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

FORM 10-Q

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

For the Quarterly Period Ended June 30, 2003

or

☐ 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	**95-4840775**
(State or other jurisdiction of incorporation or organization)	(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)

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 whether the Registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2).

Yes ☒ No ☐

APPLICABLE ONLY TO CORPORATE ISSUERS

Indicate the number of shares outstanding of each of the issuer's classes of stock, as of the latest practicable date.

As of July 30, 2003

Common stock outstanding	182,952,138 shares
Preferred stock outstanding	3,500,000 shares

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONSOLIDATED CONDENSED STATEMENTS OF FINANCIAL POSITION

$ in millions	(Unaudited) June 30, 2003	December 31, 2002
Assets:		
Cash and cash equivalents	**$ 268**	$ 1,412
Accounts receivable, net of progress payments of $19,133 in 2003 and $16,152 in 2002	**2,980**	2,889
Inventoried costs, net of progress payments of $887 in 2003 and $988 in 2002	**1,226**	1,091
Deferred income taxes	**646**	662
Prepaid expenses and other current assets	**144**	160
Assets of businesses held for sale	**463**	9,621
Total current assets	**5,727**	15,835
Net property, plant and equipment	**3,920**	3,605
Goodwill	**17,394**	15,657
Other purchased intangibles, net of accumulated amortization of $874 in 2003 and $760 in 2002	**1,823**	2,553
Prepaid retiree benefits cost and intangible pension asset	**3,465**	3,618
Deferred income taxes	**439**	174
Notes receivable and accrued interest	**482**	98
Miscellaneous other assets	**738**	726
Total other assets	**24,341**	22,826
Total Assets	**$ 33,988**	$ 42,266

$ in millions	(Unaudited) **June 30, 2003**	December 31, 2002
Liabilities and Shareholders' Equity:		
Notes payable to banks	**$ 28**	$ 22
Current portion of long-term debt	**142**	203
Trade accounts payable	**1,300**	1,427
Accrued employees' compensation	**1,040**	1,018
Advances on contracts	**1,046**	1,006
Contract loss provisions	**512**	453
Income taxes payable	**298**	1,237
Other current liabilities	**1,309**	1,414
Liabilities of businesses held for sale	**133**	4,593
Total current liabilities	**5,808**	11,373
Long-term debt	**6,412**	9,398
Accrued retiree benefits	**5,959**	5,942
Other long-term liabilities	**764**	742
Minority interest	**25**	139
Mandatorily redeemable preferred stock	**350**	350
Paid-in capital		
Preferred stock, 10,000,000 shares authorized; 3,500,000 shares issued and outstanding, reported above		
Common stock, 800,000,000 shares authorized; issued and outstanding: 2003 – 182,947,091; 2002 – 182,602,390	**12,545**	12,511
Retained earnings	**3,169**	2,870
Unearned compensation	**(8)**	(11)
Accumulated other comprehensive loss	**(1,036)**	(1,048)
Total shareholders' equity	**14,670**	14,322
Total Liabilities and Shareholders' Equity	**$ 33,988**	$ 42,266

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

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS
(Unaudited)

$ in millions, except per share	Three months ended June 30, **2003**	2002	Six months ended June 30, **2003**	2002
Product sales and service revenues	**$ 6,627**	$ 4,231	**$ 12,493**	$ 8,162
Cost of product sales and service revenues				
Operating costs	**5,685**	3,457	**10,648**	6,717
Administrative and general expenses	**551**	420	**1,126**	778
Operating margin	**391**	354	**719**	667
Interest income	**17**	2	**29**	4
Interest expense	**(119)**	(105)	**(263)**	(214)
Other, net	**11**	10	**28**	20
Income from continuing operations before income taxes and cumulative effect of accounting change	**300**	261	**513**	477
Federal and foreign income taxes	**93**	80	**132**	147
Income from continuing operations before cumulative effect of accounting change	**207**	181	**381**	330
Income from discontinued operations, net of tax	**2**	1	**82**	1
Loss on disposal of discontinued operations, net of tax	**(4)**		**(5)**	
Income before cumulative effect of accounting change	**205**	182	**458**	331
Cumulative effect of accounting change				(432)
Net income (loss)	**$ 205**	$ 182	**$ 458**	$ (101)
Weighted average common shares outstanding, in millions	**182.93**	112.84	**182.81**	112.12
Basic earnings (loss) per common share				
Continuing operations	**$ 1.10**	$ 1.55	**$ 2.02**	$ 2.83
Discontinued operations	**.01**	.01	**.45**	.01
Disposal of discontinued operations	**(.02)**		**(.03)**	
Before cumulative effect of accounting change	**1.09**	1.56	**2.44**	2.84
Cumulative effect of accounting change				(3.85)
Basic earnings (loss) per common share	**$ 1.09**	$ 1.56	**$ 2.44**	$ (1.01)
Diluted earnings (loss) per share				
Continuing operations	**$ 1.09**	$ 1.52	**$ 2.00**	$ 2.79
Discontinued operations	**.01**	.01	**.45**	.01
Disposal of discontinued operations	**(.02)**		**(.03)**	
Before cumulative effect of accounting change	**1.08**	1.53	**2.42**	2.80
Cumulative effect of accounting change				(3.79)
Diluted earnings (loss) per share	**$ 1.08**	$ 1.53	**$ 2.42**	$ (.99)
Dividends per common share	**$ .40**	$ .40	**$ .80**	$ .80
Dividends per mandatorily redeemable preferred share	**$ 1.75**	$ 1.75	**$ 3.50**	$ 3.50

