$ 7,031

- (1) A "purchase obligation" is defined as an agreement to purchase goods or services that is enforceable and legally binding on the company and that specifies all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. These amounts are primarily comprised of open purchase order commitments to vendors and subcontractors pertaining to funded contracts.
- (2) Other long-term liabilities primarily consist of accrued workers' compensation, deferred compensation, and other miscellaneous liabilities.

The table above excludes mandatorily redeemable preferred stock of \$350 million as well as cumulative annual cash dividends of \$7 per share, payable quarterly. See Note 14 to the Consolidated Financial Statements in Part II, Item 8.

The table above also excludes estimated minimum funding requirements for retiree benefit plans as set forth by the Employee Retirement Income Security Act (ERISA), totaling approximately \$2.9 billion over the next five years: \$389 million in 2005, \$1.3 billion in 2006 and 2007, and \$1.2 billion in 2008 and 2009. The company also has payments due under plans that are not required to be funded in advance, but are pay-as-you-go. See Note 15 to the Consolidated Financial Statements in Part II, Item 8.

Further details regarding long-term debt and operating leases can be found in Notes 13 and 16, respectively, to the Consolidated Financial Statements in Part II, Item 8.

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### NORTHROP GRUMMAN CORPORATION

#### Sources and Uses of Cash

The following table provides an overview of the company's sources and uses of cash. The amounts from which the percentages are derived are reported in the Consolidated Statements of Cash Flows as follows: cash from customers and cash to employees and suppliers of services and materials are reported in "Operating Activities"; cash from buyers of assets, cash to sellers of assets, and cash to suppliers of facilities are reported in "Investing Activities"; and cash from and cash to lenders and shareholders are reported in "Financing Activities."

	Year ended December 31		
	2004	2003	2002
Cash came from			
Customers	94%	85%	93%
Buyers of assets/other	3	13	4
Shareholders	3		
Lenders		2	3
	<b>100%</b>	100%	100%
Cash went to			
Employees and suppliers of services and materials	88%	74%	88%
Lenders	4	16	7
Suppliers of facilities/other	2	6	1
Shareholders	4	2	1
Sellers of assets	2	2	3
	<b>100%</b>	100%	100%

#### *Operating Activities*

2004 – In 2004, cash provided by operating activities was \$1.9 billion as compared with \$798 million generated in 2003. In 2003, cash used in operations included \$1 billion of taxes paid upon completion of the B-2 EMD contract. The Internal Revenue Service has completed its audits of the B-2 program for the years ended December 31, 1997 through December 31, 2000, and has proposed an adjustment that does not affect the company's income tax liability but could result in an obligation to pay an amount of interest to the Internal Revenue Service that could be significant. The company believes the proposed adjustment will be eliminated or significantly reduced. Accordingly, the company does not believe that any adjustment by the Internal Revenue Service in this matter will have a material adverse effect on the company's financial position, results of operations, or cash flows.

In 2004, the company's appeal to the Supreme Court of Indiana in connection with the Allison Gas Turbine case was denied and the company paid \$81 million in settlement of the judgment and interest.

In 2004, the company and Goodrich agreed to a settlement to resolve certain post-closing liabilities that related to warranty, customer claims, and certain other matters in exchange for a payment to Goodrich of \$99 million. The company also resolved an indemnification of other post-employment benefits, pursuant to the Auto sale agreement, and paid The Blackstone Group \$52.5 million. For further information refer to Note 5 to the Consolidated Financial Statements in Part II, Item 8.

Employer contributions to the company's pension plans increased \$295 million from \$329 million in 2003 to \$624 million in 2004. The increase reflects a voluntary pre-funding of \$250 million in the fourth quarter of 2004.

Interest payments decreased \$150 million in 2004 as compared with 2003, primarily due to a reduction in fixed-rate debt.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

At December 31, 2004, net working capital (current assets less current liabilities) was \$684 million reflecting a higher cash balance and a decreased current portion of long-term debt.

2003 – In 2003, cash provided by operating activities was \$798 million as compared with \$1.7 billion generated in 2002. In 2003, cash used in operations reflects \$1 billion of taxes paid upon completion of the B-2 EMD contract.

During 2003, the company also received \$178 million of federal and state tax refunds and made litigation settlement payments totaling \$206 million. At December 31, 2003, net working capital deficit (current assets less current liabilities) was \$623 million reflecting a lower cash balance, an increased current portion of long-term debt, and increased customer advances.

2002 – In 2002, cash provided by operating activities was \$1.7 billion as compared with \$817 million generated in 2001. The increased level of cash provided in 2002 principally resulted from inclusion of the Litton and Newport News acquisitions for a full year, increased operating margin over 2001, and accelerated cash collections.

***Investing Activities***

2004 – Cash provided by investing activities was \$9 million in 2004. On October 10, 2004, the company reached an agreement with TRW Automotive Holdings Corp. regarding the repurchase of a payment-in-kind note. On November 12, 2004, the company received \$493.5 million, which was net of \$40.5 million for settlement of certain contractual issues arising from the sale of Auto.

During 2004, the company received \$125 million from the sale of businesses. This includes the sale of Kester, one of the former Components Technologies businesses, in February 2004 for approximately \$60 million, and the sale of Northrop Grumman Canada in December 2004 for approximately \$65 million.

Capital expenditures in 2004 were \$672 million, including \$53 million for capitalized software costs. Capital expenditure commitments at December 31, 2004, were approximately \$577 million.

2003 – Cash provided by investing activities was \$2.9 billion in 2003. On February 28, 2003, the company sold TRW Auto to The Blackstone Group for \$3.3 billion in cash, a \$600 million face value payment-in-kind note, initially valued at \$455 million, and a 19.6 percent interest in the new enterprise, valued at \$170 million. The cash received from the sale of Auto was adjusted from the sale agreement amount by cash sold with the business, preliminary purchase price adjustments, and an asset retained. Cash proceeds from the sale of Auto were primarily used to reduce debt.

Capital expenditures in 2003 were \$637 million, including \$47 million for capitalized software costs.

2002 – Cash used in investing activities was \$155 million in 2002. In 2002, the company sold two businesses for \$135 million in cash, incurred \$55 million for transaction costs pertaining to the acquisition of TRW, and spent approximately \$166 million in cash to complete the Newport News acquisition. In 2002, the company acquired TRW in an all stock transaction. Capital expenditures in 2002 were \$528 million, including \$30 million for capitalized software costs.

***Financing Activities***

2004 – Cash of \$1 billion was used in financing activities in 2004. The company made \$725 million in principal payments of long-term debt and paid dividends to shareholders of \$321 million.

*Debt Redemption* – On October 15, 2004, the company redeemed all of its outstanding \$250 million 9.375 percent debentures due 2024. The redemption price was 104.363 percent of the principal amount plus accrued and unpaid interest through the redemption date. As a result of the redemption, the company recorded a \$13 million pre-tax charge in 2004.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

*Equity Security Units* – In November 2001, the company issued 6.9 million equity security units. Each equity security unit, issued at \$100 per unit, initially consisted of a contract to purchase shares of Northrop Grumman common stock on November 16, 2004, and a \$100 senior note due 2006. The senior notes due 2006 are reported as long-term debt. The senior notes initially bore interest at 5.25 percent per annum, and each equity security unit paid a contract adjustment payment of 2.0 percent per annum through November 16, 2004, for a combined yield on the equity security unit of 7.25 percent per annum through November 16, 2004.

On August 11, 2004, the company remarketed the senior notes as required by the original terms of the equity security units. As a result of this remarketing, the interest rate on the senior notes was reset to 4.079 percent per annum effective August 16, 2004. Proceeds from the remarketed notes were used to purchase U.S. Treasury securities that were pledged to secure the stock purchase obligations of the unit holders.

On November 16, 2004, the company received \$690 million and issued 13.2 million shares of common stock in settlement of the stock purchase contracts. The number of shares issued was calculated using a conversion ratio of 1.9171 shares per each equity security unit, which was determined in accordance with the original terms of the stock purchase contracts.

*Share Repurchases* – On August 20, 2003, the company's Board of Directors authorized share repurchase program of \$700 million of its outstanding common stock. This share repurchase program was completed on October 5, 2004 and resulted in the retirement of 14.4 million shares of common stock, with \$500 million of the repurchases occurring in 2004.

On October 26, 2004, the company's Board of Directors authorized a share repurchase program of up to \$1 billion of its outstanding common stock, which commenced in November 2004 and is expected to be completed over a twelve to eighteen-month period. As of December 31, 2004, the company had repurchased 5.5 million shares for approximately \$309 million, including commissions, under this share repurchase program. Share repurchases will take place at management's discretion and under pre-established non-discretionary programs from time to time, depending on market conditions, in the open market, and in privately negotiated transactions. The company retires its common stock upon repurchase.

2003 – Cash used in financing activities was \$4.7 billion in 2003. In March 2003, the company's wholly owned subsidiary, Northrop Grumman Space & Mission Systems Corp. (formerly TRW Inc.), commenced offers to purchase any or all of certain designated outstanding Northrop Grumman Space & Mission Systems Corp. debt securities in a debt reduction plan substantially completed in the second quarter of 2003. In the first phase, approximately \$2.4 billion in aggregate principal amount of outstanding debt securities was tendered and accepted for purchase, for a total purchase price of approximately \$2.9 billion (including accrued and unpaid interest on the securities). In the second phase, the company purchased on the open market \$658 million in aggregate principal amount for a total purchase price of \$795 million (including accrued and unpaid interest on the securities) of Northrop Grumman Space & Mission Systems Corp. debt securities. Cash proceeds from the sale of Auto were used to complete these transactions, which contributed to the reduction of long-term debt to \$5.9 billion at December 31, 2003, from the \$9.6 billion reported at December 31, 2002.

As of December 31, 2003, as part of the share repurchase program commenced in the third quarter of 2003, the company had repurchased over 4.4 million shares for approximately \$200 million.

The company redeemed all outstanding shares of TRW Automotive Inc. Series A Convertible Preferred Stock and Series B Preferred Stock for \$117 million in 2003.

2002 – Cash of \$623 million was used in financing activities in 2002. The use of cash in 2002 results from principal payments of long-term debt of \$500 million and dividends paid to shareholders of \$205 million.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

*Credit Facility* – At December 31, 2004, \$2.5 billion was available under a five-year revolving credit facility. Borrowings under the credit facility bear interest at various rates, including adjusted London Interbank Offered Rate (LIBOR), or an alternate base rate plus an incremental margin based on the company's credit rating. The credit facility also provides for a facility fee on the daily aggregate amount of commitments (whether or not utilized). The facility fee is also based on the company's credit rating level.

*Mandatorily Redeemable Series B Convertible Preferred Stock* – In connection with the Litton acquisition, the company issued 3.5 million shares of mandatorily redeemable Series B Convertible Preferred Stock in April 2001. Each share of Series B preferred stock has a liquidation value of \$100 per share. The liquidation value, plus accrued but unpaid dividends, is payable on April 4, 2021, the mandatory redemption date. The company has the option to redeem all, but not less than all, of the shares of Series B preferred stock at any time after seven years from the date of issuance for a number of shares of the company's common stock equal to the liquidation value plus accrued and unpaid dividends divided by the current market price of common stock determined in relation to the date of redemption. Each share of preferred stock is convertible, at any time, at the option of the holder into the right to receive shares of the company's common stock. Initially, each share is convertible into 1.82 shares of common stock, subject to adjustment. Holders of preferred stock are entitled to cumulative annual cash dividends of \$7 per share, payable quarterly. In any liquidation of the company, each share of preferred stock is entitled to a liquidation preference before any distribution may be made on the company's common stock or any series of capital stock that is junior to the Series B preferred stock. In the event of a fundamental change in control of the company, holders of Series B preferred stock also have specified exchange rights into common stock of the company or into specified securities or property of another entity participating in the change in control transaction.

***Other Sources and Uses of Capital***

*Additional Capital* – To provide for long-term liquidity, the company believes it can obtain additional capital from such sources as the public or private capital markets, the sale of assets, sale and leaseback of operating assets, and leasing rather than purchasing new assets. Cash on hand at the beginning of the year plus cash generated from operations and cash available under credit lines are expected to be sufficient in 2005 to service debt, finance capital expansion projects, pay federal income taxes, and continue paying dividends to shareholders. The company will continue to provide the productive capacity to perform its existing contracts, prepare for future contracts, and conduct research and development in the pursuit of developing opportunities. While these expenditures tend to limit short-term liquidity, they are made with the intention of improving the long-term growth and profitability of the company.

*Financial Arrangements* – In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued by insurance companies principally to guarantee the performance on certain contracts and to support the company's self-insured workers' compensation plans. At December 31, 2004, there were \$492 million of unused stand-by letters of credit, \$150 million of bank guarantees, and \$532 million of surety bonds outstanding.

*Other Agreements* – In July and August of 2003, Ship Systems executed agreements with the states of Mississippi and Louisiana, respectively, wherein Ship Systems will lease facility improvements and equipment from these states in exchange for certain commitments by Ship Systems. Under the Mississippi agreement, Ship Systems is required to match the state's funding with expenditures in the amount of \$121 million and create 667 new full time jobs in Mississippi by December 2007. Under the Louisiana agreement, Ship Systems is required to match the state's funding with expenditures in the amount of \$56 million by December 2007, and employ a minimum of 5,200 full-time employees in 16 of the 32 fiscal quarters beginning January 1, 2003, and ending December 31, 2010. Failure by Ship Systems to meet these commitments would result in reimbursement by Ship Systems to Mississippi and Louisiana in accordance with the respective agreements.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****OTHER MATTERS****New Accounting Pronouncements**

Several new accounting pronouncements were issued by the Financial Accounting Standards Board (FASB), which became effective during the periods presented. None of the new pronouncements effective during 2004 had a significant effect on the company's financial position or results of operations.

Other new pronouncements issued by the FASB and not effective until after December 31, 2004, are not expected to have a significant effect on the company's financial position or results of operations, with the exception of the following:

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123(R) – *Share-Based Payment*, which replaces SFAS No. 123 – *Accounting for Stock-Based Compensation*, and supersedes APB Opinion No. 25 – *Accounting for Stock Issued to Employees*. SFAS No. 123(R) requires compensation costs related to share-based payment transactions to be recognized in the financial statements. With limited exceptions, the amount of compensation cost is measured based on the grant-date fair value of the equity or liability instruments issued. SFAS No. 123(R) requires liability awards to be remeasured each reporting period and compensation costs to be recognized over the period that an employee provides service in exchange for the award. SFAS No. 123(R) is effective as of the beginning of the first interim or annual reporting period that begins after June 15, 2005. The company plans to adopt the provisions of SFAS No. 123(R) prospectively during the third quarter of 2005. Management's preliminary estimate of the effect of adoption of this statement is an expense of approximately \$40 million for 2005. Management is currently evaluating the effect, if any, that adoption of this statement may have on the design of the company's performance-based stock compensation arrangements.

For further discussion of new accounting standards, see Note 2 to the Consolidated Financial Statements in Part II, Item 8.

**Independence of Registered Public Accounting Firm**

The company's independent registered public accounting firm, Deloitte & Touche LLP (Deloitte), recently advised the Audit Committee of the company's Board of Directors that a Deloitte Touche Tohmatsu member firm in Germany had disbursement authority, through December 7, 2004, over an account related to payroll tax payments and payroll tax refund deposits for a small number of company employees located in Germany. While the services to which this account related were terminated by the company in September 2002, the account remained open through December 7, 2004, with minimal account balance and activity. Upon closure, the balance in the account was remitted to the company. Deloitte informed the company and the Audit Committee that Deloitte believes its independence and objectivity with respect to performance of its audit services for the company are not, and were not, impaired by the existence of this account or the administrative actions related to it.

The Audit Committee and Deloitte discussed Deloitte's independence with respect to the company in consideration of this matter, and the Audit Committee has concluded, taking into consideration, among other factors, the insignificant amounts involved in the account, the *de minimis* fees paid to the Deloitte Touche Tohmatsu member firm in Germany for its services, and the ministerial nature of the account, that this matter did not and does not impair Deloitte's independence with respect to the audit services provided to the company.

**Off-Balance Sheet Arrangements**

As of December 31, 2004, the company had no significant off-balance sheet arrangements with the exception of operating leases as discussed in Note 16 to the Consolidated Financial Statements in Part II, Item 8.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****FORWARD LOOKING STATEMENTS AND IMPORTANT RISK FACTORS**

Certain statements and assumptions throughout this report contain or are based on “forward-looking” information (that Northrop Grumman believes to be within the definition in the Private Securities Litigation Reform Act of 1995) and involve risks and uncertainties, and include, among others, statements in the future tense, and all statements accompanied by terms such as “believe,” “project,” “expect,” “estimate,” “assume,” “intend,” “anticipate,” and variations thereof and similar terms. This information reflects the company’s best estimates when made, but the company expressly disclaims any duty to update this information if new data becomes available or estimates change after the date of this report. These forward-looking statements should, therefore, be considered in light of various important factors that could cause actual results to differ materially from estimates or projections including, without limitation:

- The company depends on a limited number of customers. The company is heavily dependent on government contracts, many of which are only partially funded. The termination or failure to fund one or more significant contracts could have a material adverse effect on the company’s results of operations. The company is a supplier, either directly or as a subcontractor or team member, to the U.S. Government and its agencies as well as foreign governments and agencies. These contracts are subject to each customer’s political and budgetary constraints and processes, changes in short-range and long-range plans, the timing of contract awards, the congressional budget authorization and appropriation processes, the government’s ability to terminate contracts for convenience or for default, as well as other risks such as contractor suspension or debarment in the event of certain violations of legal and regulatory requirements.
- Many of the company’s contracts are fixed-price contracts. While firm, fixed-price contracts allow the company to benefit from cost savings, they also expose the company to the risk of cost overruns. If the company’s initial estimates used for calculating contract prices are incorrect, the company can incur losses on those contracts. In addition, some of the company’s contracts have provisions relating to cost controls and audit rights, and if the company fails to meet the terms specified in those contracts, then the company may not realize their full benefits. The company’s ability to manage costs on these contracts may have a material effect on its financial position and results of operations. In addition, in those instances where the company has entered into contracts for fixed-price development programs, the company’s successful performance of such programs is subject to its ability to control cost growth in meeting production specifications and delivery rates.
- The company is subject to significant competition. The company’s markets include defense and commercial areas where it competes with companies of substantial size and resources. The company’s success or failure in winning new contracts or follow-on orders for its existing or future products may cause material fluctuations in the company’s future revenues and results of operations.
- The company’s operations may be subject to events that cause adverse effects on its ability to meet contract obligations within anticipated cost and time constraints. The company may encounter internal problems and delays in delivery as a result of issues with respect to design, technology, licensing and patent rights, labor, learning curve assumptions, or materials and components that prevent the company from achieving contract requirements. The company may be affected by delivery or performance issues with key suppliers and subcontractors, as well as other factors inherent in the company’s businesses that may cause operating results to be adversely affected. Operating results are also dependent on successful negotiation of collective bargaining agreements. Changes in inventory requirements or other production cost increases may also have a material adverse effect on the company’s results of operations.
- If the company does not perform its plans as intended, or if the company encounters unforeseen problems, or problems subsequently develop, including loss on launch, premature failure, or unplanned degradation of performance in orbit of its satellite systems, the company’s results of operations could be adversely affected. Among the factors that may be involved would be unforeseen costs and expenses, and diversion of management focus in responding to unforeseen liabilities and in the case of certain contracts, repayment to the government

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

customer of progress payments and award fees upon loss at launch or premature failure or unplanned degradation of performance in orbit of its satellite systems.