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

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Unaudited)

Six months ended June 30, $ in millions	**2003**	2002
Paid-in Capital		
At beginning of year	**$ 12,511**	$ 4,451
Stock issued in purchase of businesses		308
Employee stock awards and options	**34**	90
	12,545	4,849
Retained Earnings		
At beginning of year	**2,870**	3,011
Net income (loss)	**458**	(101)
Cash dividends	**(159)**	(102)
	3,169	2,808
Unearned Compensation		
At beginning of year	**(11)**	(18)
Amortization of unearned compensation	**3**	3
	(8)	(15)
Accumulated Other Comprehensive Loss		
At beginning of year	**(1,048)**	(53)
Change in cumulative translation adjustment	**12**	1
	(1,036)	(52)
Total shareholders' equity	**$ 14,670**	$ 7,590

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

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS
(Unaudited)

Six months ended June 30, $ in millions	**2003**	2002
Operating Activities		
Sources of Cash—Continuing Operations		
Cash received from customers		
Progress payments	**$ 3,348**	$ 2,681
Other collections	**8,968**	5,531
Interest received	**12**	62
Income tax refunds received	**20**	53
Other cash receipts	**35**	21
Cash provided by operating activities	**12,383**	8,348
Uses of Cash—Continuing Operations		
Cash paid to suppliers and employees	**11,342**	7,583
Interest paid	**329**	200
Income taxes paid	**1,121**	89
Other cash payments	**10**	3
Cash used in operating activities	**12,802**	7,875
Cash (used in) provided by continuing operations	**(419)**	473
Cash provided by discontinued operations	**44**	
Net cash (used in) provided by operating activities	**(375)**	473
Investing Activities		
Proceeds from sale of businesses, net of cash divested	**3,297**	
Payment for businesses purchased, net of cash acquired	**(43)**	(166)
Additions to property, plant and equipment	**(229)**	(209)
Proceeds from sale of property, plant and equipment	**20**	16
Other investing activities, net	**(1)**	(8)
Discontinued operations	**(69)**	(5)
Net cash provided by (used in) investing activities	**2,975**	(372)
Financing Activities		
Borrowings under lines of credit	**758**	507
Repayment of borrowings under lines of credit	**(122)**	(400)
Principal payments of long-term debt/capital leases	**(3,768)**	(440)
Proceeds from issuance of stock	**7**	66
Dividends paid	**(159)**	(102)
Redemption of minority interest	**(117)**	
Discontinued operations	**(343)**	
Net cash used in financing activities	**(3,744)**	(369)
Decrease in cash and cash equivalents	**(1,144)**	(268)
Cash and cash equivalents balance at beginning of period	**1,412**	464
Cash and cash equivalents balance at end of period	**$ 268**	$ 196

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

Six months ended June 30, $ in millions	**2003**	2002
Reconciliation of Income from Continuing Operations before Cumulative Effect of Accounting Change to Net Cash (Used in) Provided by Operating Activities:		
Income from continuing operations before cumulative effect of accounting change	**$ 381**	$ 330
Adjustments to reconcile to net cash (used in) provided by operating activities		
Depreciation	**220**	190
Amortization of intangible assets	**114**	82
Common stock issued to employees	**28**	26
Gain on disposals of property, plant and equipment	**(5)**	(5)
Amortization of long-term debt premium	**(30)**	(1)
(Increase) decrease in		
Accounts receivable	**(3,061)**	(2,515)
Inventoried costs	**(35)**	(45)
Prepaid expenses and other current assets	**5**	(8)
Increase (decrease) in		
Progress payments	**2,881**	2,682
Accounts payable and accruals	**(226)**	(354)
Provisions for contract losses	**46**	33
Deferred income taxes	**185**	(317)
Income taxes payable	**(1,137)**	429
Retiree benefits	**233**	(78)
Other noncash transactions	**(18)**	24
Cash (used in) provided by continuing operations	**(419)**	473
Cash provided by discontinued operations	**44**	
Net cash (used in) provided by operating activities	**$ (375)**	$ 473
Noncash Investing and Financing Activities:		
Conversion of debt to equity		$ 3
Sale of business		
Note receivable, net of discount	**$ 455**	
Investment in unconsolidated affiliate	**170**	
Purchase of businesses		
Fair value of assets acquired		$ 765
Cash paid		(166)
Common stock issued		(308)
Liabilities assumed		$ 291

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

NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS
(Unaudited)

Basis of Presentation
The unaudited consolidated condensed financial statements include the accounts of Northrop Grumman Corporation and its subsidiaries (the company). All material intercompany accounts, transactions and profits are eliminated in consolidation.