- The company relies on continuous innovation. The company is dependent upon its ability to anticipate changing needs for defense products, military and civilian electronic systems and support, naval vessels, space technologies, and information technology. The company's success is dependent on designing new products that will respond to such requirements within customers' price limitations.
- The company faces significant challenges in the international marketplace. The company's international business is subject to changes in import and export policies, technology transfer restrictions, limitations imposed by United States law that are not applicable to foreign competitors, and other legal, financial, and governmental risks.
- The company assumes that any divestiture of non-core businesses and assets will be completed successfully. The company's performance may be affected by its inability to successfully dispose of assets and businesses that do not fit with, or are no longer appropriate to, the company's strategic plan.
- The company is subject to environmental matters and other litigation, which, if not resolved within the company's expectations, could have a material adverse effect on the company's financial position, results of operations, or cash flows.
- The company's pension (expense) income may fluctuate significantly based on changes in actuarial assumptions and future market performance, which could have a material effect on the its results of operations.
- The company's tax filings are regularly examined by federal and state taxing authorities. Results of these examinations can result in tax deficiencies, cumulative interest payments, fines, and penalties. Such assessments could negatively affect the company's financial position, results of operations, or cash flows.
- A decrease in expected reporting unit cash flows or changes in market conditions may indicate potential impairment of recorded goodwill.

The company intends that all forward-looking statements it makes will be subject to safe harbor protection of the federal securities laws as found in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934.

You should consider the limitations and risks associated in forward-looking statements and not rely on the accuracy of predictions contained in such forward-looking statements. These statements speak only as of the date when they are made. The company cannot undertake any obligation to update its forward-looking statements to reflect events, circumstances, changes in expectations, or the occurrence of unanticipated events after the date of those statements. Moreover, in the future, the company, through its senior management, may make forward-looking statements that involve the risks and other matters described in this document or other matters concerning the company.

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

*Interest Rates* – The company is exposed to market risk, primarily related to interest rates and foreign currency exchange rates. Financial instruments subject to interest rate risk include fixed-rate long-term debt obligations, variable-rate short-term debt outstanding under the credit agreement, short-term investments, and long-term notes receivable. At December 31, 2004, substantially all borrowings were fixed-rate long-term debt obligations of which a significant portion are not callable until maturity. The company's sensitivity to a 1 percent change in interest rates is tied to its \$2.5 billion credit agreement, which had no balance outstanding at December 31, 2004, or 2003. See Note 13 to the Consolidated Financial Statements in Part II, Item 8.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

*Derivatives* – The company does not hold or issue derivative financial instruments for trading purposes. The company may enter into interest rate swap agreements to manage its exposure to interest rate fluctuations. At December 31, 2004, two interest rate swap agreements were in effect. At December 31, 2003, there were no interest rate swap agreements in effect. See Note 18 to the Consolidated Financial Statements in Part II, Item 8.

*Foreign Currency* – The company enters into foreign currency forward contracts to manage foreign currency exchange rate risk related to receipts from customers and payments to suppliers denominated in foreign currencies. At December 31, 2004, and 2003, the amount of foreign currency forward contracts outstanding was not material. The company does not consider the market risk exposure relating to foreign currency exchange to be material.

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**NORTHROP GRUMMAN CORPORATION**

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

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON THE CONSOLIDATED FINANCIAL STATEMENTS**

To the Board of Directors and Shareholders of  
Northrop Grumman Corporation  
Los Angeles, California

We have audited the accompanying consolidated statements of financial position of Northrop Grumman Corporation and subsidiaries (the “Company”) as of December 31, 2004 and 2003, and the related consolidated statements of income, comprehensive income (loss), changes in shareholders’ equity, and cash flows for each of the three years in the period ended December 31, 2004. Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and financial statement schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on the financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit 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, such consolidated financial statements present fairly, in all material respects, the financial position of Northrop Grumman Corporation and subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for goodwill and other intangible assets effective January 1, 2002, to conform to Statement of Financial Accounting Standards No. 142—*Goodwill and Other Intangible Assets*.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of the Company’s internal control over financial reporting as of December 31, 2004, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 1, 2005 expressed an unqualified opinion on management’s assessment of the effectiveness of the Company’s internal control over financial reporting and an unqualified opinion on the effectiveness of the Company’s internal control over financial reporting.

Deloitte & Touche LLP  
Los Angeles, California  
March 1, 2005

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**NORTHROP GRUMMAN CORPORATION**  
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION**

<i>\$ in millions</i>	December 31,	
	2004	2003
<b>Assets:</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 1,230	\$ 294
Accounts receivable, net	3,546	3,226
Inventoried costs, net	1,061	1,167
Deferred income taxes	777	770
Prepaid expenses and other current assets	293	281
<b>Total current assets</b>	<b>6,907</b>	<b>5,738</b>
<b>Property, Plant, and Equipment</b>		
Land and land improvements	533	500
Buildings	1,791	1,660
Machinery and other equipment	3,807	3,426
Leasehold improvements	268	235
	<b>6,399</b>	<b>5,821</b>
Accumulated depreciation	<b>(2,189)</b>	<b>(1,774)</b>
<b>Property, plant, and equipment, net</b>	<b>4,210</b>	<b>4,047</b>
<b>Other Assets</b>		
Goodwill	17,182	17,333
Other purchased intangible assets, net of accumulated amortization of \$1,205 in 2004 and \$987 in 2003	1,477	1,710
Prepaid retiree benefits cost and intangible pension asset	2,938	2,988
Deferred income taxes	28	
Other assets	619	1,206
<b>Total other assets</b>	<b>22,244</b>	<b>23,237</b>
<b>Total assets</b>	<b>\$33,361</b>	<b>\$33,022</b>

Table of Contents**NORTHROP GRUMMAN CORPORATION**

	December 31,	
<i>\$ in millions</i>	<b>2004</b>	2003
<b>Liabilities and Shareholders' Equity:</b>		
<b>Current Liabilities</b>		
Notes payable to banks	\$ 9	\$ 19
Current portion of long-term debt	33	462
Trade accounts payable	1,750	1,514
Accrued employees' compensation	1,070	1,001
Advances on contracts	1,393	1,285
Contract loss provisions	270	364
Income taxes payable	454	356
Other current liabilities	1,244	1,360
Total current liabilities	<b>6,223</b>	6,361
Long-term debt	5,116	5,410
Mandatorily redeemable preferred stock	350	350
Accrued retiree benefits	3,736	3,811
Deferred income taxes	506	508
Other long-term liabilities	730	797
Total liabilities	<b>16,661</b>	17,237
<b>Shareholders' Equity</b>		
Common stock, \$1 par value; 800,000,000 shares authorized; issued and outstanding: 2004— 364,430,202; 2003—362,216,210	364	362
Paid-in capital	12,426	12,071
Retained earnings	4,014	3,431
Unearned compensation	(3)	(6)
Accumulated other comprehensive loss	(101)	(73)
Total shareholders' equity	<b>16,700</b>	15,785
<b>Total liabilities and shareholders' equity</b>	<b>\$33,361</b>	\$33,022

*The accompanying notes are an integral part of these consolidated financial statements.*

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**NORTHROP GRUMMAN CORPORATION**  
**CONSOLIDATED STATEMENTS OF INCOME**

	Year ended December 31		
	2004	2003	2002
<i>\$ in millions, except per share</i>			
Sales and Service Revenues			
Product sales	<b>\$20,106</b>	\$18,540	\$13,838
Service revenues	<b>9,747</b>	7,856	3,568
Total revenues	<b>29,853</b>	26,396	17,406
Cost of Sales and Service			
Cost of product sales	<b>16,417</b>	14,854	11,264
Cost of service revenues	<b>8,718</b>	7,681	3,262
General and administrative expenses	<b>2,712</b>	2,393	1,760
Operating margin	<b>2,006</b>	1,468	1,120
Other Income (Expense)			
Interest income	<b>58</b>	60	11
Interest expense	<b>(431)</b>	(497)	(422)
Other, net	<b>(18)</b>	24	26
Income from continuing operations before income taxes and cumulative effect of accounting change	<b>1,615</b>	1,055	735
Federal and foreign income taxes	<b>522</b>	297	280
Income from continuing operations before cumulative effect of accounting change	<b>1,093</b>	758	455
Income from discontinued operations, net of income taxes	<b>3</b>	64	36
(Loss) gain on disposal of discontinued operations, net of income taxes	<b>(12)</b>	44	5
Income before cumulative effect of accounting change	<b>1,084</b>	866	496
Cumulative effect of accounting change			(432)
Net income	<b>\$ 1,084</b>	\$ 866	\$ 64
Basic Earnings (Loss) Per Share			
Continuing operations	<b>\$ 3.04</b>	\$ 2.04	\$ 1.86
Discontinued operations	<b>.01</b>	.18	.16
Disposal of discontinued operations	<b>(.04)</b>	.12	.02
Before cumulative effect of accounting change	<b>3.01</b>	2.34	2.04
Cumulative effect of accounting change			(1.87)
Basic earnings per share	<b>\$ 3.01</b>	\$ 2.34	\$ .17
Weighted average common shares outstanding, in millions	<b>359.7</b>	365.3	231.1
Diluted Earnings (Loss) Per Share			
Continuing operations	<b>\$ 2.99</b>	\$ 2.03	1.83
Discontinued operations	<b>.01</b>	.17	.16
Disposal of discontinued operations	<b>(.03)</b>	.12	.02
Before cumulative effect of accounting change	<b>2.97</b>	2.32	2.01
Cumulative effect of accounting change			(1.84)
Diluted earnings per share	<b>\$ 2.97</b>	\$ 2.32	\$ .17
Weighted average diluted shares outstanding, in millions	<b>365.0</b>	368.4	234.9

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents**NORTHROP GRUMMAN CORPORATION****CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
Net income	<b>\$ 1,084</b>	\$ 866	\$ 64
Other Comprehensive Income (Loss)			
Change in cumulative translation adjustment	<b>11</b>	10	(1)
Unrealized gain on marketable securities, net of tax of \$15 in 2004	<b>26</b>	1	
Minimum pension liability adjustments, net of tax of \$44 in 2004, \$(681) in 2003, and \$705 in 2002	<b>(65)</b>	964	(994)
Other comprehensive (loss) income, net of tax	<b>(28)</b>	975	(995)
Comprehensive income (loss)	<b>\$ 1,056</b>	\$ 1,841	\$ (931)

*The accompanying notes are an integral part of these consolidated financial statements.*

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**NORTHROP GRUMMAN CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Operating Activities</b>			
Sources of cash—continuing operations			
Cash received from customers			
Progress payments	\$ 7,583	\$ 8,575	\$ 5,748
Other collections	22,110	17,932	11,869
Proceeds from litigation settlement			220
Income tax refunds received	121	178	74
Interest received	8	17	69
Other cash receipts	34	64	34
Total sources of cash—continuing operations	29,856	26,766	18,014
Uses of cash—continuing operations			
Cash paid to suppliers and employees	26,751	24,011	15,860
Interest paid	443	593	334
Income taxes paid	449	1,152	149
Payments for litigation settlements	86	206	
Other cash payments	181	35	17
Total uses of cash—continuing operations	27,910	25,997	16,360
Cash provided by continuing operations	1,946	769	1,654
Cash (used in) provided by discontinued operations	(10)	29	35
Net cash provided by operating activities	1,936	798	1,689
<b>Investing Activities</b>			
Proceeds from sale of businesses, net of cash divested	125	3,614	135
Collection of note receivable	494		
Payments for businesses purchased, net of cash acquired		(66)	144
Additions to property, plant, and equipment	(672)	(637)	(528)
Proceeds from sale of property, plant, and equipment	28	86	45
Proceeds from sale of investment	23		29
Other investing activities, net	11	(56)	30
Discontinued operations		(71)	(10)
Net cash provided by (used in) investing activities	9	2,870	(155)
<b>Financing Activities</b>			
Borrowings under lines of credit	101	758	514
Repayment of borrowings under lines of credit	(111)	(772)	(501)
Principal payments of long-term debt	(725)	(3,805)	(500)
Dividends paid	(322)	(305)	(205)
Common stock repurchases	(786)	(200)	
Proceeds from issuance of stock	834	33	76
Redemption of minority interest		(117)	
Discontinued operations		(341)	(7)
Net cash used in financing activities	(1,009)	(4,749)	(623)
Increase (decrease) in cash and cash equivalents	936	(1,081)	911
Cash and cash equivalents, beginning of year	294	1,375	464
Cash and cash equivalents, end of year	\$ 1,230	\$ 294	\$ 1,375

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<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Reconciliation of Income from Continuing Operations to Net Cash Provided by</b>			
<b>Operating Activities</b>			
Income from continuing operations before cumulative effect of accounting change	<b>\$ 1,093</b>	\$ 758	\$ 455
Adjustments to reconcile to net cash provided by operating activities			
Depreciation	<b>508</b>	455	347
Amortization of intangible assets	<b>226</b>	227	170
Stock based compensation	<b>154</b>	84	67
Loss on disposals of property, plant, and equipment	<b>14</b>	20	
Amortization of long-term debt premium	<b>(17)</b>	(47)	(2)
Decrease (increase) in			
Accounts receivable	<b>(5,674)</b>	(5,385)	(771)
Inventoried costs	<b>3</b>	(53)	(211)
Prepaid expenses and other current assets	<b>3</b>	5	38
Increase (decrease) in			
Progress payments	<b>5,400</b>	5,264	1,109
Accounts payable and accruals	<b>322</b>	(276)	78
Contract loss provisions	<b>(94)</b>	(24)	(135)
Deferred income taxes	<b>91</b>	1,022	(1,509)
Income taxes payable	<b>98</b>	(960)	1,049
Retiree benefits	<b>(192)</b>	(374)	941
Other non-cash transactions	<b>11</b>	53	28
Cash provided by continuing operations	<b>1,946</b>	769	1,654
Cash (used in) provided by discontinued operations	<b>(10)</b>	29	35
Net cash provided by operating activities	<b>\$ 1,936</b>	\$ 798	\$ 1,689
<b>Noncash Investing and Financing Activities:</b>			
Conversion of debt to equity			\$ 3
Settlement of note receivable in lieu of payment	<b>\$ 40</b>		
Sale of business			
Note receivable, net of discount		\$ 455	
Investment in unconsolidated affiliate		170	
Purchase of businesses			
Fair value of assets acquired		\$ 73	\$20,243
Cash paid, net of cash acquired		(66)	144
Noncash stock compensation			(151)
Common stock issued			(7,753)
Liabilities assumed		\$ 7	\$12,483

*The accompanying notes are an integral part of these consolidated financial statements.*

Table of Contents**NORTHROP GRUMMAN CORPORATION****CONSOLIDATED STATEMENTS OF CHANGES  
IN SHAREHOLDERS' EQUITY**

<i>\$ in millions, except per share</i>	Year ended December 31		
	2004	2003	2002
<b>Common Stock</b>			
At beginning of year	\$ 362	\$ 365	\$ 217
Stock issued in purchase of businesses			145
Stock issued upon execution of stock purchase contracts	13		
Common stock repurchased	(15)	(4)	
Employee stock awards and options	4	1	3
At end of year	364	362	365
<b>Paid-in Capital</b>			
At beginning of year	12,071	12,146	4,234
Stock issued in purchase of businesses			7,608
Stock issued upon execution of stock purchase contracts	677		
Common stock repurchased	(794)	(196)	
Stock split	179		
Employee stock awards and options	293	121	304
At end of year	12,426	12,071	12,146
<b>Retained Earnings</b>			
At beginning of year	3,431	2,870	3,011
Net income	1,084	866	64
Stock split	(179)		
Cash dividends	(322)	(305)	(205)
At end of year	4,014	3,431	2,870
<b>Unearned Compensation</b>			
At beginning of year	(6)	(11)	(18)
Amortization of unearned compensation	3	5	7
At end of year	(3)	(6)	(11)
<b>Accumulated Other Comprehensive Loss</b>			
At beginning of year	(73)	(1,048)	(53)
Change in cumulative translation adjustment	11	10	(1)
Change in unrealized gain on marketable securities, net of tax	26	1	
Change in additional minimum pension liability, net of tax	(65)	964	(994)
At end of year	(101)	(73)	(1,048)
Total shareholders' equity	\$16,700	\$15,785	\$14,322
Cash dividends per share	\$ .89	\$ .80	\$ .80

The accompanying notes are an integral part of these consolidated financial statements.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

*Principles of Consolidation* – The consolidated financial statements include the accounts of Northrop Grumman Corporation (Northrop Grumman or the company) and its subsidiaries. All material intercompany accounts, transactions, and profits are eliminated in consolidation.

*Accounting Estimates* – The company's financial statements are in conformity with accounting principles generally accepted in the United States of America. The preparation thereof requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingencies at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Estimates have been prepared on the basis of the most current and best available information and actual results could differ materially from those estimates.

*Nature of Operations* – Northrop Grumman provides technologically advanced, innovative products, services and solutions in defense and commercial electronics, nuclear and non-nuclear shipbuilding, information technology, mission systems, systems integration, and space technology. As prime contractor, principal subcontractor, partner, or preferred supplier, Northrop Grumman participates in many high-priority defense and commercial technology programs in the United States and abroad. The majority of the company's products and services are ultimately sold to the U. S. Government, and the company is therefore affected by, among other things, the federal budget process.

*Revenue Recognition* – As a defense contractor engaging in long-term contracts, the company extensively utilizes the cost-to-cost and the units-of-delivery measures of the percentage-of-completion method of accounting. Sales under cost-reimbursement contracts and construction-type contracts that provide for delivery at a low volume per year or a small number of units after a lengthy period of time over which a significant amount of costs have been incurred are accounted for using the cost-to-cost measure of the percentage-of-completion method of accounting. Under this method, sales, including estimated earned fees or profits, are recorded as costs are incurred. For most contracts, sales are calculated based on the percentage that total costs incurred bear to total estimated costs. For certain contracts with large up-front purchases of material, sales are calculated based on the percentage that direct labor costs incurred bear to total estimated direct labor costs. Sales under construction-type contracts that provide for delivery at a high volume per year are accounted for using the units-of-delivery measure of the percentage-of-completion method of accounting. Under this method, sales are recognized as deliveries are made and are computed on the basis of the estimated final average unit cost plus profit. Revenue relating to service contracts is recognized as the services are performed.

Certain contracts contain provisions for price redetermination or for cost and/or performance incentives. Such redetermined amounts or incentives are included in sales when the amounts can reasonably be determined. Amounts representing contract change orders, claims, or limitations in funding are included in sales only when they can be reliably estimated and realization is probable. In the period in which it is determined that a loss will result from the performance of a contract, the entire amount of the estimated ultimate loss is charged against income. Loss provisions are first offset against costs that are included in assets, with any remaining amount reflected in liabilities. Other changes in estimates of contract sales, costs, and profits are recognized using the cumulative catch-up method of accounting. This method recognizes in the current period the cumulative effect of the changes on current and prior periods. Hence, the effect of the changes on future periods of contract performance is recognized as if the revised estimates had been the original estimates. A significant change in an estimate on one or more programs could have a material effect on the company's financial position or results of operations.

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*Research and Development* – Company-sponsored research and development activities primarily include independent research and development (IR&D) efforts related to government programs. IR&D expenses are included in general and administrative costs and are allocated to U.S. Government contracts. Company-sponsored research and development expenses totaled \$504 million, \$429 million, and \$283 million in 2004, 2003, and 2002, respectively. Customer-sponsored research and development expenses are charged directly to the related contracts.