The accompanying unaudited consolidated condensed financial statements of the company have been prepared by management in accordance with the instructions to Form 10-Q of the Securities and Exchange Commission. These statements include all adjustments considered necessary by management to present a fair statement of the results of operations, financial position and cash flows. The results reported in these financial statements should not be regarded as necessarily indicative of results that may be expected for the entire year. These financial statements should be read in conjunction with the Notes to Consolidated Financial Statements and Independent Auditors' Report contained in the company's 2002 Annual Report.

Financial Statement Reclassification
Certain prior year amounts have been reclassified to conform to the 2003 presentation.

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, after giving recognition to stock splits and stock dividends. Income available to common shareholders from continuing operations before cumulative effect of accounting change is calculated by reducing income from continuing operations before cumulative effect of accounting change by the amount of dividends accrued on mandatorily redeemable preferred stock. Diluted earnings per share from continuing operations before cumulative effect of accounting change 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 mandatorily redeemable preferred stock have not been included in the diluted earnings per share calculation because their effect is currently anti-dilutive.

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

$ in millions, except per share	Three months ended June 30, **2003**	Three months ended June 30, 2002	Six months ended June 30, **2003**	Six months ended June 30, 2002
Basic Earnings per Share				
Income from continuing operations before cumulative effect of accounting change	**$ 207**	$ 181	**$ 381**	$ 330
Less preferred dividends	**6**	6	**12**	12
Income available to common shareholders from continuing operations before cumulative effect of accounting change	**$ 201**	$ 175	**$ 369**	$ 318
Weighted-average common shares outstanding, in millions	**182.93**	112.84	**182.81**	112.12
Basic earnings per share from continuing operations before cumulative effect of accounting change	**$ 1.10**	$ 1.55	**$ 2.02**	$ 2.83
Diluted Earnings per Share				
Income from continuing operations before cumulative effect of accounting change	**$ 207**	$ 181	**$ 381**	$ 330
Less preferred dividends	**6**	6	**12**	12
Income available to common shareholders from continuing operations before cumulative effect of accounting change	**$ 201**	$ 175	**$ 369**	$ 318
Weighted-average common shares outstanding, in millions	**182.93**	112.84	**182.81**	112.12
Dilutive effect of stock options, awards and equity security units, in millions	**1.44**	1.98	**1.51**	1.67
Weighted-average diluted shares outstanding, in millions	**184.37**	114.82	**184.32**	113.79
Diluted earnings per share from continuing operations before cumulative effect of accounting change	**$ 1.09**	$ 1.52	**$ 2.00**	$ 2.79

Goodwill and Other Purchased Intangible Assets

The company accounts for goodwill under the impairment-only approach prescribed by Statement of Financial Accounting Standards (SFAS) No. 142 – *Goodwill and Other Intangible Assets*. Impairment tests are performed at least annually and more often as circumstances require. Goodwill and other purchased intangible assets balances are included in the identifiable assets of the 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 segment's operating margin. The annual impairment test for all sectors except Mission Systems and Space Technology was performed as of April 30, 2003, with no indication of impairment. Mission Systems and Space Technology will be tested in the second half of the year.

The changes in the carrying amount of goodwill for the six months ended June 30, 2003, are as follows:

$ in millions	Balance as of December 31, 2002	Goodwill acquired	Fair value adjustments to net assets acquired	Balance as of June 30, 2003
Electronic Systems	$ 2,557	$	$ 42	$ 2,599
Ships	3,635			3,635
Information Technology	1,117	5		1,122
Mission Systems	3,705		1,957	5,662
Integrated Systems	938			938
Space Technology	3,705		(267)	3,438
Total	$ 15,657	$ 5	$ 1,732	$ 17,394

In connection with the acquisition of TRW Inc. (TRW), the company has allocated $416 million of the purchase price as purchased intangible assets with a weighted average life of 8 years. See the "Acquisitions" footnote contained herein for additional information. The table below summarizes the company's aggregate purchased intangible assets as of June 30, 2003, and December 31, 2002.

	June 30, 2003			**December 31, 2002**		
$ in millions	Gross Carrying Amount	Accumulated Amortization	**Net Carrying Amount**	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Contract and program intangibles	$2,587	$(825)	**$1,762**	$3,253	$(714)	$2,539
Other purchased intangibles	110	(49)	**61**	60	(46)	14
Total	$2,697	$(874)	**$1,823**	$3,313	$(760)	$2,553

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 for the three months and six months ended June 30, 2003, was $57 million and $114 million, respectively.

The table below shows expected amortization for the remainder of 2003 and for the next five years:

$ in millions	
Year Ended December 31,	
2003 (July 1 to December 31)	$ 114
2004	226
2005	217
2006	129
2007	116
2008	108

Discontinued Operations

The company's Condensed Consolidated Financial Statements and related footnote disclosures reflect the Auto and Component Technologies 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*. As such, discontinued operations includes the January and February 2003 results of TRW Automotive (Auto), the sale of which was completed February 28, 2003, and the results of the company's remaining Component Technologies businesses. The assets and liabilities of these businesses have been reclassified as held for sale.

Proceeds received in the first quarter of 2003 from the sale of Auto included $3.3 billion in cash, a $600 million face value payment-in-kind note, valued at $455 million, and a 19.6 percent investment in the new enterprise, valued at $170 million. The cash received was adjusted from the sale agreement amount by cash sold with the business, preliminary purchase price adjustments, and an asset retained. The payment-in-kind note matures in 2018 and bears interest at an effective yield of 11.7 percent per annum. The acquirer also assumed debt of approximately $200 million. Final valuation of the Auto transaction will occur upon settlement of purchase price adjustments, expected to be completed in the second half of 2003, and may result in additional adjustments. The company has retained certain liabilities associated with the Auto business as well as the Aeronautical Systems business that TRW divested in 2002.

In the second quarter of 2003, the company entered into an agreement with COB Support Acquisition Inc., an indirect wholly-owned subsidiary of Cobham plc, to sell the Life Support business, one of the discontinued Component Technologies businesses. The transaction is expected to close in the second half of 2003.

Operating results of the discontinued businesses for the three months and six months ended June 30, 2003, and 2002, respectively, are as follows:

$ in millions	Three months ended June 30, **2003**	Three months ended June 30, 2002	Six months ended June 30, **2003**	Six months ended June 30, 2002
Sales	**$ 178**	$ 197	**$ 2,224**	$ 320
Income from discontinued operations	**$ 3**	$ 3	**$ 126**	$ 3
Income tax expense	**(1)**	(2)	**(44)**	(2)
Income from discontinued operations, net of tax	**$ 2**	$ 1	**$ 82**	$ 1
Loss on disposal of discontinued operations	**$ (7)**		**$ (8)**	
Income tax benefit	**3**		**3**	
Loss on disposal of discontinued operations, net of tax	**$ (4)**		**$ (5)**	

The major classes of assets and liabilities for the discontinued businesses at June 30, 2003, and December 31, 2002, were as follows:

$ in millions	**June 30, 2003**	December 31, 2002
Current assets	**$ 112**	$ 2,161
Net property, plant and equipment	**130**	2,799
Goodwill	**98**	4,117
Miscellaneous other assets	**123**	544
Assets of businesses held for sale	**$ 463**	$ 9,621
Accounts payable and other current liabilities	**$ 110**	$ 2,661
Long-term debt	**1**	229
Other long-term liabilities	**22**	1,703
Liabilities of businesses held for sale	**$ 133**	$ 4,593

Acquisitions

In December 2002, the company purchased 100 percent of the common stock of TRW. TRW's defense business units are operated as two separate sectors, Mission Systems and Space Technology. The TRW acquisition is accounted for using the purchase method of accounting. Under the purchase method of accounting, the purchase price is allocated to the underlying tangible and intangible assets acquired and liabilities assumed based on their respective fair market values, with the excess recorded as goodwill. The financial statements and the information from which they were derived reflect preliminary estimates of the fair market value of the assets acquired and liabilities assumed and the related allocations of purchase price and preliminary estimates of adjustments necessary to conform TRW to the company's accounting policies. The company is currently reviewing preliminary accounting conformance adjustments and preliminary estimates of the fair market value of assets acquired and liabilities assumed, including valuations associated with certain contracts, debt, environmental and other legal contingencies, restructuring activities, warranty liabilities, income taxes, insurance liabilities, property, plant, and equipment, retiree benefits assets and liabilities, and any purchase price adjustments and retained liabilities associated with the Auto and Aeronautical Systems divestitures. The final determination of the fair market value of assets acquired and liabilities assumed and final allocation of the purchase price may differ significantly from the amounts included in the financial statements contained in this Form 10-Q. Adjustments to the purchase price allocations of TRW are expected to be finalized by the fourth quarter of 2003 and will be reflected in future filings. There can be no assurance that such adjustments will not be material.

Segment Information

The table below shows segment operating information for the three months and six months ended June 30, 2003, and 2002, respectively.

	Three months ended June 30,		Six months ended June 30,	
$ in millions	**2003**	2002	**2003**	2002
Net Sales				
Electronic Systems	**$ 1,512**	$ 1,299	**$ 2,850**	$ 2,500
Ships	**1,379**	1,157	**2,580**	2,234
Information Technology	**1,155**	1,036	**2,247**	1,965
Mission Systems	**1,083**		**2,012**	
Integrated Systems	**988**	829	**1,804**	1,636
Space Technology	**733**		**1,381**	
Intersegment eliminations	**(223)**	(90)	**(381)**	(173)
Total Net Sales	**$ 6,627**	$ 4,231	**$ 12,493**	$ 8,162
Operating Margin				
Electronic Systems	**$ 148**	$ 109	**$ 269**	$ 199
Ships	**23**	85	**98**	152
Information Technology	**67**	41	**129**	91
Mission Systems	**74**		**130**	
Integrated Systems	**123**	100	**210**	193
Space Technology	**55**		**87**	
Total Segment Operating Margin	**490**	335	**923**	635
Adjustments to reconcile to total operating margin:				
Unallocated expenses	**(22)**	(22)	**(52)**	(53)
Pension (expense) income	**(140)**	22	**(280)**	46
Reversal of CAS pension expense included above	**66**	23	**137**	49
Reversal of royalty income included above	**(3)**	(4)	**(9)**	(10)
Total Operating Margin	**$ 391**	$ 354	**$ 719**	$ 667

Pension expense is included in determining the sectors' operating margin to the extent that the cost is 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 determined under Generally Accepted Accounting Principles (GAAP) is reported separately as a reconciling item under the caption "Pension (expense) income." The reconciling item captioned "Unallocated expenses" includes the portion of corporate expenses, state tax provisions and other retiree benefit expenses that are not allocated to the sectors.