*Product Warranty Costs* – The company provides certain product warranties that require repair or replacement of non-conforming items for a specified period of time. Most of the company's product warranties are provided under government contracts, the costs of which are generally recoverable from the customer. Accrued product warranty costs of \$99 million and \$90 million were included in other current liabilities at December 31, 2004, and 2003, respectively.

*Environmental Costs* – Environmental liabilities are accrued when the company determines it is responsible for remediation costs and such amounts are reasonably estimable. When only a range of amounts is established and no amount within the range is more probable than another, the minimum amount in the range is recorded. Environmental liabilities are recorded on an undiscounted basis. At sites involving multiple parties, the company accrues environmental liabilities based upon its expected share of liability, taking into account the financial viability of other jointly liable parties. Environmental expenditures are expensed or capitalized as appropriate. Capitalized expenditures relate to long-lived improvements in currently operating facilities. The company does not anticipate and record insurance recoveries before collection is probable. At December 31, 2004, and 2003, the company did not accrue any assets related to insurance reimbursements or recoveries.

*Foreign Currency Forward Contracts* – The company enters into foreign currency forward contracts to manage foreign currency exchange risk related to receipts from customers and payments to suppliers denominated in foreign currencies. Gains and losses from such transactions are included as contract costs. At December 31, 2004 and 2003, the amount of foreign currency forward contracts outstanding was not material.

*Interest Rate Swap Agreements* – The company may enter into interest rate swap agreements to offset the variable-rate characteristic of certain variable-rate term loans which may be outstanding from time to time under the company's credit facility (see Note 13). The company may also enter into interest rate swap agreements to benefit from floating interest rates as an offset to the fixed-rate characteristic of certain of its long-term debt. Two interest rate swap agreements were entered into during 2004 and are in effect as of December 31, 2004 (see Note 18). No interest rate swap agreements were in effect at December 31, 2003.

*Income Taxes* – Provisions for federal, foreign, state, and local income taxes are calculated on reported financial statement pre-tax income based on current tax law and also include the cumulative effect of any changes in tax rates from those used previously in determining deferred tax assets and liabilities. Such provisions differ from the amounts currently payable because certain items of income and expense are recognized in different time periods for financial reporting purposes than for income tax purposes. State and local income and franchise tax provisions are included in administrative and general expenses.

*Cash and Cash Equivalents* – Cash and cash equivalents include interest-earning debt instruments that mature in three months or less from the date purchased.

*Marketable Securities* – The company accounts for marketable securities in accordance with Statement of Financial Accounting Standards (SFAS) No. 115 – *Accounting for Certain Investments in Debt and Equity Securities*, which requires the determination of the appropriate classification for all marketable securities as either held-to-maturity, available-for-sale, or trading at the time of purchase. The company evaluates the appropriate classification of its marketable securities at each balance sheet date. At December 31, 2004, and 2003, all of the company's

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**NORTHROP GRUMMAN CORPORATION**

investments in marketable securities were classified as available-for-sale or trading. For available-for-sale securities, any unrealized gains and losses are reported as a separate component of shareholders' equity. Unrealized gains and losses on trading securities are included in income in the period in which they occur. The fair values of these marketable securities are determined based on prevailing market prices.

*Accounts Receivable* – Accounts receivable include amounts billed and currently due from customers, amounts currently due but unbilled (primarily related to contracts accounted for under the cost-to-cost measure of the percentage-of-completion method of accounting), certain estimated contract changes, claims in negotiation that are probable of recovery, and amounts retained by the customer pending contract completion.

*Inventoried Costs* – Inventoried costs primarily relate to work in process under fixed-price contracts (excluding those included in unbilled accounts receivable as previously described). They represent accumulated contract costs less the portion of such costs allocated to delivered items. Accumulated contract costs include direct production costs, factory and engineering overhead, production tooling costs, and, for government contracts, allowable general and administrative expenses. The ratio of inventoried general and administrative expenses to total inventoried costs is estimated to be the same as the ratio of total administrative and general expenses incurred to total contract costs incurred. According to the provisions of U. S. Government contracts, the customer asserts title to, or a security interest in, substantially all inventories related to such contracts as a result of advances, performance-based payments, and progress payments. General corporate expenses and IR&D allocable to commercial contracts are expensed as incurred. Inventoried costs are classified as a current asset and include amounts related to contracts having production cycles longer than one year. Product inventory primarily consists of raw materials and is stated at the lower of cost or market, generally using the average cost method.

*Depreciable Properties* – Property, plant, and equipment owned by the company are depreciated over the estimated useful lives of individual assets. Costs incurred for computer software developed or obtained for internal use are capitalized and classified in machinery and other equipment. Capitalized software costs are amortized over no more than three years. Most of these assets are depreciated using declining-balance methods, with the remainder using the straight-line method, with the following lives:

	Years
Land improvements	2-40
Buildings	2-45
Machinery and other equipment	2-25
Leasehold improvements	Length of lease

*Goodwill and Other Purchased Intangible Assets* –The company applies SFAS No. 142 – *Goodwill and Other Intangible Assets* in accounting for goodwill and purchased intangible assets. In accordance with SFAS No. 142, impairment tests are performed at least annually for goodwill, and more often as circumstances require. When it is determined that an impairment has occurred, an appropriate charge to operations is recorded. Goodwill and other purchased intangible assets balances are included in the identifiable assets of the business segment to which they have been assigned. Any goodwill impairment, as well as the amortization of other purchased intangible assets, is charged against the respective business segment operating margin. Purchased intangible assets are amortized on a straight-line basis over their estimated useful lives.

*Self-Insurance Accruals* – Included in other long-term liabilities is approximately \$410 million and \$398 million related to self-insured workers' compensation as of December 31, 2004, and 2003, respectively. The company estimates the required liability of such claims on a discounted basis utilizing actuarial methods based on various assumptions, which include, but are not limited to, the company's historical loss experience and projected loss development factors.

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*Retirement Benefits* – The company sponsors various pension plans covering substantially all employees. The company also provides postretirement benefit plans other than pensions, consisting principally of health care and life insurance benefits, to eligible retirees and qualifying dependents. The liabilities and annual income or expense of the company's pension and other postretirement benefit plans are determined using methodologies that involve several actuarial assumptions, the most significant of which are the discount rate, the long-term rate of asset return (based on the market related value of assets), and medical trend (rate of growth for medical costs). Not all net periodic pension income or expense is recognized in net earnings in the year incurred because it is allocated to production as product costs, and a portion remains in inventory at the end of a reporting period. The company's funding policy for pension plans is to contribute, at a minimum, the statutorily required amount to an irrevocable trust.

*Litigation and Contingencies* – In accordance with SFAS No. 5 – *Accounting for Contingencies*, amounts associated with litigation and contingencies are recorded as charges to earnings when management, after taking into consideration the facts and circumstances of each matter, including any settlement offers, has determined that it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

*Foreign Currency Translation* – For operations outside the U. S. that prepare financial statements in currencies other than the U.S. dollar, results of operations and cash flows are translated at average exchange rates during the period, and assets and liabilities are generally translated at end-of-period exchange rates. Translation adjustments are included as a separate component of accumulated other comprehensive income (loss) in shareholders' equity.

*Stock Based Compensation* – The company utilizes the intrinsic value method in accordance with Accounting Principles Board (APB) Opinion No. 25 – *Accounting for Stock Issued to Employees* and related interpretations in accounting for awards made under stock compensation plans. When stock options are exercised, the cash proceeds received by the company are recorded as an increase to paid-in capital. No compensation expense is recognized in connection with the stock options. Compensation expense for restricted performance stock rights and restricted stock rights is estimated and accrued over the vesting period.

Had compensation expense been determined based on the fair value at the grant dates for stock option awards, consistent with the method of SFAS No. 123 – *Accounting for Stock Based Compensation*, net income, basic earnings per share, and diluted earnings per share would have been as shown in the table below. These amounts were determined using weighted-average per share fair values for market options granted in 2004, 2003, and 2002 of \$18, \$16, and \$19, respectively. The fair value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model based on an expected life of six years and for 2004, 2003, and 2002, respectively, the following additional assumptions – dividend yield: 1.5 percent, 1.7 percent, and 1.4 percent; expected volatility: 34 percent, 35 percent, and 35 percent; and risk-free interest rate: 4.1 percent, 3.6 percent, and 3.5 percent.

<i>\$ in millions, except per share</i>	Year ended December 31		
	2004	2003	2002
<b>Net Income as Reported</b>	<b>\$ 1,084</b>	\$ 866	\$ 64
Stock based compensation, net of tax, included in net income as reported	115	64	45
Stock based compensation, net of tax, that would have been included in net income, if the fair value method had been applied to all awards	(140)	(82)	(65)
<b>Pro-Forma Net Income Using the Fair Value Method</b>	<b>\$ 1,059</b>	\$ 848	\$ 44
<b>Basic Earnings Per Share</b>			
As reported	\$ 3.01	\$ 2.34	\$ .17
Pro-forma	\$ 2.94	\$ 2.29	\$ .08
<b>Diluted Earnings Per Share</b>			
As reported	\$ 2.97	\$ 2.32	\$ .17
Pro-forma	\$ 2.90	\$ 2.27	\$ .08

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*Financial Statement Reclassification* – Certain amounts in the prior year financial statements and related notes have been reclassified to conform to the 2004 presentation. Effective January 1, 2004, the company realigned businesses among its Mission Systems, Information Technology, and Integrated Systems segments. Where applicable, all prior period segment information has been reclassified to reflect this realignment. During the third quarter of 2004, the company suspended its efforts to sell the remaining Component Technologies (CT) businesses. Accordingly, the assets, liabilities, and results of operations of the remaining businesses have been reclassified from discontinued operations to continuing operations for all periods presented (see Note 5). These businesses are reported under the segment entitled “Other.”

**2. NEW ACCOUNTING STANDARDS**

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123(R) – *Share-Based Payment*, which replaces SFAS No. 123 – *Accounting for Stock-Based Compensation*, and supersedes APB Opinion No. 25 – *Accounting for Stock Issued to Employees*. SFAS No. 123(R) requires compensation costs related to share-based payment transactions to be recognized in the financial statements. With limited exceptions, the amount of compensation cost is measured based on the grant-date fair value of the equity or liability instruments issued. SFAS No. 123(R) requires liability awards to be remeasured each reporting period and compensation costs to be recognized over the period that an employee provides service in exchange for the award. SFAS No. 123(R) is effective as of the beginning of the first interim or annual reporting period that begins after June 15, 2005. The company plans to adopt the provisions of SFAS No. 123(R) prospectively during the third quarter of 2005, and is currently evaluating the effect that adoption of this statement will have on its financial position and results of operations.

In December 2004, FASB issued SFAS No. 153 – *Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29*, to replace the exception from fair value measurement for nonmonetary exchanges of similar productive assets in APB Opinion No. 29 – *Accounting for Nonmonetary Transactions*. SFAS No. 153 replaces this exception with a general exception from fair value measurement for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. SFAS No. 153 is effective for nonmonetary exchanges occurring in fiscal periods beginning after June 15, 2005. Management is currently evaluating the effect that adoption of this statement will have on the company’s financial position and results of operations.

In December 2004, FASB issued SFAS No. 151 – *Inventory Costs, an amendment of ARB No. 43, Chapter 4*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). SFAS No. 151 requires that those items be recognized as current -period charges regardless of whether they meet the criterion of “so abnormal.” In addition, this statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. SFAS No. 151 is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. Management is currently evaluating the effect that adoption of this statement will have on the company’s financial position and results of operations.

In November 2004, the Emerging Issues Task Force (EITF) reached consensus on EITF Issue No. 03-13 – *Applying the Conditions of Paragraph 42 of FASB Statement No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, in Determining Whether to Report Discontinued Operations*. Issue No. 03-13 provides that classification of a disposed component as a discontinued operation is appropriate only if the ongoing entity has no continuing direct cash flows, and does not retain an interest, contract, or other arrangement sufficient to enable it to exert significant influence over the disposed component’s operating and financial policies after the disposal transaction. This issue is effective to components that are disposed of or classified as held for sale in periods beginning after December 15, 2004. Adoption of EITF 03-13 did not have a significant effect on the company’s financial position or results of operations.

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In December 2004, the FASB issued FASB Staff Position (FSP) FAS 109-1 – *Application of FASB Statement No. 109, Accounting for Income Taxes, to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004* (2004 Act). This FSP provides guidance on the application of SFAS No. 109 to the provisions of the tax deduction on qualified production activities contained within the 2004 Act. FSP 109-1 states that the manufacturers' deduction should be accounted for as a special deduction in accordance with SFAS No. 109 and not as a tax rate reduction. The company adopted the provisions of FSP 109-1 during the fourth quarter of 2004. Adoption of FSP 109-1 did not have a significant effect on the company's financial position or results of operations.

In December 2004, the FASB issued FSP FAS 109-2 – *Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004*, which provides guidance for the repatriation provisions included in the 2004 Act. The 2004 Act introduced a special limited-time dividends received deduction on the repatriation of certain foreign earnings to a U.S. taxpayer. As a result, FSP 109-2 provides an exception to the SFAS No. 109 requirement to reflect the effect of a new tax law in the period of enactment. Accordingly, an entity is allowed additional time beyond the financial reporting period of enactment to evaluate the effect of the 2004 Act on its plan for repatriation of foreign earnings. The company adopted the provisions of FSP 109-2 during the fourth quarter of 2004. Adoption of FSP 109-2 did not have a significant effect on the company's financial position or results of operations.

On May 19, 2004, the FASB issued FSP FAS 106-2 – *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003*, which supersedes FSP 106-1. This FSP provides guidance on the accounting for the effects of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the Act) for employers that sponsor postretirement health care plans that provide prescription drug benefits. It also requires certain disclosures regarding the effect of the federal subsidy provided by the Act. The company adopted the provisions of FSP 106-2 during the third quarter of 2004 (see Notes 15 and 19).

**3. STOCK SPLIT AND COMMON STOCK DIVIDEND**

*Stock Split* – On May 11, 2004, the company's Board of Directors approved a two-for-one stock split of the company's common stock. The stock split was payable in the form of a stock dividend and entitled each shareholder of record at the close of business on May 28, 2004, to receive one share of common stock for every outstanding share of common stock held on that date. The stock dividend was distributed on June 21, 2004. As required by Delaware statute, the company transferred the par value of \$1 per share from retained earnings to paid-in capital for each share outstanding on May 28, 2004. The capital accounts, share data, and earnings per share data in these Consolidated Financial Statements give effect to the stock split, applied retroactively, to all periods presented.

*Common Stock Dividend* – On May 11, 2004, the company's Board of Directors approved a 15 percent increase to the company's quarterly common stock dividend. On a post-split basis, the quarterly cash dividend was increased from \$.20 per share to \$.23 per share.

**4. BUSINESSES ACQUIRED**

In December 2002, the company purchased 100 percent of the common stock of TRW, Inc. (TRW) valued at approximately \$12.5 billion, including the assumption of TRW's debt of \$4.8 billion. The purchase of TRW consisted of two defense related businesses and an automotive business (Auto). The company issued approximately 139 million shares of its common stock with cash paid in lieu of any fractional share of the company's stock, which otherwise would be issued to the TRW shareholders. The acquisition of TRW was accounted for using the purchase method of accounting. Under the purchase method of accounting, the purchase price is allocated to the

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underlying tangible and intangible assets acquired and liabilities assumed based on their respective fair market values, with the excess recorded as goodwill. As of December 31, 2003, the company completed the fair market value and accounting conformance evaluation process for TRW and recorded an aggregate increase to goodwill of \$1.6 billion.

**5. BUSINESSES SOLD AND DISCONTINUED OPERATIONS**

The company's Consolidated Financial Statements and related footnote disclosures reflect Auto and the sold CT businesses as discontinued operations, net of applicable income taxes, for all periods presented in accordance with SFAS No. 144 – *Accounting for the Impairment or Disposal of Long-Lived Assets*. Accordingly, "Income from discontinued operations, net of tax" in the accompanying Consolidated Statements of Income includes the January and February 2003 results of Auto, the sale of which was completed on February 28, 2003, and the results of the company's divested CT businesses.

*Component Technologies* – The businesses comprising the CT reporting segment were classified as discontinued operations beginning in the third quarter of 2002, and subsequently the company sold all but three of the CT businesses. The remaining businesses consist of a manufacturer of complex printed circuit boards, an electronic connector manufacturer, and a European-based marketing group. During the third quarter of 2004, the company suspended its efforts to sell these businesses. Accordingly, the assets, liabilities, and results of operations of these businesses have been reclassified from discontinued operations to continuing operations for all periods presented. These businesses are reported under the segment entitled "Other." As a result of the reclassification, net sales for the years ended December 31, 2003, and 2002 increased by \$191 million and \$200 million respectively. Income from continuing operations for the years ended December 31, 2003, and 2002 were reduced by \$50 million, and \$242 million, respectively, and previously reported diluted earnings per share from continuing operations for the same periods were reduced to \$2.03 and \$1.83 from \$2.16 and \$2.86, respectively.

*TRW Auto Sale* – Proceeds received from the sale of Auto to The Blackstone Group included \$3.3 billion in cash, a \$600 million face value payment-in-kind note, initially valued at \$455 million, debt assumption of approximately \$200 million, and a 19.6 percent investment in the new enterprise, initially valued at \$170 million. As a result of Auto's initial public offering in February 2004, the company's ownership percentage in Auto has been reduced to 17.2 percent. The cash received from the sale of Auto was adjusted from the sale agreement amount by cash sold with the business, preliminary purchase price adjustments, and an asset retained.

*Auto Settlement Agreement* – On October 10, 2004, the company reached an agreement with TRW Automotive Holdings Corp. to sell the payment-in-kind note, which bore interest at an effective yield of 11.7 percent per annum and was to mature in 2018, and to settle certain other contractual issues arising from the Auto sale. At the date of the agreement, the note, including accrued interest, was valued at \$543 million. The company also resolved an indemnification of other post-retirement employee benefits pursuant to the Auto sale agreement, and agreed to pay The Blackstone Group \$52.5 million. As a result of the agreement, the company recorded a \$9 million after-tax charge to continuing operations relating to the sale of the note, and a \$6 million after-tax charge to discontinued operations related to the settlement of the indemnification and other contractual issues. In November 2004, the company received \$493.5 million for the sale of the note, which was net of \$40.5 million for settlement of the contractual issues, and paid \$52.5 million for settlement of the indemnification.

*Auto Investment* – In January 2004, restrictions on the equity investment in Auto were amended to provide the company more flexibility in the disposition of its shares. Under the amended agreement, approximately 4 million shares become available for sale through December 31, 2005. Accordingly, these shares have been reported as available-for-sale securities totaling \$83 million as of December 31, 2004. The amount recorded reflects the corresponding publicly traded stock price of Auto and is included in "Prepaid expenses and other current assets" in

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### **NORTHROP GRUMMAN CORPORATION**

the accompanying Consolidated Statements of Financial Position. The remaining equity investment of \$130 million and \$170 million as of December 31, 2004, and December 31, 2003, respectively, is carried at cost and is included in "Other assets" in the accompanying Consolidated Statements of Financial Position.

*Goodrich* – The company assumed through its acquisition of TRW certain post-closing liabilities retained by TRW in connection with TRW's October 2002 sale of its Aeronautical Systems business to Goodrich Corporation (Goodrich). On December 27, 2004, the company and Goodrich agreed to a settlement to resolve certain post-closing liabilities that related to warranty, customer claims, and certain other matters in exchange for a payment to Goodrich of \$99 million. This settlement resulted in a 2004 after-tax charge to discontinued operations of \$15 million. The settlement excludes amounts associated with claims that Goodrich may assert against the company relating to the Airbus A380 actuation systems development program and certain other liabilities retained by TRW under the original acquisition agreement.

*Northrop Grumman Canada* – On December 30, 2004, the company completed the sale of its Canadian navigation systems and space sensors systems businesses for \$65 million in cash, and recorded a \$9 million after-tax gain in discontinued operations. The the assets and liabilities as well as results of operations of the Canadian navigation systems and space sensors systems businesses were not material to any of the periods presented and have therefore not been reclassified as discontinued operations.

Sales and operating results of the discontinued businesses were as follows:

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
Sales	\$ 15	\$ 2,290	\$ 431
Income from discontinued operations	\$ 3	\$ 104	\$ 55
Income tax expense		(40)	(19)
Income from discontinued operations, net of tax	\$ 3	\$ 64	\$ 36
(Loss) gain on disposal of discontinued operations	\$ (12)	\$ 97	\$ 29
Income tax expense		(53)	(24)
(Loss) gain on disposal of discontinued operations, net of tax	\$ (12)	\$ 44	\$ 5

Tax rates on discontinued operations vary from the company's effective tax rate due to the non-deductibility of goodwill for tax purposes.

At December 31, 2003, the major classes of assets for these discontinued businesses included current assets of \$32 million, net property, plant, and equipment of \$23 million, and other assets of \$11 million, and the major classes of liabilities were accounts payable and other current liabilities of \$41 million and other long-term liabilities of \$4 million.

## **6. SEGMENT INFORMATION**

### **Organization, Products, and Services**

The company operates in seven business segments organized based on differences in their respective products and services: Electronic Systems, Newport News, Ship Systems, Information Technology, Mission Systems, Integrated Systems, and Space Technology. For financial reporting purposes, the Electronic Systems, Information Technology, Mission Systems, Integrated Systems, and Space Technology sectors are each reportable segments. In accordance with the provisions of SFAS No. 131 – *Disclosures about Segments of an Enterprise and Related Information*, Newport News and Ship Systems results are aggregated and reported as the Ships segment.

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*Electronic Systems* – Electronic Systems is a leading designer, developer, and manufacturer of a wide variety of advanced defense electronics and systems. Electronic Systems provides airborne radar systems, secondary surveillance systems, inertial navigation systems and sensors, electronic warfare systems, precision weapons, air traffic control systems, air defense systems, communications systems, space systems, marine systems, oceanic and naval systems, integrated avionics systems, and automation and information systems. Key products include fire control radars for the F-16, F/A-22, and F-35 fighter aircraft, as well as for the Longbow Apache helicopter. Other principal products include the Airborne Warning and Control System (AWACS) radar, the 737 airborne early warning and control system, the Joint Surveillance Target Attack Radar System (Joint STARS) air-to-ground surveillance radar sensor, the Longbow Hellfire missile, tactical military radars, countrywide air defense systems, airborne electronic countermeasures systems, sophisticated undersea warfare systems, and naval propulsion and power generation systems.

*Newport News* – Newport News' primary business is the design, construction, repair, maintenance, overhaul, life-cycle support, and refueling of nuclear-powered aircraft carriers and the design, life-cycle support, and construction of nuclear-powered submarines for the U.S. Navy. Newport News is the nation's sole designer, builder, and refueler of nuclear-powered aircraft carriers and one of only two companies capable of designing and building nuclear-powered submarines. Major programs are the CVN 21 (next generation aircraft carrier), the Nimitz-class nuclear powered aircraft carriers, and the Virginia-class submarine program. The sector also provides after-market services for a wide array of naval and commercial vessels.

*Ship Systems* – Ship Systems is one of the nation's leading full service systems providers for the design, engineering, construction, and life cycle support of major surface ships for the U.S. Navy, U.S. Coast Guard, international navies, and for commercial vessels of all types. Major programs for the U.S. Navy include the WASP LHD 1 Class and San Antonio LPD 17 Class amphibious assault ships, the Arleigh Burke DDG 51, and next generation DD(X) destroyers. Ship Systems is also a partner in the Coast Guard's Deepwater modernization program. Major programs for the U.S. Coast Guard include the Maritime Security Cutter – Large (WMSL), the Maritime Security Cutter – Medium (WMSM) and the Maritime Coastal Patrol Cutter (WPC). Ship Systems also produces double-hulled crude oil tankers.

*Information Technology* – Information Technology is a premier provider of advanced information technology (IT) solutions, engineering, and business services for government and commercial customers. The segment consists of four lines of business: Government Information Technology, Enterprise Information Technology, Commercial Information Technology, and Technology Services. Government Information Technology covers a wide range of large-scale systems integration, solutions, and services programs. This work is performed for government customers at the DoD, federal, state, and local levels, and covers C4ISR, training and simulation, science and technology, and information systems markets. Enterprise Information Technology focuses on the delivery and integration of commercially available computers, networks, hardware, software, and peripherals to government and commercial customers. Commercial Information Technology provides complete IT outsourcing services directed at the commercial marketplace and also provides public safety and information services to state and local governments. Technology Services includes base and range support, training and simulation, and information systems. In addition, the segment provides IT services internally to all Northrop Grumman sectors.

*Mission Systems* – Mission Systems is a leading global system integrator of complex, mission-enabling systems for government, military, and business clients. The organization's technology leadership spans three business areas: Command, Control & Intelligence Systems, Missile Systems, and Technical and Management Services. Products and services are focused on the fields of Command, Control, Communications, Computers and Intelligence (C4I), strategic missiles, missile and air defense, airborne reconnaissance, intelligence management and processing, electro-magnetic and infrared analysis, communications, and decision support systems.

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*Integrated Systems* – Integrated Systems is a leader in the design, development, and production of airborne early warning, electronic warfare and surveillance, and battlefield management systems. Integrated Systems includes the Air Combat Systems, Airborne Early Warning and Electronic Warfare Systems, and Airborne Ground Surveillance and Battle Management Systems business areas. Integrated Systems is the prime contractor for the Joint STARS advanced airborne targeting and battle management system, Global Hawk, and B-2 Spirit stealth bomber. The segment has principal roles in the F/A-18 Hornet strike fighter and F-35 joint strike fighter programs. Integrated Systems is upgrading the EA-6B Prowler electronic countermeasures aircraft and produces the E-2C Hawkeye early warning aircraft.

*Space Technology* – Space Technology develops and integrates a broad range of systems at the leading edge of space, defense, and electronics technology. The segment supplies products primarily to the U.S. Government that play an important role in maintaining the nation's security and leadership in science and technology. Space Technology's business areas focus on the design, development, manufacture, and integration of spacecraft systems and subsystems, electronic and communications payloads, advanced avionics systems, and high energy laser systems and subsystems.

*Other* – The segment entitled "Other" includes the assets, liabilities, and results of operations of the three remaining CT businesses. These businesses consist of a manufacturer of complex printed circuit boards, an electronic connector manufacturer, and a European-based marketing group. Effective January 1, 2005, two of these operations were integrated into, and reported under, the Electronic Systems segment. The European-based marketing group will continue to be reported under "Other." The effect of this realignment on the Electronic Systems segment's sales and operating margin is not significant.

**Summary Segment Financial Information**

In the following table of segment and major customer data, revenue from the U.S. Government includes revenue from contracts for which Northrop Grumman is the prime contractor as well as those for which the company is a subcontractor and the ultimate customer is the U.S. Government. The company's discontinued operations are excluded from all of the data elements in this table, except for assets by segment. The 2002 consolidated statement of income does not include TRW's post-acquisition results as they were not material.

*Adjustments to Reconcile to Total Operating Margin* – Pension expense is included in the segments' cost of sales to the extent that these costs are currently recognized under government Cost Accounting Standards (CAS). In order to reconcile from segment operating margin to total company operating margin, these amounts are reported under the caption "Reversal of CAS pension expense included above." Total pension income or expense accounted for under accounting principles generally accepted in the United States of America is reported separately as a reconciling item under the caption "Pension (expense) income." The reconciling item captioned "Unallocated expenses" includes the portion of corporate, legal, environmental, state income tax, other retiree benefits expenses, and other expenses not considered allowable under CAS and not allocated to the segments.

*Foreign Sales* – Foreign sales amounted to approximately \$1.6 billion, \$1.8 billion, and \$1.4 billion during 2004, 2003, and 2002, respectively.

Table of Contents**NORTHROP GRUMMAN CORPORATION****Results of Operations By Segment and Major Customer**

	Year ended December 31		
	2004	2003	2002
<i>\$ in millions</i>			
<b>Sales and Service Revenues</b>			
<b>Electronic Systems</b>			
United States Government	\$ 3,761	\$ 3,481	\$ 2,959
Other customers	2,190	2,199	2,114
Intersegment sales	466	359	253
	<b>6,417</b>	<b>6,039</b>	<b>5,326</b>
<b>Ships</b>			
United States Government	6,108	5,276	4,445
Other customers	142	174	251
Intersegment sales	2	1	1
	<b>6,252</b>	<b>5,451</b>	<b>4,697</b>
<b>Information Technology</b>			
United States Government	4,102	3,824	2,971
Other customers	778	741	464
Intersegment sales	171	86	41
	<b>5,051</b>	<b>4,651</b>	<b>3,476</b>
<b>Mission Systems</b>			
United States Government	4,359	3,785	736
Other customers	283	132	9
Intersegment sales	305	255	19
	<b>4,947</b>	<b>4,172</b>	<b>764</b>
<b>Integrated Systems</b>			
United States Government	4,486	3,638	3,096
Other customers	204	181	161
Intersegment sales	52	28	16
	<b>4,742</b>	<b>3,847</b>	<b>3,273</b>
<b>Space Technology</b>			
United States Government	3,148	2,718	
Other customers	63	57	
Intersegment sales	58	48	
	<b>3,269</b>	<b>2,823</b>	
<b>Other</b>			
United States Government	2		
Other customers	227	190	200
Intersegment sales	1	1	
	<b>230</b>	<b>191</b>	<b>200</b>
Intersegment eliminations	(1,055)	(778)	(330)
Total revenue	<b>\$29,853</b>	<b>\$26,396</b>	<b>\$17,406</b>
<b>Operating Margin</b>			
Electronic Systems	\$ 670	\$ 590	\$ 434
Ships	389	295	306
Information Technology	301	269	191
Mission Systems	321	266	59
Integrated Systems	412	384	331
Space Technology	222	193	
Other	(3)	(74)	(271)
Total segment operating margin	<b>2,312</b>	<b>1,923</b>	<b>1,050</b>
Adjustments to Reconcile to Total Operating Margin			
Unallocated expenses	(282)	(137)	(105)
Pension (expense) income	(350)	(568)	90
Reversal of CAS pension expense included above	338	265	100
Reversal of royalty income included above	(12)	(15)	(15)
Total operating margin	<b>\$ 2,006</b>	<b>\$ 1,468</b>	<b>\$ 1,120</b>

Table of Contents**NORTHROP GRUMMAN CORPORATION**

<i>\$ in millions</i>	December 31,	
	2004	2003
<b>Assets</b>		
Electronic Systems	\$ 5,761	\$ 5,660
Ships	6,521	6,482
Information Technology	3,467	3,386
Mission Systems	5,121	5,188
Integrated Systems	2,201	2,210
Space Technology	4,625	4,717
Other	82	173
Segment assets	27,778	27,816
General corporate	5,583	5,206
Total assets	\$33,361	\$33,022

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Capital Expenditures</b>			
Electronic Systems	\$ 146	\$ 173	\$ 263
Ships	220	136	76
Information Technology	29	30	45
Mission Systems	25	28	
Integrated Systems	111	158	134
Space Technology	123	105	
Other	3	2	7
General corporate	15	5	3
Total capital expenditures	\$ 672	\$ 637	\$ 528

<b>Depreciation and Amortization</b>			
Electronic Systems	\$ 245	\$ 229	\$ 226
Ships	148	142	147
Information Technology	51	47	44
Mission Systems	56	60	
Integrated Systems	94	86	78
Space Technology	132	115	
Other	2		21
General corporate	6	3	1
Total depreciation and amortization	\$ 734	\$ 682	\$ 517

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****7. EARNINGS PER SHARE**

*Basic Earnings Per Share* – Basic earnings per share from continuing operations before cumulative effect of accounting change are calculated by dividing income available to common shareholders from continuing operations before cumulative effect of accounting change by the weighted-average number of shares of common stock outstanding during each period.

*Diluted Earnings Per Share* – Diluted earnings per share reflect the dilutive effect of stock options and other stock awards granted to employees under stock-based compensation plans and the dilutive effect of the equity security units, as applicable. Shares issuable pursuant to the 3.5 million mandatorily redeemable preferred stock are not included in the diluted earnings per share calculations because their effect is anti-dilutive for all periods presented. The weighted-average diluted shares outstanding for the years ended 2004, 2003, and 2002, exclude stock options to purchase approximately 12.6 million shares, 11.2 million shares, and 4.3 million shares, respectively, since such options have an exercise price in excess of the average market price of the company's common stock during the period.

*Effects of SFAS No. 150* – Through June 30, 2003, income available to common shareholders from continuing operations was calculated by reducing income from continuing operations by the amount of dividends accrued on mandatorily redeemable preferred stock. Effective July 1, 2003, the company adopted SFAS No. 150 – *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. Following adoption of this standard, mandatorily redeemable preferred stock is reported as a long-term liability in the accompanying Consolidated Statements of Financial Position, and dividends accrued on mandatorily redeemable preferred stock have been recorded as interest expense in the accompanying Consolidated Statements of Income. This change had no effect on the earnings per share calculation. This standard required adoption on a prospective basis, and accordingly, no restatement of prior periods has been made.

*Share Repurchases* – On August 20, 2003, the company's Board of Directors authorized a share repurchase program of \$700 million of its outstanding common stock. This share repurchase program was completed on October 5, 2004 and resulted in the retirement of 14.4 million shares of common stock.

On October 26, 2004, the company's Board of Directors authorized the repurchase of up to \$1 billion of its outstanding common stock which is expected to be completed over a twelve to eighteen-month period and commenced in November 2004. The share repurchases will take place at management's discretion and under pre-established non-discretionary programs from time to time, depending on market conditions, in the open market, and in privately negotiated transactions. The company retires its common stock upon repurchase. Under this authorization, the company repurchased 5.5 million shares for \$309 million through December 31, 2004.

Table of Contents**NORTHROP GRUMMAN CORPORATION**

Basic and diluted earnings per share from continuing operations before cumulative effect of accounting change are calculated as follows:

<i>in millions, except per share</i>	Year ended December 31		
	2004	2003	2002
<b>Basic Earnings Per Share</b>			
Income from continuing operations before cumulative effect of accounting change	\$ 1,093	\$ 758	\$ 455
Less dividends on mandatorily redeemable preferred stock		12	25
Income available to common shareholders from continuing operations before cumulative effect of accounting change	\$ 1,093	\$ 746	\$ 430
Weighted-average common shares outstanding	359.7	365.3	231.1
<b>Basic Earnings Per Share From Continuing Operations Before Cumulative Effect of Accounting Change</b>	\$ 3.04	\$ 2.04	\$ 1.86
<b>Diluted Earnings Per Share</b>			
Income from continuing operations before cumulative effect of accounting change	\$ 1,093	\$ 758	\$ 455
Less dividends on mandatorily redeemable preferred stock		12	25
Income available to common shareholders from continuing operations before cumulative effect of accounting change	\$ 1,093	\$ 746	\$ 430
Weighted-average common shares outstanding	359.7	365.3	231.1
Dilutive effect of stock options, awards, and equity security units	5.3	3.1	3.8
Weighted-average diluted shares outstanding	365.0	368.4	234.9
<b>Diluted Earnings Per Share From Continuing Operations Before Cumulative Effect of Accounting Change</b>	\$ 2.99	\$ 2.03	\$ 1.83

**8. ACCOUNTS RECEIVABLE, NET**

Unbilled amounts represent sales for which billings have not been presented to customers at year-end, including differences between actual and estimated overhead and margin rates. These amounts are usually billed and collected within one year. Progress payments are received on a number of fixed-price contracts accounted for using the cost-to-cost measure of the percentage-of-completion method.

Accounts receivable at December 31, 2004, are expected to be collected in 2005 except for approximately \$114 million due in 2006 and \$41 million due in 2007 and later.

Allowances for doubtful amounts mainly represent estimates of overhead type costs which may not be successfully negotiated and collected.

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Accounts receivable were composed of the following:

<i>\$ in millions</i>	December 31,	
	2004	2003
<b>Due From U.S. Government, Long-Term Contracts</b>		
Current accounts		
Billed	\$ 1,210	\$ 1,088
Unbilled	25,752	20,808
Progress payments received	(24,572)	(19,752)
	<b>2,390</b>	2,144
<b>Due From Other Customers, Long-Term Contracts</b>		
Current accounts		
Billed	221	170
Unbilled	2,688	1,783
Progress payments received	(2,144)	(1,366)
	<b>765</b>	587
Total due, long-term contracts	<b>3,155</b>	2,731
<b>Trade And Other Accounts Receivable</b>		
Due from U.S. Government	410	465
Due from other customers	287	560
Progress payments received	(38)	(282)
Total due, trade and other	<b>659</b>	743
	<b>3,814</b>	3,474
Allowances for doubtful amounts	(268)	(248)
Total accounts receivable, net	<b>\$ 3,546</b>	\$ 3,226

**9. INVENTORIED COSTS, NET**

Inventoried costs were composed of the following:

<i>\$ in millions</i>	December 31,	
	2004	2003
Production costs of contracts in process	\$ 1,677	\$ 1,642
Administrative and general expenses	107	239
	<b>1,784</b>	1,881
Progress payments received	(1,049)	(1,003)
	<b>735</b>	878
Product inventory	326	289
Total inventoried costs, net	<b>\$ 1,061</b>	\$ 1,167

Table of Contents**NORTHROP GRUMMAN CORPORATION****10. GOODWILL AND OTHER PURCHASED INTANGIBLE ASSETS****Goodwill**

Goodwill and other purchased intangible assets balances are included in the identifiable assets of the segment to which they have been assigned. In accordance with SFAS No. 142, impairment tests are performed at least annually and more often as circumstances require. Any goodwill impairment, as well as the amortization of other purchased intangible assets, is charged against the respective segment's operating margin. The annual impairment test for all sectors except Mission Systems and Space Technology was performed as of April 30, 2004, with no indication of impairment. The impairment test for Mission Systems and Space Technology was performed as of November 30, 2004, with no indication of impairment. In performing the goodwill impairment tests, the company uses a discounted cash flow approach corroborated by comparative market multiples, where appropriate, to determine the fair value of reporting units. A goodwill impairment charge of \$47 million related to a Component Technologies business sold in 2004 was recorded in 2003 based on the excess of the net carrying value of the business' net assets in comparison to the then current negotiated sale price for the business.

*Realignment* – Effective January 1, 2004, the company realigned businesses among its Mission Systems, Information Technology, and Integrated Systems segments. As a result of this realignment, goodwill of approximately \$1.3 billion from the TRW acquisition was reallocated among these three segments as required by SFAS No. 142. This realignment is reflected in the table below. In connection with this realignment, the company performed impairment tests of the Mission Systems, Information Technology, and Integrated Systems segments as of January 1, 2004, before and after the realignment with no indication of impairment.