Long-Term Debt

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 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 approximately $642 million in aggregate principal amount for a total purchase price of $777 million (including accrued and unpaid interest on the securities). Cash proceeds from the sale of Auto were used to complete these transactions, which contributed to the reduction of long-term debt to $6.4 billion at June 30, 2003, from the $9.4 billion reported at December 31, 2002.

Long-term debt at June 30, 2003, and December 31, 2002, consisted of the following:

$ in millions	**June 30, 2003**	December 31, 2002
Notes and debentures due 2003 to 2036, rates from 6.05% to 12.36%	**$5,130**	$8,772
Equity security unit notes due 2006, 7.25%	**690**	690
Revolving credit facility, weighted average interest rate of 2.24%	**630**	
Other indebtedness due 2004 to 2024, rates from 7.0% to 8.5%	**104**	139
	6,554	9,601
Less current portion	**142**	203
	$6,412	$9,398

Litigation, Commitments and Contingencies

Various claims and legal proceedings arise in the ordinary course of business and are pending against the company and its properties. Based upon the information available, the company does not believe that the resolution of any of these proceedings will have a material adverse affect upon its operations or financial condition.

U.S. ex rel. Bagley v. TRW Inc., previously reported in the company's public filings, has been settled for $111.2 million. The settlement payment was made in July 2003. The company reviewed this case in preparation for the acquisition of TRW Inc. and it is being accounted for as part of the acquisition. As such, the settlement did not have an effect on the company's results of operations. The relator's claim for attorneys' fees should be resolved in the third quarter and the entire action dismissed with prejudice.

Stock-Based Compensation

The company applies Accounting Principles Board Opinion 25 – *Accounting for Stock Issued to Employees* and related Interpretations in accounting for awards made under the company's stock-based compensation plans. When stock options are exercised, the amount of the cash proceeds to the company is recorded as an increase to paid-in capital. Compensation expense for restricted performance 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 (loss), basic earnings (loss) per share, and diluted earnings (loss) per share would have been as shown in the table below.

$ in millions, except per share	Three months ended June 30, **2003**	Three months ended June 30, 2002	Six months ended June 30, **2003**	Six months ended June 30, 2002
Net income (loss) as reported	**$ 205**	$ 182	**$ 458**	$ (101)
Stock based compensation, net of tax, included in net income as reported	**14**	6	**21**	15
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	**(22)**	(7)	**(36)**	(23)
Pro-forma net income (loss) using the fair value method	**$ 197**	$ 181	**$ 443**	$ (109)
Basic Earnings (Loss) Per Share				
As reported	**$ 1.09**	$ 1.56	**$ 2.44**	$ (1.01)
Pro forma	**$ 1.04**	$ 1.52	**$ 2.36**	$ (1.08)
Diluted Earnings (Loss) Per Share				
As reported	**$ 1.08**	$ 1.53	**$ 2.42**	$ (.99)
Pro forma	**$ 1.03**	$ 1.49	**$ 2.34**	$ (1.07)

These amounts were determined using weighted-average per share fair values for market options granted in 2003 and 2002 of $30 and $28, 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 the three months and six months ended June 30, 2003 and 2002, respectively, the following additional assumptions: dividend yield, 1.8 percent and 1.6 percent; expected volatility, 36 percent and 35 percent; and risk-free interest rate, 3.2 percent and 3.6 percent.

Minority Interest

As of December 31, 2002, TRW Automotive Inc. (TAI) had outstanding 100,000 shares of Series A Convertible Preferred Stock (TAI Series A) and 30,000 shares of Series B Preferred Stock (TAI Series B), of which 14,000 shares were owned by Northrop Grumman. All of the outstanding TAI Series A and TAI Series B shares were redeemed in the second quarter of 2003 for $117 million.

New Accounting Pronouncements

In May 2003, the Financial Accounting Standards Board issued SFAS No. 150 – *Accounting for Certain Financial Instruments with Characteristics of both Liability and Equity.* It requires an issuer to classify certain financial instruments as liabilities and assets in defined circumstances. This statement becomes effective for financial statements issued for interim periods beginning after June 15, 2003. Management is currently evaluating the effect that adoption of this standard will have on the company's results of operations and financial position.

In April 2003, the Financial Accounting Standards Board issued SFAS No. 149 – *Amendment of Statement 133 on Derivative Instruments and Hedging Activities,* which clarifies and amends certain definitions and characteristics of derivative instruments contained in SFAS No. 133 – *Accounting for Derivative Instruments and Hedging Activities,* FASB Interpretation No. 45: *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect*

Guarantees of Indebtedness of Others and other existing pronouncements. Adoption of this statement will not have an effect on the company's financial position, results of operations or cash flows.

In January 2003, the Emerging Issues Task Force (EITF) published EITF Issue 00-21 – *Revenue Arrangements with Multiple Deliverables* (EITF 00-21), which provides guidance on how to recognize revenue in certain arrangements with multiple deliverables. This issue is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. Management is currently evaluating the effect that adoption of EITF 00-21 will have on the company's results of operations and financial position.

In January 2003, the Financial Accounting Standards Board issued FASB Interpretation No. 46 – *Consolidation of Variable Interest Entities,* an interpretation of Accounting Research Bulletin No. 51. This interpretation explains how to identify variable interest entities and how an enterprise assesses its interests in a variable interest entity to decide whether to consolidate that entity. This interpretation requires existing unconsolidated variable interest entities to be consolidated by their primary beneficiaries if the entities do not effectively disperse risks among the parties involved. Management is currently evaluating the effect that adoption of this standard will have on the company's results of operations and financial position.

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In June 2002, the Financial Accounting Standards Board issued SFAS No. 146 – *Accounting for Costs Associated with Exit or Disposal Activities,* which requires a liability for a cost associated with an exit or disposal activity to be recognized and measured at its fair value in the period in which the liability is incurred. This statement was adopted January 1, 2003, and did not have a significant effect on the company's financial position, results of operations or cash flows.

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Item 2. Management's Discussion and Analysis of the Company's Financial Condition and Results of Operations

The 2003 results include the operations of TRW Inc. (TRW), acquired in the fourth quarter of 2002. Operating results of the acquired TRW businesses are reported as the Mission Systems and Space Technology sectors of the company. This acquisition is an important component of the increase in sales, operating margin and net income for the 2003 periods compared with 2002.

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

SELECTED INDUSTRY SEGMENT INFORMATION

	Three months ended June 30,		Six months ended June 30,	
$ in millions	**2003**	2002	**2003**	2002
Net Sales				
Electronic Systems	**$ 1,512**	$ 1,299	**$ 2,850**	$ 2,500
Ships	**1,379**	1,157	**2,580**	2,234
Information Technology	**1,155**	1,036	**2,247**	1,965
Mission Systems	**1,083**		**2,012**	
Integrated Systems	**988**	829	**1,804**	1,636
Space Technology	**733**		**1,381**	
Intersegment eliminations	**(223)**	(90)	**(381)**	(173)
Total Net Sales	**$ 6,627**	$ 4,231	**$ 12,493**	$ 8,162
Operating Margin				
Segments:				
Electronic Systems	**$ 148**	$ 109	**$ 269**	$ 199
Ships	**23**	85	**98**	152
Information Technology	**67**	41	**129**	91
Mission Systems	**74**		**130**	
Integrated Systems	**123**	100	**210**	193
Space Technology	**55**		**87**	
Adjustments to reconcile to total operating margin:				
Unallocated expenses	**(22)**	(22)	**(52)**	(53)
Pension (expense) income	**(140)**	22	**(280)**	46
Reversal of CAS pension expense included above	**66**	23	**137**	49
Reversal of royalty income included above	**(3)**	(4)	**(9)**	(10)
Total Operating Margin	**$ 391**	$ 354	**$ 719**	$ 667
Contract Acquisitions				
Electronic Systems	**$ 1,336**	$ 1,164	**$ 2,914**	$ 2,589
Ships	**857**	1,207	**1,725**	3,054
Information Technology	**1,116**	1,004	**2,404**	2,077
Mission Systems	**729**		**2,005**	
Integrated Systems	**870**	580	**2,507**	1,890
Space Technology	**643**		**1,410**	
Intersegment eliminations	**(311)**	(114)	**(635)**	(159)
Total Contract Acquisitions	**$ 5,240**	$ 3,841	**$ 12,330**	$ 9,451
Funded Order Backlog				
Electronic Systems			**$ 6,559**	$ 5,985
Ships			**9,506**	10,592
Information Technology			**1,746**	1,548
Mission Systems			**2,741**	
Integrated Systems			**4,441**	3,777
Space Technology			**1,337**	
Intersegment eliminations			**(440)**	(212)
Total Funded Order Backlog			**$ 25,890**	$ 21,690

Contract Acquisitions

Contract acquisitions increased 36 percent to $5.2 billion for the second quarter of 2003 as compared to the second quarter a year ago, and increased 30 percent to $12.3 billion in the six-month period of 2003 compared to the 2002 period. Growth in 2003 principally reflects inclusion of the two new sectors, Mission Systems for $729 million and $2 billion in the quarterly and six-month periods and Space Technology for $643 million and $1.4 billion in the quarterly and six-month periods of 2003. In last year's first quarter, Ships reported contract acquisitions of $1.8 billion resulting from the funding of *Virginia*-class submarines and refueling and overhaul of the carrier *USS Eisenhower*. The company's business backlog at June 30, 2003, increased to $25.9 billion from $21.7 billion reported a year earlier.