The changes in the carrying amounts of goodwill for the years ended December 31, 2004 and 2003, are summarized below.

<i>\$ in millions</i>	<b>Electronic Systems</b>	<b>Ships</b>	<b>Information Technology</b>	<b>Missions Systems</b>	<b>Integrated Systems</b>	<b>Space Technology</b>	<b>Total</b>
Balance as of January 1, 2003	\$ 2,557	\$3,635	\$ 1,117	\$ 3,705	\$ 938	\$ 3,705	\$15,657
Goodwill acquired			11	39			50
Fair value adjustments to net assets acquired	42		(6)	1,893		(303)	1,626
Balance as of December 31, 2003	2,599	3,635	1,122	5,637	938	3,402	17,333
Goodwill transferred due to segment realignment			1,292	(1,309)	17		
Goodwill of business sold	(13)			(3)			(16)
Fair value adjustments to net assets acquired	11	(5)	(16)	(60)		(65)	(135)
<b>Balance as of December 31, 2004</b>	<b>\$ 2,597</b>	<b>\$3,630</b>	<b>\$ 2,398</b>	<b>\$ 4,265</b>	<b>\$ 955</b>	<b>\$ 3,337</b>	<b>\$17,182</b>

*Fair Value Adjustments to Net Assets Acquired* – During 2003, the company recorded an aggregate increase to goodwill of approximately \$1.6 billion, primarily due to fair value adjustments to retiree benefits liabilities and debt assumed from the acquisition of TRW.

For 2004, the fair value adjustments were primarily due to the resolution of pre-acquisition tax uncertainties associated with the Litton, Newport News, and TRW acquisitions. The adjustments relating to Litton and

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Newport News primarily resulted from audits by the Internal Revenue Service. The TRW adjustments were primarily related to the utilization of a portion of the capital loss carryforward recognized at the time of acquisition. Due to the uncertainty related to the company's ability to fully utilize this capital loss carryforward, a valuation allowance equal to the full amount of the related tax benefit was recorded as of the acquisition date. Any reduction to this valuation allowance is recorded as a reduction of goodwill.

**Purchased Intangible Assets**

The table below summarizes the company's aggregate purchased intangible assets as follows:

<i>\$ in millions</i>	December 31, 2004			December 31, 2003		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Contract and program intangibles	\$ 2,572	\$ (1,146)	\$ 1,426	\$ 2,587	\$ (934)	\$ 1,653
Other purchased intangibles	110	(59)	51	110	(53)	57
<b>Total</b>	<b>\$ 2,682</b>	<b>\$ (1,205)</b>	<b>\$ 1,477</b>	<b>\$ 2,697</b>	<b>\$ (987)</b>	<b>\$ 1,710</b>

All of the company's purchased intangible assets are subject to amortization and are being amortized on a straight-line basis over an aggregate weighted-average period of 22 years. Aggregate amortization expense during 2004, 2003, and 2002, was \$226 million, \$233 million, and \$172 million, respectively.

The table below shows expected amortization for purchased intangibles as of December 31, 2004, for the next five years:

<i>\$ in millions</i>	
Year ended December 31	
2005	\$215
2006	126
2007	114
2008	108
2009	96

**11. FAIR VALUE OF FINANCIAL INSTRUMENTS**

Carrying amounts and the related estimated fair values of the company's financial instruments are as follows:

<i>\$ in millions</i>	December 31,			
	2004		2003	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash and cash equivalents	\$ 1,230	\$ 1,230	\$ 294	\$ 294
Investments in marketable securities	55	55	50	50
Investment in Auto	213	352	170	170
Note receivable			499	482
Short-term notes payable	(9)	(9)	(19)	(19)
Long-term debt	(5,149)	(5,833)	(5,872)	(6,509)
Mandatorily redeemable preferred stock	(350)	(469)	(350)	(436)
Interest rate swaps	7	7		
Forward share sale agreements				
Liability portion			(13)	(13)
Hedge portion			13	13
Foreign currency forward contracts	(4)	(4)	2	2



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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

*Short-Term Instruments* – For cash and cash equivalents and amounts borrowed under the company’s short-term credit lines, the carrying amounts approximate fair value, due to the short-term nature of these items.

*Investments in Marketable Securities* –The company holds a portfolio of equity securities that are classified as trading securities. The portfolio is managed by an asset management company that invests in equities with performance and risk factors closely correlated to the Russell 3000 Index (Frank Russell Company). During the years ended December 31, 2004, and 2003, the company recorded approximately \$6 million and \$11 million, respectively, in unrealized gains from holding these securities, which is included in “Other, net” in the accompanying Consolidated Statements of Income. As of December 31, 2004, and 2003, the aggregate fair value of these marketable securities was \$54 million and \$48 million, respectively. The company also holds equity securities classified as available-for-sale marketable securities, which were recorded at their fair value of \$1 million and \$2 million as of December 31, 2004, and 2003, respectively. The company’s investments in marketable securities are included in “Prepaid expenses and other current assets” in the accompanying Consolidated Statements of Financial Position.

*Investment in Auto* – The company’s investment in Auto represents the company’s equity interest in TRW Automotive Holdings Corp. received upon the completion of the sale of Auto. On February 2, 2004, TRW Automotive Holdings Corp. completed an initial public offering, and the stock began trading publicly on the New York Stock Exchange (trading symbol TRW) on February 3, 2004. The company’s equity ownership position following the initial public offering was 17.2 percent. It was not practical to determine a fair value of this equity interest as of December 31, 2003, as the common stock did not trade publicly at that time.

In January 2004, restrictions on the equity investment in Auto were amended to provide the company more flexibility in the disposition of its shares. Under the amended agreement, approximately 4 million shares become available for sale through December 31, 2005. Accordingly, these shares have been reported as available-for-sale securities totaling \$83 million as of December 31, 2004. The amount recorded reflects the corresponding publicly traded stock price of Auto and is included in “Prepaid expenses and other current assets” in the accompanying Consolidated Statements of Financial Position. The remaining equity investment of \$130 million and \$170 million as of December 31, 2004 and December 31, 2003, respectively, is carried at cost and is included in “Other assets” in the accompanying Consolidated Statements of Financial Position.

*Note Receivable* – On October 10, 2004, the company reached an agreement with Auto regarding the repurchase of the payment-in-kind note as described in Note 5.

*Long-Term Debt* – The fair value of the long-term debt was calculated based on interest rates available for debt with terms and due dates similar to the company’s existing debt arrangements.

*Mandatorily Redeemable Preferred Stock* – The fair value of the mandatorily redeemable preferred stock was calculated based on the closing market price quoted on the New York Stock Exchange (trading symbol NOC-pb) at December 31, 2004, and 2003, respectively.

*Interest Rate Swaps* – The company has from time to time entered into interest rate swap agreements to mitigate interest rate risk. As described in Note 18, two interest rate swap agreements were in effect at December 31, 2004, and no agreements were in effect at December 31, 2003.

*Forward Share Sale Agreements* – In connection with the TRW acquisition, the company acquired investments in RF Micro Devices, Inc. (RFMD) and Applera Corporation -Celera Genomics Group (Celera), two publicly traded companies. These investments had been monetized through the execution of forward share sale agreements. The company also acquired certain hedges designed to protect the forecasted cash flows resulting from the future sale of shares in these investments. These hedges also mitigate any downside risk of loss and provide for additional gain

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depending on market conditions at maturity. The investments in RFMD and Celera and the related hedge portion of the forward share sale agreements were carried at their respective fair market values in accordance with SFAS No. 133 – *Accounting for Derivative Instruments and Hedging Activities*, as amended. As of December 31, 2004, all of the RFMD shares and Celera shares have been delivered. As the value of the investments and the hedge were equivalent during the period that the shares were held by the company, no gain or loss was realized.

*Foreign Currency* – The company enters into foreign currency forward contracts to manage foreign currency exchange risk related to receipts from customers and payments to suppliers denominated in foreign currencies. Gains and losses from such transactions are included as contract costs.

**12. INCOME TAXES**

Income tax expense, both federal and foreign, consisted of the following:

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
<b>Income Taxes on Continuing Operations</b>			
Current Payable (Refundable)			
Federal income taxes	\$ 475	\$ (176)	\$ 965
Foreign income taxes	28	18	16
	<b>503</b>	(158)	981
Change in deferred federal and foreign income taxes	19	455	(701)
Total income taxes on continuing operations	<b>\$ 522</b>	\$ 297	\$ 280

Income tax expense differs from the amount computed by multiplying the statutory federal income tax rate times the income from continuing operations before income taxes and cumulative effect of accounting change due to the following:

<i>\$ in millions</i>	Year ended December 31		
	2004	2003	2002
Income tax expense on continuing operations at statutory rate	\$ 565	\$ 370	\$ 257
Extraterritorial income exclusion/foreign sales corporation	(28)	(11)	(10)
Research tax credit	(20)	(51)	(5)
Goodwill impairment			65
Other, net	5	(11)	(27)
Total federal and foreign income taxes	<b>\$ 522</b>	\$ 297	\$ 280

*Deferred income taxes* – Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and tax purposes. Such amounts are classified as current or noncurrent assets or liabilities based upon the balance sheet classification of the related assets and liabilities. The company's principal temporary differences arise from the recognition of income from long-term contracts and retiree benefit plan income/expense under different methods for financial reporting purposes and tax purposes.

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The tax effects of significant temporary differences and carryforwards that gave rise to year-end deferred federal, state and foreign tax balances, as presented in the Consolidated Statements of Financial Position, are as follows:

<i>\$ in millions</i>	December 31,	
	2004	2003
<b>Deferred Tax Assets</b>		
Retirement benefit plan expense	\$ 500	\$ 547
Contract accounting differences	574	459
Total tax credits and carryforwards		
Net operating loss		17
Capital loss	1,195	1,200
Foreign income tax credit	180	214
Other credits	45	9
Other	241	207
Gross deferred tax assets	2,735	2,653
Less valuation allowance	(1,375)	(1,407)
Net deferred tax assets	1,360	1,246
<b>Deferred Tax Liabilities</b>		
Provision for accrued liabilities	94	40
Purchased intangibles	128	134
Depreciation and amortization	494	520
Goodwill amortization	345	290
Gross deferred tax liabilities	1,061	984
Net deferred tax assets	\$ 299	\$ 262

Net deferred tax assets (liabilities) as presented in the Consolidated Statements of Financial Position are as follows:

<i>\$ in millions</i>	December 31,	
	2004	2003
Net current deferred tax assets	\$ 777	\$ 770
Net non-current deferred tax assets	28	
Net non-current deferred tax liabilities	(506)	(508)
Net deferred tax assets	\$ 299	\$ 262

*Foreign Income* – Income from continuing operations before income taxes and cumulative effect of accounting change included foreign income of \$70 million, \$40 million, and \$31 million, for the years ended December 31, 2004, 2003, and 2002, respectively. The company intends to reinvest undistributed earnings of certain non-U.S. subsidiaries, thereby indefinitely postponing their remittance. Accordingly, deferred income taxes have not been provided for accumulated undistributed earnings of \$166 million at December 31, 2004. Should these earnings be distributed in the form of dividends or otherwise, the distributions would be subject to U.S. federal income tax at the statutory rate of 35 percent, less foreign tax credits applicable to distributions, if any. In addition, such distributions would be subject to withholding taxes in the various tax jurisdictions.

*Tax Carryforwards* – The company has a capital loss carryforward of approximately \$1.2 billion (tax effected) at December 31, 2004, against which a full valuation allowance has been recorded. The majority of the capital loss carryforward, which primarily arose from the sale of Auto, will expire in 2008. Future reductions to the valuation allowance resulting from the recognition of tax benefits, if any, will reduce goodwill. In addition, the company has

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foreign income tax credit carryforward items of \$180 million at December 31, 2004, to offset future federal income tax liabilities, against which a full valuation allowance has been recorded. The \$180 million foreign income tax credit carryforward arose from the acquisition of TRW, and from the sale of Auto and other discontinued operations, and will expire in 2009 through 2012. In 2004, the company extended its foreign tax credit carryforward period from five to ten years based on the American Jobs Creation Act of 2004.

**13. NOTES PAYABLE TO BANKS AND LONG-TERM DEBT**

The company has available short-term credit lines in the form of money market facilities with several banks. The amount and conditions for borrowing under these credit lines depend on the availability and terms prevailing in the marketplace. No fees or compensating balances are required for these credit facilities.

*TRW Debt Reduction* – In connection with the acquisition of TRW, the company assumed various notes and debentures amounting to approximately \$4.8 billion. In March 2003, the company's wholly owned subsidiary, Northrop Grumman Space & Mission Systems Corp. (formerly TRW Inc.), commenced offers to purchase any or all of certain designated outstanding debt securities in a debt reduction plan substantially completed in the second quarter of 2003. In the first phase, approximately \$2.4 billion in aggregate principal amount of outstanding debt securities were tendered and accepted for purchase, for a total purchase price of approximately \$2.9 billion (including accrued and unpaid interest on the securities). In the second phase, the company purchased on the open market \$658 million in aggregate principal amount for a total purchase price of \$795 million (including accrued and unpaid interest on the securities).

*Credit Facility* – At December 31, 2004, \$2.5 billion was available under the five-year revolving credit facility. Borrowings under the credit facility bear interest at various rates, including adjusted London Interbank Offered Rate (LIBOR), or an alternate base rate plus an incremental margin based on the company's credit rating. The credit facility also provides for a facility fee on the daily aggregate amount of commitments (whether or not utilized). The facility fee is also based on the company's credit rating level. The company's credit agreements contain various restrictive covenants relating to the payment of dividends, acquisition of the company's stock, minimum fixed charges, aggregate indebtedness for borrowed money, interest coverage, as well as customary covenants, representations and warranties, funding conditions and events of default.

*Equity Security Units* – In November 2001, the company issued 6.9 million equity security units. Each equity security unit, issued at \$100 per unit, initially consisted of a contract to purchase shares of Northrop Grumman common stock on November 16, 2004, and a \$100 senior note due 2006. The senior notes due 2006 are reported as long-term debt. The senior notes initially bore interest at 5.25 percent per annum, and each equity security unit paid a contract adjustment payment of 2.0 percent per annum through November 16, 2004, for a combined yield on the equity security unit of 7.25 percent per annum through November 16, 2004.

On August 11, 2004, the company remarketed the senior notes as required by the original terms of the equity security units. As a result of this remarketing, the interest rate on the senior notes was reset to 4.079 percent per annum effective August 16, 2004. Proceeds from the remarketed notes were used to purchase U.S. Treasury securities that were pledged to secure the stock purchase obligations of the unit holders and held with a collateral agent.

On November 16, 2004, the company received \$690 million and issued 13.2 million shares of common stock in settlement of the stock purchase contracts. The number of shares issued was calculated using a conversion ratio of 1.9171 shares per each equity security unit, which was determined in accordance with the original terms of the stock purchase contracts.

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*Debt Redemption* – On October 15, 2004, the company redeemed all of its outstanding \$250 million 9.375 percent debentures due 2024. The redemption price was 104.363 percent of the principal amount plus accrued and unpaid interest through the redemption date. As a result of the redemption, the company recorded a \$13 million pre-tax charge in 2004 included in “Other, net” in the Consolidated Statements of Income.

Long-term debt consisted of the following.

<i>\$ in millions</i>	December 31,	
	2004	2003
Notes and debentures due 2005 to 2036, rates from 6.05% to 9.375%	<b>\$5,064</b>	\$5,780
Other indebtedness due 2005 to 2024, rates from 7.0% to 8.5%	<b>85</b>	92
Total long-term debt	<b>5,149</b>	5,872
Less current portion	<b>33</b>	462
Long-term debt, net of current portion	<b>\$5,116</b>	\$5,410

Indentures underlying long-term debt issued by the company or its subsidiaries contain various restrictions with respect to the issuer, including one or more restrictions relating to limitations on liens, sale and leaseback arrangements, and funded debt of subsidiaries.

Maturities of long-term debt as of December 31, 2004, are as follows:

<i>\$ in millions</i>	
2005	\$ 33
2006	1,211
2007	73
2008	108
2009	472
Thereafter	3,171
Total principal payments	5,068
Unamortized premium on long-term debt, net of discount	81
Total long-term debt	\$5,149

The premium on long-term debt primarily represents non-cash fair market value adjustments resulting from the acquisitions of Litton and TRW.

**14. MANDATORILY REDEEMABLE SERIES B CONVERTIBLE PREFERRED STOCK**

The company issued 3.5 million shares of mandatorily redeemable Series B Convertible Preferred Stock in April 2001. Each share of Series B preferred stock has a liquidation value of \$100 per share. The liquidation value, plus accrued but unpaid dividends, is payable on April 4, 2021, the mandatory redemption date. The company has the option to redeem all but not less than all of the shares of Series B preferred stock at any time after seven years from the date of issuance for a number of shares of the company’s common stock equal to the liquidation value plus accrued and unpaid dividends divided by the current market price of common stock determined in relation to the date of redemption. Under this option, were the redemption to have taken place at December 31, 2004, each share would have been converted into 1.819 shares of common stock. Each share of preferred stock is convertible, at any time, at the option of the holder into the right to receive shares of the company’s common stock. Initially, each share was convertible into .911 shares of common stock, subject to adjustment in the event of certain dividends and distributions, a stock split, a merger, consolidation or sale of substantially all of the company’s assets,

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a liquidation or distribution, and certain other events. Were the conversion to have taken place at December 31, 2004, each share would have been converted into 1.822 shares of common stock, reflecting adjustment for the stock split discussed in Note 3. Holders of preferred stock are entitled to cumulative annual cash dividends of \$7 per share, payable quarterly. In any liquidation of the company, each share of preferred stock is entitled to a liquidation preference before any distribution may be made on the company's common stock or any series of capital stock that is junior to the Series B preferred stock. In the event of a change in control of the company, holders of Series B preferred stock also have specified exchange rights into common stock of the company or into specified securities or property of another entity participating in the change in control transaction.

Effective July 1, 2003, the company adopted SFAS No. 150 – *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. Following adoption of the standard, mandatorily redeemable preferred stock is reported as a long-term liability in the Consolidated Statements of Financial Position. As of December 31, 2004, 10 million preferred stock shares are authorized and 3.5 million shares are issued and outstanding.

**15. RETIREMENT BENEFITS****Plan Descriptions**

*Pension Benefits* – The company sponsors several defined benefit pension plans covering approximately 90 percent of its employees. Pension benefits for most employees are based on the employee's years of service and compensation. It is the policy of the company to fund at least the minimum amount required for all qualified plans, using actuarial cost methods and assumptions acceptable under U. S. Government regulations, by making payments into benefit trusts separate from the company. Starting in July 2003, the pension benefit for most employees was based upon new criteria, whereby employees earn age and service points over their employment period. Subsequent to the 2003 initial phase-in, other exempt and non-exempt plans were conformed to the new model. No settlement or curtailments arose as a result of these changes. Union plans were not affected by these plan modifications. Eight of the company's 21 qualified plans, which cover more than 50 percent of all employees, were in a legally defined full-funding limitation status at December 31, 2004.

*Defined Contribution Plans* – The company also sponsors 401(k) defined contribution plans in which most employees are eligible to participate. Company contributions for most plans are based on a cash matching of employee contributions up to 4 percent of compensation. Certain hourly employees are covered under a target benefit plan. In 2004, the company also participated in a multiemployer plan for a small group of union employees. The company's contributions to these plans for the years ended December 31, 2004, 2003, and 2002, were \$219 million, \$204 million, and \$148 million, respectively.

*Medical and Life Benefits* – The company and its subsidiaries provide certain health care and life insurance benefits for retired employees. Certain employees achieve eligibility to participate in these contributory plans upon retirement from active service and if they meet specified age and years of service requirements. Qualifying dependents are also eligible for medical coverage. Approximately 60 percent of the company's current retirees participate in the medical plans. The company reserves the right to amend or terminate the plans at any time. Premiums charged retirees for medical coverage are based on years of service and are adjusted annually for changes in the cost of the plans as determined by an independent actuary. In addition to this medical inflation cost-sharing feature, the plans also have provisions for deductibles, copayments, coinsurance percentages, out-of-pocket limits, schedule of reasonable fees, managed care providers, maintenance of benefits with other plans, Medicare carve-out, and a maximum lifetime benefit of from \$250,000 to \$1,000,000 per covered individual. It is the policy of the company to fund the maximum amount deductible for income tax purposes utilizing the Voluntary Employees' Beneficiary Association (VEBA) trust established for the Northrop Retiree Health Care Plan for Retired Employees for payment of benefits.

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On December 8, 2003, the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (Act) was signed into law. The Act introduces a prescription drug benefit under Medicare Part D as well as a federal subsidy to sponsors of retiree health care benefit plans that provide a benefit that is at least actuarially equivalent to Medicare Part D. During the third quarter of 2004, the company elected to record the effects of the Act retroactively to January 1, 2004, for its two largest plans, in accordance with the guidelines of FSP FAS 106-2.

The effect of the Medicare prescription drug subsidy on the net periodic postretirement benefit cost for the year ended December 31, 2004, was a reduction of \$17 million, comprised of \$2 million in service cost, \$8 million in interest cost, and \$7 million in actuarial loss. The reduction in the accumulated postretirement benefit obligation as a result of the subsidy was \$181 million as of December 31, 2004. The reduction recognized reflects the impact on four plans that the company has determined to be eligible for the subsidy.

Final regulations were released by the Centers for Medicare and Medicaid Services on January 21, 2005. In light of these final regulations, the company is further assessing whether any of its other plans will qualify for the federal subsidy. If it is determined that any of the company's other plans do qualify for the federal subsidy, the effect of the additional subsidy will be recorded in the period in which that determination is made.

**Summary Plan Results**

The cost to the company of these plans in each of the three years ended December 31 is shown in the following table:

<i>\$ in millions</i>	Pension Benefits			Medical and Life Benefits		
	2004	2003	2002	2004	2003	2002
<b>Components of Net Periodic Benefit Cost (Income)</b>						
Service cost	\$ 564	\$ 491	\$ 303	\$ 56	\$ 52	\$ 34
Interest cost	1,050	1,022	859	175	176	128
Expected return on plan assets	(1,378)	(1,195)	(1,289)	(46)	(39)	(29)
Amortization of						
Prior service costs	51	55	51			1
Transition assets, net			(34)			
Net loss from previous years	55	196	14	7	15	1
Settlement cost (income)		4	2			(3)
Special termination benefits cost	1			8	4	
Other	7					
<b>Net periodic benefit cost (income)</b>	<b>350</b>	573	(94)	<b>200</b>	208	132
Less net periodic benefit cost (income) from discontinued operations		5	(4)			
<b>Net periodic benefit cost (income) from continuing operations</b>	<b>\$ 350</b>	\$ 568	\$ (90)	<b>\$200</b>	\$208	\$132

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The following tables set forth the funded status and amounts recognized in the Consolidated Statements of Financial Position for the company's defined-benefit pension and retiree health care and life insurance benefit plans. Pension benefits data include the qualified plans as well as 22 unfunded non-qualified plans for benefits provided to directors, officers, and employees either beyond those provided by, or payable under, the company's qualified plans. The company uses a December 31 measurement date for most of its plans.

<i>\$ in millions</i>	Pension Benefits		Medical and Life Benefits	
	2004	2003	2004	2003
<b>Change in Benefit Obligation</b>				
Benefit obligation at beginning of year	\$16,872	\$21,524	\$ 2,986	\$ 3,809
Service cost	564	491	56	52
Interest cost	1,050	1,022	175	176
Plan participants' contributions	21	24	72	63
Special termination benefits			8	4
Plan amendments	84	50	(13)	(3)
Actuarial loss	1,555	205	198	124
Divestitures	(81)	(5,216)		(978)
Acquisitions/transfers	302	(90)		(17)
Settlements		(47)		
Benefits paid	(1,029)	(1,091)	(259)	(244)
Benefit obligation at end of year	19,338	16,872	3,223	2,986
<b>Change in Plan Assets</b>				
Fair value of plan assets at beginning of year	15,985	18,532	688	561
Gain on plan assets	2,076	3,023	71	131
Employer contributions	624	329	182	177
Plan participants' contributions	21	24	72	63
Divestitures	(83)	(4,808)		
Acquisitions/transfers	143	24		
Settlements		(48)		
Benefits paid	(1,029)	(1,091)	(259)	(244)
Other	(17)			
Fair value of plan assets at end of year	17,720	15,985	754	688
Funded status	(1,618)	(887)	(2,469)	(2,298)
Unrecognized prior service cost	322	289	(10)	3
Unrecognized net transition obligation	2			
Unrecognized net loss	2,647	1,799	562	397
Net asset (liability) recognized	\$ 1,353	\$ 1,201	\$(1,917)	\$(1,898)
<b>Amounts Recognized in the Statements of Financial Position</b>				
Prepaid benefit cost	\$ 2,868	\$ 2,918	\$ 46	\$ 44
Accrued benefit liability	(1,773)	(1,869)	(1,963)	(1,942)
Intangible asset	24	26		
Accumulated other comprehensive loss	234	126		
Net asset (liability) recognized	\$ 1,353	\$ 1,201	\$(1,917)	\$(1,898)

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The accumulated benefit obligation for all defined benefit pension plans was \$17.5 billion and \$15.4 billion at December 31, 2004 and 2003, respectively.

Amounts for pension plans with accumulated benefit obligations in excess of plan assets are as follows:

<i>\$ in millions</i>	December 31,	
	<b>2004</b>	2003
Projected benefit obligation	<b>\$5,880</b>	\$4,617
Accumulated benefit obligation	<b>4,858</b>	3,782
Fair value of plan assets	<b>3,544</b>	2,667

**Plan Assumptions**

On a weighted-average basis, the following assumptions were used to determine the benefit obligations and the net periodic benefit cost:

	Pension Benefits		Medical and Life Benefits	
	<b>2004</b>	2003	<b>2004</b>	2003
<b>Assumptions Used to Determine Benefit Obligation at December 31</b>				
Discount rate	<b>5.75%</b>	6.25%	<b>5.75%</b>	6.25%
Rate of compensation increase	<b>4.00%</b>	4.00%		
<b>Assumptions Used to Determine Benefit Cost for the Year Ended December 31</b>				
Discount rate	<b>6.25%</b>	6.50%	<b>6.25%</b>	6.50%
Expected long -term return on plan assets	<b>8.75%</b>	9.00%	<b>6.00%</b>	6.00%
Rate of compensation increase	<b>4.00%</b>	4.00%		

These assumptions also were used in retiree health care and life insurance benefit calculations with one modification. Since, unlike the pension trust, the earnings of the VEBA trust are taxable, the above long -term rate of return on plan assets was reduced accordingly to an after-tax rate.

Through consultation with investment advisors, expected long-term returns for each of the plans' strategic asset classes were developed. Several factors were considered, including survey of investment managers' expectations, current market data such as yields/price-earnings ratios, and historical market returns over long periods. Using policy target allocation percentages and the asset class expected returns, a weighted-average expected return was calculated.

Health care cost trend rate assumptions used to determine the expected cost of retiree health care plans are as follows:

	<b>2004</b>	2003
Health care cost trend rate assumed for next year	<b>10.00%</b>	9.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	<b>5.00%</b>	5.00%
Year that the rate reaches the ultimate trend rate	<b>2009</b>	2008

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Assumed health care trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in health care cost trend rates would have the following effects:

<i>\$ in millions</i>	1-Percentage- Point Increase	1-Percentage- Point Decrease
Increase (decrease) from change in health care cost trend rates to		
Postretirement benefit expense	\$ 29	\$ (24)
Postretirement benefit liability	352	(293)

### **Plan Assets and Investment Policy**

Weighted-average asset allocations at December 31 by asset category are as follows:

	Pension Plan Assets		Medical and Life Benefits Plan Assets	
	2004	2003	2004	2003
Equity securities	64%	64%	79%	78%
Debt securities	29	28	19	22
Real estate	1	2		
Other	6	6	2	
<b>Total</b>	<b>100%</b>	100%	<b>100%</b>	100%

Plan assets are invested in various asset classes that are expected to produce a sufficient level of diversification and investment return over the long term. The investment goals are (1) to exceed the assumed actuarial rate of return over the long term within reasonable and prudent levels of risk, and (2) to preserve the real purchasing power of assets to meet future obligations. Liability studies are conducted on a regular basis to provide guidance in setting investment goals with an objective to balance risk. Risk targets are established and monitored against acceptable ranges.

All investment policies and procedures are designed to ensure that the plans' investments are in compliance with the Employee Retirement Income Security Act. Guidelines are established defining permitted investments within each asset class. Derivatives are used for transitioning assets, asset class rebalancing, managing currency risk, and for fixed income management. Other uses of derivatives, including for speculation, are prohibited.

The investment policies for most of the pension plans require that the asset allocation be maintained within the following ranges:

	Asset Allocation Ranges
U.S. equity securities	30 – 40%
International equity securities	15 – 25
Debt securities	25 – 35
Real estate and other	10 – 20

Current policies for the plans target an asset mix of 70% in total equity securities and 30% in debt and other securities.

At December 31, 2004, the pension plans and VEBA trust did not hold any Northrop Grumman common stock. Equity securities held by pension plans include Northrop Grumman Corporation common stock in the amounts of

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\$664 million (4 percent of total plan assets) at December 31, 2003. Equity securities in the VEBA trust include Northrop Grumman Corporation common stock in the amounts of \$9.7 million (2 percent of total plan assets) at December 31, 2003.

In 2005, the company expects to contribute approximately \$205 million to its pension plans and approximately \$184 million to its other postretirement benefit plans.

**Benefit Payments**

The following table reflects estimated benefit payments, based upon the same assumptions used to measure the benefit obligation, and include expected future employee service, as of December 31, 2004:

<i>\$ in millions</i>	Pension Benefits	Medical and Life Benefits
2005	\$ 1,028	\$ 197
2006	1,054	194
2007	1,096	201
2008	1,148	204
2009	1,202	208
2010 through 2014	6,865	1,097

**16. LITIGATION, COMMITMENTS, AND CONTINGENCIES**

*Litigation* – The company is subject to a range of claims, lawsuits, environmental and income tax matters, and administrative proceedings that arise in the ordinary course of business. Estimating liabilities and costs associated with these matters requires judgment and assessment based upon professional knowledge and experience of management and its internal and external legal counsel. The ultimate resolution of any exposure to the company may vary from earlier estimates as further facts and circumstances become known. While the company cannot predict the ultimate outcome of these matters, based upon available information, it is the company's expectation that known legal actions and tax matters will not have a material adverse effect on the company's financial position, results of operations, or cash flows.

The company, as a government contractor, is from time to time subject to U.S. Government investigations relating to its operations. Government contractors that are found to have violated the False Claims Act, or are indicted or convicted for violations of other federal laws, or are considered not to be responsible contractors, may be suspended or debarred from government contracting for some period of time. Such convictions could also result in fines. Given the company's dependence on government contracting, suspension or debarment could have a material adverse effect on the company.

In August 1992, in U.S. ex rel. Rex Robinson v. Northrop Grumman Corporation, the United States District Court for the Northern District of Illinois unsealed a complaint brought by four individuals in the name of the United States of America. The action was filed on August 10, 1989, seeking damages under the qui tam provision of the civil False Claims Act. The relators also sought damages as individuals for alleged retaliation. On March 1, 2005, the company agreed with the government to settle the False Claims Act case for \$62 million. The company also agreed to settle the relators' personal claims including their claim for attorney fees and to reimburse the government for previously billed legal costs incurred by the company. As a result of the settlement, the company recorded a pre-tax charge of \$35 million in the fourth quarter of 2004 and expects to pay a total of \$99 million in the first quarter of 2005.

On March 13, 2002, a jury in Indianapolis, Indiana returned a verdict of approximately \$31 million in favor of Allison Gas Turbine for cost overruns on the engine exhaust liner and trailing edge of a discontinued prototype

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aircraft from a competitive award process, which occurred in the 1980s. On May 3, 2002, the approximate sum of \$37 million of pre-judgment interest was awarded in this matter. On April 27, 2004, the Court of Appeals of Indiana affirmed the decision of the lower court. As a result, the company recorded an additional provision of \$62 million in 2004 for legal and interest costs relating to this matter, which is included in "Unallocated expenses" (see Note 6). On September 28, 2004, the company's appeal to the Supreme Court of Indiana was denied and the company paid \$81 million in settlement of the judgment and interest.

*Income Tax Matters* – The Internal Revenue Service has completed its audits of the B-2 program for the years ended December 31, 1997 through December 31, 2000, and has proposed an adjustment that does not affect the company's income tax liability but could result in an obligation to pay an amount of interest to the Internal Revenue Service that could be significant. The company believes the proposed adjustment will be eliminated or significantly reduced. Accordingly, the company does not believe that the adjustment proposed by the Internal Revenue Service will have a material adverse effect on the company's financial position, results of operations, or cash flows.

*Environmental Matters* – In accordance with company policy on environmental remediation, the estimated cost to complete remediation has been accrued where it is probable that the company will incur such costs in the future to address environmental impacts of current or formerly owned operating facilities, or at sites where it has been named a Potentially Responsible Party (PRP) by the Environmental Protection Agency, or similarly designated by other environmental agencies. To assess the potential impact on the company's Consolidated Financial Statements, management estimates the total reasonably possible remediation costs that could be incurred by the company on a site-by-site basis, taking into account currently available facts on each site as well as the current state of technology and prior experience in remediating contaminated sites. These estimates are reviewed periodically and adjusted to reflect changes in facts and technical and legal circumstances. Management estimates that at December 31, 2004, the range of reasonably possible future costs for all environmental remediation sites is \$278 million to \$411 million, of which \$281 million is accrued. Factors that could result in changes to the company's estimate include: modification of planned remedial actions, increase or decrease in the estimated time required to remediate, discovery of more extensive contamination than anticipated, changes in laws and regulations affecting remediation requirements, and improvements in remediation technology. Should other PRPs not pay their allocable share of remediation costs, the company may have to incur costs in addition to those already estimated and accrued. Although management cannot predict whether new information gained as projects progress will materially affect the estimated liability accrued, management does not anticipate that future remediation expenditures will have a material adverse effect on the company's financial position, results of operations, or cash flows.

*Other Agreements* – In July and August of 2003, Ship Systems executed agreements with the states of Mississippi and Louisiana, respectively, whereby Ship Systems will lease facility improvements and equipment from Mississippi and from a non-profit economic development corporation in Louisiana in exchange for certain commitments by Ship Systems to these states. Under the Mississippi agreement, Ship Systems is required to match the state's funding with expenditures in the amount of \$121 million and create 667 new full-time jobs in Mississippi by December 2007. Under the Louisiana agreement, Ship Systems is required to match the state's funding with expenditures in the amount of \$56 million through 2007, and employ a minimum of 5,200 full-time employees in 16 of the 32 fiscal quarters beginning January 1, 2003, and ending December 31, 2010. Failure by Ship Systems to meet these commitments would result in reimbursement by Ship Systems to Mississippi and Louisiana in accordance with the respective agreements.

*Financial Arrangements* – In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued by insurance companies principally to guarantee the performance on certain contracts and to support the company's self-insured workers' compensation plans. At December 31, 2004, there were \$492 million of unused stand-by letters of credit, \$150 million of bank guarantees, and \$532 million of surety bonds outstanding.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

*Operating Leases* – Rental expense for operating leases, excluding discontinued operations, was \$456 million in 2004, \$472 million in 2003, and \$307 million in 2002. These amounts are net of sublease rental income of \$9 million in 2004, \$8 million in 2003, and \$5 million in 2002. Minimum rental commitments under long-term noncancellable operating leases as of December 31, 2004, total \$1.8 billion, which are payable as follows: 2005 - \$386 million; 2006 - \$289 million; 2007 - \$243 million; 2008 - \$205 million; 2009 - \$178 million; and thereafter - \$518 million. In addition, the company has contracts for future sublease income totaling \$18 million.

For all periods presented, the company had no material related party transactions.

**17. STOCK COMPENSATION PLANS**

At December 31, 2004, Northrop Grumman had three stock-based compensation plans: the 2001 Long-Term Incentive Stock Plan (2001 LTISP), and the 1993 Long-Term Incentive Stock Plan (1993 LTISP), both applicable to employees, and the 1995 Stock Option Plan for Non-Employee Directors (SOPND). All of these plans are approved by the company's shareholders.

*Employee Plans* – The 2001 LTISP and the 1993 LTISP permit grants to key employees of three general types of stock incentive awards: stock options, stock appreciation rights (SARs), and stock awards. Each stock option grant is made with an exercise price either at the closing price of the stock on the date of grant (market options) or at a premium over the closing price of the stock on the date of grant (premium options). Options generally vest in 25 percent increments one, two, three, and four years from the grant date under the 2001 LTISP and two, three, four, and five years from the grant date under the 1993 LTISP. Under both plans, options expire ten years after the grant date. No SARs have been granted under either of the LTISPs. Stock awards, in the form of restricted performance stock rights and restricted stock rights, are granted to key employees without payment to the company. Under the 2001 LTISP, recipients of restricted performance stock rights earn shares of stock based on an economic value added (EVA) metric over a three-year performance period with distributions made entirely at the end of the third year. If at the end of the applicable performance period objectives have not been met, unearned rights up to 100 percent of the original grant for five elected officers and the three next highest compensated employees, and up to 70 percent of the original grant for all other recipients, will be forfeited. Restricted stock rights issued under either plan vest annually, generally over three years. Termination of employment can result in forfeiture of some or all of the benefits extended under the plan. Of the 50 million shares approved for issuance under the 2001 LTISP, approximately 25 million shares were available for future grants as of December 31, 2004.

*Nonemployee Plan* – The SOPND permits grants of stock options to nonemployee directors. Each grant of a stock option is made at the closing market price on the date of the grant, is immediately exercisable, and expires ten years after the grant date. At December 31, 2004, approximately 345,000 shares were available for future grants under the SOPND.

*Stock Awards* – Compensation expense for restricted performance stock rights is estimated and recognized over the vesting period. The fixed 30 percent minimum distribution portion is measured at the grant date fair value and the variable portion is adjusted to the fair value at the end of each accounting period. Compensation expense for restricted stock rights is measured at the grant date fair value and recognized over the vesting period. Restricted performance stock rights and restricted stock rights were granted with weighted-average grant-date fair values per share as follows: 2004 – 126,900 at \$52; 2003 – 2,294,600 at \$47; and 2002 – 1,692,290 at \$57. Restricted performance stock rights and restricted stock rights for approximately 6.5 million common shares were outstanding as of December 31, 2004, with a weighted-average grant-date fair value per share of \$48.

*Option Conversions* – In connection with the acquisition of Litton, the company converted Litton stock options to company stock options. For Litton options only, a reduction of shareholders' equity was recorded and is being amortized as compensation expense through 2005. Acquired TRW options were converted to the company's options and fully vested on the date of acquisition.