Measures of Performance

Sales for the second quarter of 2003 increased 57 percent to $6.6 billion and for the six-month period of 2003 increased 53 percent to $12.5 billion, as compared with the same periods of 2002. Sales for 2003 are expected to be between $25 billion and $26 billion. Sales by business area are outlined below. Certain prior year amounts have been reclassified to conform to the 2003 presentation.

NORTHROP GRUMMAN CORPORATION AND SUBSIDIARIES

$ in millions	Three months ended June 30, 2003	2002	Six months ended June 30, 2003	2002
Electronic Systems				
Aerospace Electronic Systems	**$ 455**	$ 399	**$ 837**	$ 709
C^{4}ISR&N	**314**	267	**593**	521
Defensive Electronic Systems	**192**	205	**406**	384
Navigation Systems	**182**	159	**365**	325
Space Systems	**138**	105	**248**	221
Other	**231**	164	**401**	340
	1,512	1,299	**2,850**	2,500
Ships				
Aircraft Carriers	**528**	491	**998**	970
Surface Combatants	**371**	191	**692**	380
Amphibious and Auxiliary	**265**	216	**468**	389
Submarines	**160**	154	**292**	285
Commercial and International	**19**	83	**55**	154
Services and Other	**36**	50	**75**	109
Intrasegment Eliminations		(28)		(53)
	1,379	1,157	**2,580**	2,234
Information Technology				
Government Information Technology	**770**	674	**1,467**	1,276
Enterprise Information Technology	**180**	167	**362**	305
Technology Services	**170**	162	**342**	314
Commercial Information Technology	**66**	49	**133**	106
Intrasegment Eliminations	**(31)**	(16)	**(57)**	(36)
	1,155	1,036	**2,247**	1,965
Mission Systems				
Command, Control & Intelligence	**413**		**767**	
Missile Systems	**301**		**514**	
Federal & Civil Information Systems	**199**		**408**	
Technical Services	**177**		**342**	
Intrasegment Eliminations	**(7)**		**(19)**	
	1,083		**2,012**	
Integrated Systems				
Air Combat Systems	**603**	470	**1,110**	957
Airborne Early Warning/Electronic Warfare	**248**	187	**427**	355
Airborne Ground Surveillance/Battle Management	**139**	174	**269**	326
Intrasegment Eliminations	**(2)**	(2)	**(2)**	(2)
	988	829	**1,804**	1,636
Space Technology				
Intelligence, Surveillance, & Reconnaissance	**226**		**405**	
Satellite Communications	**116**		**248**	
Civil Space	**128**		**245**	
Missile Defense	**103**		**187**	
Radio Systems	**95**		**180**	
Technology	**65**		**116**	
	733		**1,381**	
Intersegment eliminations	**(223)**	(90)	**(381)**	(173)
Total sales	**$ 6,627**	$ 4,231	**$ 12,493**	$ 8,162

Sales at Electronic Systems sector increased 16 percent and 14 percent to $1.5 billion and $2.8 billion in the second quarter and six-month periods of 2003 as compared to the same periods of 2002. Operating margin for the second quarter increased 36 percent to $148 million as compared to the 2002 second quarter and increased 35 percent to $269 million in the 2003 six-month period in contrast to the 2002 six-month period. Second quarter and six-month 2003 results for sales and operating margin reflect the benefit of increased deliveries in Aerospace Electronic Systems on the F/A-22, Apache Longbow and F-16 programs and increased volume and improved performance on C4ISR&N programs. For 2003, Electronic Systems sales are expected to be between $5.9 billion and $6.1 billion with operating margin of nearly 10 percent of sales.

Ships, which includes the financial results of the Newport News and Ship Systems sectors, generated sales of $1.4 billion and $2.6 billion in the second quarter and six-month periods of 2003, reflecting 19 percent and 15 percent increases in contrast to the 2002 periods. Operating margin was $23 million for the second quarter and $98 million for the six-month period of 2003, compared to operating margin of $85 million and $152 million in the 2002 second quarter and year-to-date periods, respectively. The sales growth reflects increased revenue on the DDX program, included in the Surface Combatant business area, and on the LPD program, included in the Amphibious and Auxiliary business area. The second quarter 2003 results include a $68 million pre-tax charge to operating margin on the commercial Polar Tanker program. The charge includes cost growth on the third tanker due to unusual weather delays and rework. This tanker was delivered to the customer on July 21. The charge also includes increased estimates to complete the final two ships to reflect more modest improvements in labor productivity and higher overhead costs than previously expected. The fourth ship is approximately 75 percent complete and is scheduled for delivery in late 2004. The fifth and last ship is approximately 35 percent complete and is scheduled for delivery in late 2005. Operating margin for the 2003 second quarter also reflects higher purchased intangibles amortization expense at the Newport News sector as compared to the same quarter of last year. Last year’s second quarter included a reduction of purchased intangibles amortization as a result of the finalization of the useful lives of purchased intangibles. Sales in 2003 are expected to be just over $5 billion, with operating margin as a percent of sales expected to be in the mid-5 percent range.