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*Compensation Expense* – Total stock -based compensation expense was \$178 million in 2004, \$99 million in 2003, and \$69 million in 2002.

Stock option activity for the last three years is summarized below:

	Shares Under Option	Weighted- Average Exercise Prices	Shares Exercisable	Weighted- Average Exercise Prices
<b>Outstanding at January 1, 2002</b>	13,425,226	\$ 39	4,347,558	\$ 40
Granted, market options	4,510,126	57		
Options converted upon acquisition of TRW	11,620,462	46		
Cancelled	(399,518)	39		
Exercised	(2,368,700)	38		
<b>Outstanding at December 31, 2002</b>	26,787,596	45	17,063,492	45
Granted, market options	5,330,978	47		
Cancelled	(456,882)	43		
Exercised	(941,658)	33		
<b>Outstanding at December 31, 2003</b>	30,720,034	46	19,767,056	45
Granted, market options	5,427,984	52		
Cancelled	(550,540)	48		
Exercised	(3,367,847)	38		
<b>Outstanding at December 31, 2004</b>	<b>32,229,631</b>	<b>48</b>	<b>20,172,357</b>	<b>46</b>

At December 31, 2004, the following stock options were outstanding:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Prices	Number Exercisable	Weighted- Average Exercise Prices
\$ 14 to 45	8,847,941	5.2 years	\$ 38	7,725,789	\$ 38
46 to 48	7,953,487	6.8 years	47	4,188,007	47
49 to 52	8,458,923	7.3 years	52	3,155,332	50
53 to 64	6,969,280			5,103,229	
	<b>32,229,631</b>	6.5 years	56	<b>20,172,357</b>	56
			<b>48</b>		<b>46</b>

**18. DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING ACTIVITIES**

The company accounts for derivative financial instruments in accordance with SFAS No. 133 – *Accounting for Derivative Instruments and Hedging Activities*, as amended, which requires that all derivative financial instruments be recognized as assets or liabilities in the financial statements and measured at fair value. Changes in the fair value of derivative financial instruments that qualify and are designated as fair value hedges are required to be recorded in earnings, while changes in the fair value of derivative financial instruments that qualify and are designated as cash flow hedges are recorded as other comprehensive income.

The company uses derivative financial instruments to manage its exposure to interest rate risk and to balance its fixed and variable rate long-term debt portfolio. The company does not use derivative financial instruments for trading purposes, nor does it use leveraged financial instruments. Credit risk related to derivative financial instruments is considered minimal and is managed by requiring high credit standards for its counterparties and periodic settlements.



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### **NORTHROP GRUMMAN CORPORATION**

During 2004, the company entered into two interest rate swap agreements designed to convert fixed rates associated with long-term debt obligations to floating rates. These interest rate swaps each hedge a \$200 million notional amount of U.S. dollar fixed rate debt, and mature on October 15, 2009, and February 15, 2011, respectively.

These swap agreements hedge the company's risk related to changes in interest rates on the fair value of the company's fixed rate debt. The critical terms of the interest rate swaps are aligned with those of the hedged items, thereby satisfying the criteria for the short-cut method of accounting defined by SFAS No. 133. In accordance with SFAS No.133, these swaps are accounted for as fair value hedges. Any changes in the fair value of the swaps are offset by an equal and opposite change in the fair value of the hedged item, therefore there is no net impact to the company's reported results of operations. The aggregate net fair value of the swaps at December 31, 2004, was an asset of approximately \$7 million, which is included in "Other assets" in the accompanying Consolidated Statements of Financial Position.

### **19. UNAUDITED SELECTED QUARTERLY DATA**

Unaudited quarterly financial results are set forth in the following tables together with dividend and common stock price data. The company's common stock is traded on the New York Stock Exchange and Pacific Exchange (trading symbol NOC). This unaudited quarterly information is labeled using a calendar convention; that is, first quarter is consistently labeled as ended on March 31, second quarter as ended on June 30, and third quarter as ended on September 30. It is our long-standing practice to establish actual interim closing dates using a "fiscal" calendar, which requires our businesses to close their books on a Friday, in order to normalize the potentially disruptive effects of quarterly closings on business processes. The effects of this practice only exist within a reporting year.

*Restatement for Medicare Part D Subsidy* – During the third quarter of 2004, the company recorded the effects of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 retroactively to January 1, 2004, in accordance with the guidelines of FSP FAS 106-2 – *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* (see Note 2). The operating margin, income, and earnings per share data in the table below have been restated to reflect the impact of this retroactive adjustment on the results of operations for the first and second quarters of 2004.

<b>2004 Quarters</b>	<b>For the Quarter Ended</b>			
	<b>Dec. 31</b>	<b>Sep. 30</b>	<b>Jun. 30</b>	<b>Mar. 31</b>
<i>\$ in millions, except per share</i>				
Total revenue	\$ 7,846	\$ 7,408	\$ 7,435	\$ 7,164
Operating margin	538	538	492	438
Income from continuing operations	273	290	298	232
Net income	272	278	298	236
Basic earnings per share from continuing operations	.76	.81	.83	.64
Basic earnings per share	.75	.78	.83	.65
Diluted earnings per share from continuing operations	.74	.80	.82	.64
Diluted earnings per share	.74	.76	.82	.65
Dividends per common share	.23	.23	.23	.20
Dividends per mandatorily redeemable preferred share	1.75	1.75	1.75	1.75
<b>Stock Price Per Share</b>				
High	57.75	54.69	53.70	52.11
Low	49.94	50.22	48.73	47.34

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### **NORTHROP GRUMMAN CORPORATION**

*Significant Events* – In the first quarter of 2004, one of the CT businesses, Kester, was sold for approximately \$60 million in cash resulting in an after-tax gain of approximately \$3 million. Also in the first quarter, the company recorded a pre-tax charge of \$62 million for additional legal and interest costs relating to the judgment in the Allison Gas Turbine case.

In the second quarter of 2004, the company's Board of Directors approved a two-for-one stock split of the company's common stock and a 15 percent common stock dividend increase. Also in the second quarter, the company recorded a pre-tax charge of \$60 million for the F-16 Block 60 fixed-price development program reported in the Electronic Systems segment. During the same period, the company completed studies and recognized additional tax credits of approximately \$31 million related to research and development activities and extraterritorial income exclusion for the years 1997 through 2003.

During the third quarter of 2004, the company paid \$81 million in settlement of the judgment and interest related to the Allison Gas turbine case. In addition, the company reached an agreement with Auto regarding the repurchase of the payment-in-kind note and the resolution of outstanding contractual issues arising from the sale of Auto, and an agreement with The Blackstone Group to resolve an indemnification of other postretirement employee benefits arising from the sale of Auto. As a result of these agreements, the company recorded a \$9 million after-tax impairment charge to continuing operations relating to the note repurchase and a \$6 million after-tax charge to discontinued operations related to the settlement of the indemnification and other contractual issues. Also in the third quarter of 2004, the company suspended its efforts to sell the remaining three CT businesses and reclassified the assets, liabilities, and results of operations of these businesses from discontinued to continuing operations.

In the fourth quarter, the company recorded a pre-tax charge of \$42 million for the increased projected costs for the Wedgetail fixed-price development program in the Electronic Systems segment. Also in the fourth quarter, the company sold its Canadian navigation systems and space sensors systems businesses for \$65 million in cash, which resulted in a \$9 million after-tax gain recorded in discontinued operations. In addition, the company and Goodrich resolved certain post-closing liabilities related to warranty, customer claims, and certain other matters in exchange for a payment to Goodrich of \$99 million resulting in a \$15 million after-tax charge to discontinued operations. In the fourth quarter of 2004, the company received \$493.5 million from the sale of the Auto payment-in-kind note, which was net of \$40.5 million for settlement of the contractual issues, paid \$52.5 million for settlement of the indemnification discussed above, and made a voluntary pre-funding payment to the company's pension plans of \$250 million. The company recorded a pre-tax charge of \$35 million in the fourth quarter related to the settlement of the Robinson litigation (see Note 16).

<b>2003 Quarters</b>	<b>For the Quarter Ended</b>			
	<b>Dec. 31</b>	<b>Sep. 30</b>	<b>Jun. 30</b>	<b>Mar. 31</b>
<i>\$ in millions, except per share</i>				
Total revenue	\$ 7,149	\$ 6,664	\$ 6,672	\$ 5,911
Operating margin	362	394	384	328
Income from continuing operations	183	200	203	172
Net income	224	184	205	253
Basic earnings per share from continuing operations	.50	.55	.54	.45
Basic earnings per share	.62	.50	.54	.68
Diluted earnings per share from continuing operations	.50	.54	.53	.45
Diluted earnings per share	.61	.50	.54	.67
Dividends per common share	.20	.20	.20	.20
Dividends per mandatorily redeemable preferred share	1.75	1.75	1.75	1.75
<b>Stock Price Per Share</b>				
High	47.80	48.56	45.95	50.22
Low	42.38	42.46	40.11	39.50

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*Significant Events* – In the first quarter of 2003, the company paid \$1 billion in taxes upon completion of the B-2 EMD contract and recorded \$26 million in research and development tax credits.

In the second quarter of 2003, the company recorded a pre-tax charge of \$68 million for the Polar Tanker program in the Ships segment.

In the third quarter of 2003, the company recorded an after-tax loss from discontinued operations of \$46 million, including a goodwill impairment charge of \$47 million. Also in the third quarter, the company settled two civil False Claim Act cases (Newport Shipbuilding, Inc. and Jordan), reversed the unused portion of a reserve, and recorded loss provisions for settlement offers on other legal matters, which resulted in a net gain of \$17 million.

In the fourth quarter of 2003, the company recorded a pre-tax charge of \$40 million for the F-16 Block 60 combat avionics program in the Electronic Systems segment.

In 2003, the company sold several of the businesses reported in discontinued operations: Poly-Scientific and the company's 51 percent interest in the operations of TRW Koyo Steering Systems Company in the fourth quarter; Life Support during the third quarter; Auto and the VEAM business units in the first quarter. With the exception of Auto, none of these sales, either individually or in the aggregate, had a material effect on the company's results of operations.

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

No information is required in response to this item.

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

The company's principal executive officer (Chairman, Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated the company's disclosure controls and procedures as of December 31, 2004, and have concluded that these controls and procedures are effective to ensure that information required to be disclosed by the company in the reports that it files or submits under the Securities Exchange Act of 1934 (15 USC § 78a et seq) is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. These disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the company in the reports that it files or submits is accumulated and communicated to management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

**Changes in Internal Control Over Financial Reporting**

During the fourth quarter of 2004, no change occurred in the company's internal control over financial reporting that materially affected, or is likely to materially affect, the company's internal control over financial reporting.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The management of Northrop Grumman Corporation (the company) prepared and is responsible for the consolidated financial statements and all related financial information contained in this Annual Report. This responsibility includes establishing and maintaining adequate internal control over financial reporting. The company's internal control over financial reporting was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

To comply with the requirements of Section 404 of the Sarbanes–Oxley Act of 2002, the company designed and implemented a structured and comprehensive assessment process to evaluate its internal control over financial reporting across the enterprise. The assessment of the effectiveness of the company's internal control over financial reporting was based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Management regularly monitors its internal control over financial reporting, and actions are taken to correct any deficiencies as they are identified. Based on its assessment, management has concluded that the company's internal control over financial reporting is effective as of December 31, 2004.

Deloitte & Touche LLP issued an audit report dated March 1, 2005, concerning management's assessment of the company's internal control over financial reporting, which is contained in this Annual Report. The company's consolidated financial statements as of and for the year ended December 31, 2004, have been audited by the independent registered public accounting firm of Deloitte & Touche LLP in accordance with auditing standards generally accepted in the United States of America.

Ronald D. Sugar  
Chairman, Chief Executive Officer and President

Charles H. Noski  
Corporate Vice President and Chief Financial Officer

March 1, 2005

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

To the Board of Directors and Shareholders of  
Northrop Grumman Corporation  
Los Angeles, California

We have audited management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting, that Northrop Grumman Corporation and subsidiaries (the "Company") maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that the Company maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2004 of the Company and our report dated March 1, 2005 expressed an unqualified opinion on those financial statements and financial statement schedule.

Deloitte & Touche LLP  
Los Angeles, California  
March 1, 2005

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No information is required in response to this item.

**PART III****Item 10. Directors and Executive Officers of the Registrant****Directors**

The information as to Directors will be incorporated herein by reference to the Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

**Executive Officers**

The following individuals were the elected officers of the company as of February 28, 2005:

<u>Name</u>	<u>Age</u>	<u>Office Held</u>	<u>Since</u>	<u>Business Experience Last Five Years</u>
Ronald D. Sugar	56	Chairman, Chief Executive Officer and President	2003	Chief Executive Officer and President; Prior to April 2003, President and Chief Operating Officer (2001-2003); Corporate Vice President, Northrop Grumman Corporation, and President, Litton Industries, Inc. (2001); President and Chief Operating Officer, Litton Industries, Inc. (2000-2001); President and Chief Operating Officer, TRW Aerospace & Information Systems and Member of the Chief Executive Office of TRW, Inc. (1998-2000)
Wesley G. Bush	43	Corporate Vice President and Chief Financial Officer-Elect	2005	Prior to February 7, 2005, Corporate Vice President and President, Space Technology Sector; Prior to February 2003, Corporate Vice President of Northrop Grumman Corporation (2002-2003); Executive Vice President of TRW Inc. and President and Chief Executive Officer of TRW Aeronautical Systems (2001-2002); Vice President and General Manager, TRW Ventures, TRW Space & Electronics Group (2000-2001)
Philip A. Dur	60	Corporate Vice President and President, Ship Systems Sector	2001	Vice President, Electronic Systems Sector
J. Michael Hateley	58	Corporate Vice President and Chief Human Resources and Administrative Officer	2000	Vice President, Personnel
Robert W. Helm	53	Corporate Vice President, Business Development and Government Relations	1994	

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<u>Name</u>	<u>Age</u>	<u>Office Held</u>	<u>Since</u>	<u>Business Experience Last Five Years</u>
Robert P. Iorizzo	64	Corporate Vice President and President, Electronic Systems Sector	2001	Vice President and General Manager of Command, Control, Communications, Intelligence and Naval Systems Division, Electronic Systems Sector
Alexis C. Livanos	56	Corporate Vice President and President, Space Technology Sector	2005	Vice President and General Manager of Navigation and Space Sensors Division, Electronic Systems Sector; Prior to February 2003, Executive Vice President, Boeing Satellite Systems (2000-2003); Executive Vice President of Space Systems, Loral (1996-2000)
John H. Mullan	62	Corporate Vice President and Secretary	1999	
Albert F. Myers	59	Corporate Vice President, Strategy and Development	2003	Corporate Vice President and Treasurer
Charles H. Noski	52	Corporate Vice President and Chief Financial Officer	2003	Vice Chairman of the Board, AT&T; Prior to February 2002, Senior Executive Vice President and Chief Financial Officer, AT&T (1999-2002)
Rosanne P. O'Brien	61	Corporate Vice President, Communications	2000	Vice President, Corporate Communications
James R. O'Neill	51	Corporate Vice President and President, Information Technology	2004	President, TASC, Inc.; Prior to 2002, Senior Vice President and General Manager, Oracle Services Industries (2000-2002); Senior Vice President and Officer, Lucent Technologies (1997-2000)
C. Michael Petters	45	Corporate Vice President and President, Newport News Sector	2004	Vice President, Human Resources, Administration and Trades, Newport News Sector; Prior to January 2002, Vice President of Contracts Management (2000-2001); Vice President/General Manager Carriers (1998-2000)
James L. Sanford	59	Corporate Vice President and Treasurer	2003	Vice President, Corporate Contracts and Pricing
Scott J. Seymour	54	Corporate Vice President and President, Integrated Systems Sector	2002	Vice President, Integrated Systems Sector
W. Burks Terry	54	Corporate Vice President and General Counsel	2000	Vice President, Deputy General Counsel and Sector Counsel
Donald C. Winter	56	Corporate Vice President and President, Mission Systems Sector	2002	Executive Vice President of TRW Inc. and President and Chief Executive Officer, TRW Systems; Prior to 2002, Executive Vice President of TRW Inc. and General Manager, TRW Systems (2000-2001)

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**NORTHROP GRUMMAN CORPORATION**

<b><u>Name</u></b>	<b><u>Age</u></b>	<b><u>Office Held</u></b>	<b><u>Since</u></b>	<b><u>Business Experience Last Five Years</u></b>
Sandra J. Wright	49	Corporate Vice President and Controller; Chief Accounting Officer	2001	Corporate Controller; Prior to May 2001, Vice President and Controller of Litton Industries, Inc. (2000-2001); Vice President and Controller of Aerojet, a Gen Corp company (1999-2000)

**Audit Committee Financial Expert**

The information as to the Audit Committee Financial Expert is incorporated herein by reference to the Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

**Code of Ethics**

We have adopted Standards of Business Conduct for all our employees, including our principal executive officer, principal financial officer and principal accounting officer. The Standards of Business Conduct can be found on our internet web site at [www.northropgrumman.com](http://www.northropgrumman.com) under "Investor Relations – Corporate Governance – Overview."

Our web site and information contained on it or incorporated in it are not intended to be incorporated in this Annual Report on Form 10-K or our other filings with the SEC.

**Item 11. Executive Compensation**

The information as to Executive Compensation will be incorporated herein by reference to the Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

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

The information as to Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters will be incorporated herein by reference to the Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

**Item 13. Certain Relationships and Related Transactions**

The information as to Certain Relationships and Related Transactions will be incorporated herein by reference to the Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

**Item 14. Principal Accountant Fees and Services**

The information as to Principal Accountant Fees and Services will be incorporated herein by reference to the Proxy Statement for the 2005 Annual Meeting of Shareholders to be filed within 120 days after the end of the company's fiscal year.

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**Table of Contents****NORTHROP GRUMMAN CORPORATION****PART IV****Item 15. Exhibits and Financial Statement Schedules**

- (a) 1. Report of Independent Registered Public Accounting Firm on the Consolidated Financial Statements  
Financial Statements
- Consolidated Statements of Financial Position
  - Consolidated Statements of Income
  - Consolidated Statements of Comprehensive Income (Loss)
  - Consolidated Statements of Cash Flows
  - Consolidated Statements of Changes in Shareholders' Equity
  - Notes to Consolidated Financial Statements
2. Financial Statement Schedule
- Schedule II - Valuation and Qualifying Account

All other schedules are omitted either because they are not applicable or not required or because the required information is included in the financial statements or notes thereto.

**Exhibits**

- 3(a) Restated Certificate of Incorporation of Northrop Grumman Corporation (incorporated by reference to Exhibit C to the Definitive Proxy Statement on Schedule 14A filed April 4, 2003)
- 3(b) Amended and restated Bylaws of Northrop Grumman Corporation (incorporated by reference to Exhibit 3 to Form 10-Q for the quarter ended June 30, 2004, filed July 29, 2004)
- 4(a) Registration Rights Agreement dated as of January 23, 2001, by and among Northrop Grumman Systems Corporation, Northrop Grumman Corporation and Unitrin, Inc. (incorporated by reference to Exhibit (d)(6) to Amendment No. 4 to Schedule TO filed January 31, 2001)
- 4(b) Certificate of Designations, Preferences and Rights of Series B Preferred Stock of Northrop Grumman Corporation (incorporated by reference to Exhibit C to the Definitive Proxy Statement on Schedule 14A filed April 13, 2001)
- 4(c) Indenture dated as of October 15, 1994, between Northrop Grumman Systems Corporation and JPMorgan Chase Bank (formerly The Chase Manhattan Bank), as trustee (incorporated by reference to Exhibit 4.1 to Form 8-K dated October 20, 1994, and filed October 25, 1994)
- 4(d) Form of Officer's Certificate (without exhibits) establishing the terms of Northrop Grumman Systems Corporation's 7 percent Notes due 2006, 7.75 percent Debentures due 2016 and 7.875 percent Debentures due 2026 (incorporated by reference to Exhibit 4-3 to Form S-4 Registration Statement No. 333-02653 filed April 19, 1996)
- 4(e) Form of Northrop Grumman Systems Corporation's 7 percent Notes due 2006 (incorporated by reference to Exhibit 4-4 to Form S-4 Registration Statement No. 333-02653 filed April 19, 1996)
- 4(f) Form of Northrop Grumman Systems Corporation's 7.75 percent Debentures due 2016 (incorporated by reference to Exhibit 4-5 to Form S-4 Registration Statement No. 333-02653 filed April 19, 1996)
- 4(g) Form of Northrop Grumman Systems Corporation's 7.875 percent Debentures due 2026 (incorporated by reference to Exhibit 4-6 to Form S-4 Registration Statement No. 333-02653 filed April 19, 1996)

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

- 4(h) Form of Officers' Certificate establishing the terms of Northrop Grumman Systems Corporation's 7.125 percent Notes due 2011 and 7.75 percent Debentures due 2031 (incorporated by reference to Exhibit 10.9 to Form 8-K dated and filed April 17, 2001)
- 4(i) Indenture dated as of November 21, 2001, between Northrop Grumman Corporation and JPMorgan Chase Bank, as trustee (incorporated by reference to Exhibit 4.1 to Form 8-K dated and filed November 21, 2001)
- 4(j) Form of Officers' Certificate dated as of November 21, 2001, setting forth the terms of the Northrop Grumman Corporation 5.25 percent Senior Notes due 2006 that were a component of Northrop Grumman Corporation's Equity Security Units (incorporated by reference to Exhibit 4.2 to Form 8-K dated and filed November 21, 2001)
- 4(k) Form of Supplemental Officers' Certificate dated as of August 16, 2004 (supplementing the Officers' Certificate dated as of November 21, 2001, relating to the Northrop Grumman Corporation 5.25 percent Senior Notes due 2006) setting forth the terms of the Northrop Grumman Corporation 4.079 percent Senior Notes due 2006\*
- 4(l) Indenture dated as of April 13, 1998, between Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation) and The Bank of New York, as trustee, under which its 6.75 percent Senior Debentures due 2018 were issued (incorporated by reference to Exhibit 4.1 to the Form 10-Q of Litton Industries, Inc. for the quarter ended April 30, 1998, and filed June 15, 1998)
- 4(m) Supplemental Indenture with respect to Indenture dated April 13, 1998, dated as of April 3, 2001, among Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation), Northrop Grumman Corporation, Northrop Grumman Systems Corporation and The Bank of New York, as trustee (incorporated by reference to Exhibit 4.5 to Form 10-Q for the quarter ended March 31, 2001, filed May 10, 2001)
- 4(n) Supplemental Indenture with respect to Indenture dated April 13, 1998, dated as of December 20, 2002, among Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation), Northrop Grumman Corporation, Northrop Grumman Systems Corporation and The Bank of New York, as trustee (incorporated by reference to Exhibit 4(q) to Form 10-K for the year ended December 31, 2002, filed March 24, 2003)
- 4(o) Senior Indenture dated as of December 15, 1991, between Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation) and The Bank of New York, as trustee, under which its 7.75 percent and 6.98 percent debentures due 2026 and 2036 were issued and specimens of such debentures (incorporated by reference to Exhibit 4.1 to the Form 10-Q of Litton Industries, Inc. for the quarter ended April 30, 1996, filed June 11, 1996)
- 4(p) Supplemental Indenture with respect to Indenture dated December 15, 1991, dated as of April 3, 2001, among Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation), Northrop Grumman Corporation, Northrop Grumman Systems Corporation and The Bank of New York, as trustee (incorporated by reference to Exhibit 4.7 to Form 10-Q for the quarter ended March 31, 2001, filed May 10, 2001)
- 4(q) Supplemental Indenture with respect to Indenture dated December 15, 1991, dated as of December 20, 2002, among Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation), Northrop Grumman Corporation, Northrop Grumman Systems Corporation and The Bank of New York, as trustee (incorporated by reference to Exhibit 4(t) to Form 10-K for the year ended December 31, 2002, filed March 24, 2003)

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

- 4(r) Form of Exchange Security for the \$400,000,000 8 percent senior notes due 2009 of Litton Industries, Inc. (predecessor -in -interest to Northrop Grumman Systems Corporation) (incorporated by reference to Exhibit 4.3 to the Form 10-Q of Litton Industries, Inc. for the quarter ended April 30, 2000, filed June 9, 2000)
- 4(s) Indenture between TRW Inc. (now named Northrop Grumman Space & Mission Systems Corp.) and The Chase Manhattan Bank, as successor Trustee, dated as of May 1, 1986 (incorporated by reference to Exhibit 2 to the Form 8-A Registration Statement of TRW Inc. dated July 3, 1986)
- 4(t) First Supplemental Indenture between TRW Inc. (now named Northrop Grumman Space & Mission Systems Corp.) and The Chase Manhattan Bank, as successor Trustee, dated as of August 24, 1989 (incorporated by reference to Exhibit 4(b) to Form S -3 Registration Statement No. 33 -30350 of TRW Inc.)
- 4(u) Fourth Supplemental Indenture between TRW Inc. (now named Northrop Grumman Space & Mission Systems Corp.) and The Chase Manhattan Bank, as successor Trustee, dated as of June 2, 1999 (incorporated by reference to Exhibit 4(e) to Form S-4 Registration Statement No. 333-83227 of TRW Inc. filed July 20, 1999)
- 4(v) Fifth Supplemental Indenture between TRW Inc. (now named Northrop Grumman Space & Mission Systems Corp.) and The Chase Manhattan Bank, as successor Trustee, dated as of June 2, 1999 (incorporated by reference to Exhibit 4(f) to Form S-4 Registration Statement No. 333-83227 of TRW Inc. filed July 20, 1999)
- 10(a) Northrop Grumman 1993 Long-Term Incentive Stock Plan, as amended and restated (incorporated by reference to Exhibit 4.1 to Form S-8 Registration Statement No. 333-68003 filed November 25, 1998)
- 10(b) Northrop Corporation 1993 Stock Plan for Non -Employee Directors (incorporated by reference to Exhibit B to the Northrop Corporation 1993 Proxy Statement filed March 30, 1993), amended as of September 21, 1994 (incorporated by reference to Exhibit 10(q) to Form 10-K for the year ended December 31, 1994, filed March 21, 1995)
- 10(c) Northrop Grumman Corporation 1995 Stock Option Plan for Non -Employee Directors, as Amended as of May 11, 2004 (incorporated by reference to Exhibit 10.1 to Form 10-Q for the quarter ended June 30, 2004, filed July 29, 2004)
- 10(d) Northrop Grumman 2001 Long-Term Incentive Stock Plan (As amended September 17, 2003) (incorporated by reference to Exhibit 10.1 to Form 10-Q for the quarter ended September 30, 2003, filed November 6, 2003)
  - (i) Form of Restricted Performance Stock Rights Agreement (incorporated by reference to Exhibit 10.42 to Amendment No. 6 to Form S -4 Registration Statement No. 333-83672 filed September 13, 2002)
  - (ii) Form of Notice of Non -Qualified Grant of Stock Options and Option Agreement (incorporated by reference to Exhibit 10.5 to Form S -4 Registration Statement No. 333-83672 filed March 4, 2002)
  - (iii) Amended form of Non-Qualified Stock Option Agreement applicable to 2004 stock options (for officers) (incorporated by reference to Exhibit 10.2 to Form 10-Q for the quarter ended June 30, 2004, filed July 29, 2004)
  - (iv) Form of Agreement for 2005 Restricted Performance Stock Rights (for officers)\*
  - (v) Form of Agreement for 2005 Stock Options (for officers)\*
  - (vi) Form of letter from Northrop Grumman Corporation regarding Stock Option and RPSR Retirement Enhancement\*

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

- 10(e) Form of \$2,500,000,000 Five-Year Revolving Credit Agreement dated as of March 30, 2001, among Northrop Grumman Corporation, Northrop Grumman Systems Corporation and Litton Industries, Inc. (predecessor-in-interest to Northrop Grumman Systems Corporation), the Lenders party thereto, The Chase Manhattan Bank and Credit Suisse First Boston, as Co-Administrative Agents, Salomon Smith Barney Inc., as Syndication Agent, and The Bank of Nova Scotia and Deutsche Banc Alex. Brown, Inc. as Co-Documentation Agents (incorporated by reference to Exhibit 10.7 to Amendment No. 2 to Form S-4 Registration Statement No. 333-54800 filed March 27, 2001), and amended by First Amendment dated as of November 26, 2003 (incorporated by reference to Exhibit 10.1 to Form 10-Q for the quarter ended March 31, 2003, filed May 14, 2003) and Second Amendment dated as of January 15, 2004\*
- 10(f) Form of Guarantee dated as of April 3, 2001, by Northrop Grumman Corporation of the indenture indebtedness issued by the former Litton Industries, Inc. (incorporated by reference to Exhibit 10.10 to Form 8-K dated and filed April 17, 2001)
- 10(g) Form of Guarantee dated as of April 3, 2001, by Northrop Grumman Corporation of Northrop Grumman Systems Corporation indenture indebtedness (incorporated by reference to Exhibit 10.11 to Form 8-K dated and filed April 17, 2001)
- 10(h) Form of Guarantee dated as of March 27, 2003, by Northrop Grumman Corporation, as Guarantor, in favor of JP Morgan Chase Bank (formerly The Chase Manhattan Bank), as trustee, of certain debt securities of Northrop Grumman Space & Mission Systems Corp. (formerly TRW Inc.) (incorporated by reference to Exhibit 4.2 to Form 10-Q for the quarter ended March 31, 2003, filed May 14, 2003)
- 10(i) Form of Guarantee dated as of January 9, 2003, by Northrop Grumman Space & Mission Systems Corp. (formerly TRW Inc.) of Northrop Grumman Systems Corporation indenture indebtedness (incorporated by reference to Exhibit 10(qq) to Form 10-K for the year ended December 31, 2002, filed March 24, 2003)
- 10(j) Northrop Grumman Supplemental Plan 2 as amended and restated effective October 1, 2004\*
- (i) Appendix A: Northrop Supplemental Retirement Income Program for Senior Executives as amended and restated effective July 1, 2003\*
  - (ii) Appendix B: ERISA Supplemental Program 2 as amended and restated effective October 1, 2004\*
  - (iii) Appendix F: CPC Supplemental Executive Retirement Program as amended and restated effective October 1, 2004\*
  - (iv) Appendix G: Officers Supplemental Executive Retirement Program as amended and restated effective October 1, 2004\*
  - (v) Appendix H: Robert P. Iorizzo Program as amended and restated effective October 1, 2004\*
- 10(k) Northrop Grumman ERISA Supplemental Plan as amended and restated effective October 1, 2004\*
- 10(l) Northrop Grumman Corporation March 2004 Change-in-Control Severance Plan (incorporated by reference to Exhibit 10.4 to Form 10-Q for the quarter ended September 30, 2003, filed November 6, 2003)
- 10(m) Northrop Grumman Corporation Non-Employee Directors Equity Participation Plan, as amended December 18, 2002 (incorporated by reference to Exhibit 10(ff) to Form 10-K for the year ended December 31, 2002, filed March 24, 2003)
- 10(n) Special Officer Retiree Medical Plan (As Amended and Restated Effective October 1, 2003) (incorporated by reference to Exhibit 10.3 to Form 10-Q for the quarter ended September 30, 2003, filed November 6, 2003)

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**Table of Contents****NORTHROP GRUMMAN CORPORATION**

- 10(o) Northrop Grumman Deferred Compensation Plan as amended and restated effective October 1, 2004\*
- 10(p) The 2002 Incentive Compensation Plan of Northrop Grumman Corporation (incorporated by reference to Exhibit B to the Definitive Proxy Statement on Schedule 14A filed April 4, 2002)
- 10(q) Form of Indemnification Agreement between Northrop Grumman Corporation and its directors and executive officers (incorporated by reference to Exhibit 10.39 to Form S-4 Registration Statement No. 333-83672 filed March 4, 2002)
- 10(r) Employment Agreement dated February 19, 2003, between Northrop Grumman Corporation and Dr. Ronald D. Sugar (incorporated by reference to Exhibit 10(nn) to Form 10-K for the year ended December 31, 2002, filed March 24, 2003)
- 10(s) Employment Agreement between Dr. Ronald D. Sugar and Northrop Grumman Corporation dated September 19, 2001 (incorporated by reference to Exhibit 10.3 to Form 10-Q for the quarter ended September 30, 2001, filed November 5, 2001)
- 10(t) Letter Agreement dated June 21, 2000, between Litton Industries, Inc. and Ronald D. Sugar (incorporated by reference to Exhibit 10.1 to Form 8-K of Litton Industries, Inc. ("LII") dated and filed June 22, 2000, as amended by Amendment dated December 21, 2000 (incorporated by reference to Exhibit 99.(e)(6) to Schedule 14D-9 of LII filed January 5, 2001) and Letter Agreement dated January 31, 2001, between Northrop Grumman Corporation and Ronald D. Sugar (incorporated by reference to Exhibit (e)(16) to Amendment No. 3 to Schedule 14D-9 of LII filed February 1, 2001)
- 10(u) Northrop Grumman Supplementary Retirement Income Plan (formerly TRW Supplementary Retirement Income Plan) amended and restated effective January 1, 2004\*
- 10(v) Form of Northrop Grumman Corporation March 2004 Special Agreement (incorporated by reference to Exhibit 10.5 to Form 10-Q for the quarter ended September 30, 2003, filed November 6, 2003)
- 10(w) Employment Agreement between Charles H. Noski and Northrop Grumman Corporation dated as of October 16, 2003, including Charles H. Noski Executive Retirement Plan attached as Exhibit A, Executive Perquisite Summary attached as Exhibit B, Northrop Grumman Corporation March 2004 Special Agreement attached as Exhibit C and Release Agreement attached as Exhibit D (incorporated by reference to Exhibit 10.7 to Form 10-Q for the quarter ended September 30, 2003, filed November 6, 2003)
- 10(x) Northrop Grumman 2002 Annual Incentive Plan – Incentive Compensation Plan (for Non-Section 162(m) Officers), Performance Achievement Plan, Incentive Management Achievement Plan\*
- 10(y) Northrop Grumman Savings Excess Plan as amended and restated effective October 1, 2004\*
- 10(z) Employment Agreement between Donald C. Winter and Northrop Grumman Corporation effective as of December 11, 2002\*
- 10(aa) Employment Agreement between Wesley G. Bush and Northrop Grumman Corporation dated December 12, 2002 (incorporated by reference to Exhibit 99.2 to Form 8-K dated January 14, 2005, and filed January 18, 2005)
- 10(bb) Agreement between Charles H. Noski and Northrop Grumman Corporation dated January 14, 2005 (incorporated by reference to Exhibit 99.1 to Form 8-K dated January 14, 2005, and filed January 18, 2005)
- 10(cc) Litton Industries, Inc. Restoration Plan 2 effective April 3, 2001\*
- 10(dd) Litton Industries, Inc. Restoration Plan as amended and restated effective October 1, 2004\*
- 10(ee) Litton Industries, Inc. Supplemental Executive Retirement Plan as amended and restated effective October 1, 2004\*

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**Table of Contents**

**NORTHROP GRUMMAN CORPORATION**

10(ff)	Northrop Grumman Electronic Systems Executive Pension Plan as amended and restated effective October 1, 2004*
10	
(gg)	Executive Life Insurance Policy*
10	
(hh)	Executive Accidental Death, Dismemberment and Plegia Insurance Policy*
10(ii)	Executive Long-Term Disability Insurance Policy*
10(jj)	Corporate Owned Life Insurance Policy (provided for Dr. Ronald D. Sugar)*
10	
(kk)	Executive Dental Insurance Policy Group Numbers 5134 and 5135 (incorporated by reference to Exhibit 10(m) to Form 10-K for the year ended December 31, 1995, filed February 22, 1996)
10(ll)	Group Personal Excess Liability Policy*
10	
(mm)	Severance Plan for Elected and Appointed Officers of Northrop Grumman Corporation (As amended and restated effective August 1, 2003) (incorporated by reference to Exhibit 10.2 to Form 10-Q for the quarter ended September 30, 2003, filed November 6, 2003)
21	Subsidiaries*
23	Consent of Independent Registered Public Accounting Firm*
24	Power of Attorney*
31.1	Rule 13a-15(e)/15d-15(e) Certification of Ronald D. Sugar (Section 302 of the Sarbanes-Oxley Act of 2002)*
31.2	Rule 13a-15(e)/15d-15(e) Certification of Charles H. Noski (Section 302 of the Sarbanes-Oxley Act of 2002)*
32.1	Certification of Ronald D. Sugar pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes -Oxley Act of 2002**
32.2	Certification of Charles H. Noski pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes -Oxley Act of 2002**
*	Filed with this Report
**	Furnished with this Report

[Table of Contents](#)**NORTHROP GRUMMAN CORPORATION****SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 1st day of March 2005.

NORTHROP GRUMMAN CORPORATION

By:           /s/ Sandra J. Wright

Sandra J. Wright  
Corporate Vice President and Controller  
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed on behalf of the registrant this the 1st day of March 2005, by the following persons and in the capacities indicated.

<u>Signature</u>	<u>Title</u>
Ronald D. Sugar *	Chairman, Chief Executive Officer, and President (Principal Executive Officer), and Director
Charles H. Noski.*	Corporate Vice President and Chief Financial Officer, and Director (Principal Financial Officer)
John T. Chain, Jr.*	Director
Lewis W. Coleman*	Director
J. Michael Cook*	Director
Vic Fazio*	Director
Phillip Frost*	Director
Charles R. Larson*	Director
Phillip A. Odeen*	Director
Aulana L. Peters*	Director
Kevin W. Sharer*	Director
John Brooks Slaughter*	Director

\*By:           /s/ John H. Mullan

John H. Mullan  
Attorney-in-Fact  
pursuant to a power of attorney

Table of Contents**NORTHROP GRUMMAN CORPORATION****SCHEDULE II—VALUATION AND QUALIFYING ACCOUNT**

(\$ in millions)

Description	Balance at Beginning of Period	Additions At Cost (1)	Changes - Add (Deduct) (2)	Balance at End of Period
Year ended December 31, 2002				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts <sup>(3)</sup>	\$ 140	\$ 221	\$ (67)	\$ 294
Year ended December 31, 2003				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts <sup>(3)</sup>	\$ 294	\$ 83	\$ (129)	\$ 248
Year ended December 31, 2004				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts	\$ 248	\$ 107	\$ (87)	\$ 268

- (1) Includes reserves and allowances acquired of \$.4 million and \$72 million for the years ended December 31, 2003 and 2002, respectively.
- (2) Uncollectible amounts written off, net of recoveries.
- (3) Prior year amounts have been reclassified to conform to current year presentation and have been restated for discontinued operations, as appropriate.