Information Technology sector sales increased 11 percent and 14 percent to $1.2 billion and $2.2 billion in the second quarter and six-month periods of 2003 as compared to the same periods of 2002, with growth in all business areas. For the quarter and six-month periods of 2003, the sector generated increases of 63 percent and 42 percent in operating margin to $67 million and $129 million compared to the 2002 periods, reflecting increased revenues and a higher operating margin rate on Government Information Technology business. Last year’s second quarter results included a $16 million charge recorded on a contract relating to Oracle’s Enterprise Licensing Agreement with the State of California. For 2003, sales are expected to be approximately $4.7 billion with operating margin as a percent of sales of approximately 6 percent.

Mission Systems reported 2003 second quarter and six-month sales of $1.1 billion and $2 billion led by its Command, Control & Intelligence Systems and Missile Systems business areas. The segment’s 2003 second quarter and year-to-date operating margins were $74 million and $130 million, respectively. For 2003, sales are expected to be approximately $4 billion with operating margin as a percent of sales of approximately 6 percent.

Sales for Integrated Systems increased 19 percent to $1 billion in the second quarter of 2003 and increased 10 percent to $1.8 billion in the 2003 six-month period compared to the 2002 second quarter and six-month periods. Operating margin for the 2003 second quarter and six-month periods increased 23 percent and 9 percent to $123 million and $210 million, respectively from the 2002 periods. Integrated Systems results reflect increased F-35, E2C, and Global Hawk sales and operating margin, which were partially offset by lower Joint STARS volume. For 2003, sales are expected to be approximately $3.6 billion to $3.8 billion with operating margin as a percent of sales expected to be between 9 percent and 9.5 percent.

Sales for Space Technology for the 2003 second quarter and six-month periods totaled $733 million and $1.4 billion, respectively, led by revenues from its Intelligence, Surveillance & Reconnaissance and Civil Space business areas. The sector’s operating margin in the second quarter and six-months periods of 2003 were $55 million and $87 million, respectively. For 2003, sales are expected to be approximately $2.6 billion with operating margin as a percent of sales of slightly more than 6 percent.

Operating margin included $140 million and $280 million of pension expense in the second quarter and six-month periods of 2003, compared with $22 million and $46 million of pension income reported in the 2002 periods. Pension expense for 2003 is expected to total approximately $560 million. Total pension income or expense determined under Generally Accepted Accounting Principles (GAAP) is reported separately as a reconciling item in the table “Selected Industry Segment Information” under the caption “Pension (expense) income.” Pension expense is included in determining the sectors’ operating margin to the extent that the cost is currently recognized under government Cost Accounting Standards (CAS). In the adjustments to reconcile to total company operating margin, these amounts are reported under the caption “Reversal of CAS pension expense included above” and for the year 2003 are estimated to be approximately $275 million.

The increase in interest income for the 2003 periods as compared to the 2002 periods principally reflects earnings from the note received in connection with the sale of Auto and interest earned on a tax refund received in the first quarter of 2003. Interest income for the year 2003 is expected to be approximately $55 million.

Interest expense for the second quarter and six-month periods of 2003 increased to $119 million and $263 million, respectively, from $105 million and $214 million reported in the 2002 periods principally as a result of increased 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. Interest expense for the year 2003 is expected to be between $485 million and $490 million.

The company’s effective tax rate in the second quarter of 2003 was 31 percent compared to 30.6 percent in the 2002 period. During the first quarter of 2003, the company recorded a $26 million tax credit for additional research tax credits resulting in a 2003 six-month effective tax rate of 25.7 percent as compared to 30.8 percent in the 2002 six-month period. The effective tax rate is expected to be approximately 31 percent for the remainder of 2003, resulting in a rate of approximately 28 percent for the entire year.

Net income for the second quarter and six-month periods of 2003 was $205 million and $458 million, respectively, or $1.08 and $2.42 per diluted share, compared to income of $182 million and a loss of $101 million, or $1.53 and $(.99) per diluted share, for the same periods of 2002. Second quarter and six-months 2003 diluted earnings per share are based on weighted average diluted shares outstanding of 182.93 million and 182.81 million, respectively, as compared to 112.84 million and 112.12 million in the respective 2002 periods. Discontinued operations generated income of $2 million and income of $82 million for the second quarter and six-month periods of 2003, respectively, compared to income of $1 million and $1 million in the second quarter and first half of 2002. Results reflected in the six-month period of 2002 include a first quarter 2002 charge of $432 million for the cumulative effect of an accounting change recorded upon adoption of SFAS No. 142 – *Goodwill and Other Intangible Assets.*

Discontinued Operations

The company’s Condensed Consolidated Financial Statements and related footnote disclosures reflect the Auto and Component Technologies 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.* As such, discontinued operations includes the January and February 2003 results of TRW Automotive (Auto), the sale of which was completed February 28, 2003, and the results of the company’s remaining Component Technologies businesses. The assets and liabilities of these businesses have been reclassified as held for sale.

Proceeds received in the first quarter of 2003 from the sale of Auto included $3.3 billion in cash, a $600 million face value payment-in-kind note, valued at $455 million, and a 19.6 percent investment in the new enterprise, valued at $170 million. The cash received was adjusted from the sale agreement amount by cash sold with the business, preliminary purchase price adjustments, and an asset retained. The payment-in-kind note matures in 2018 and bears interest at an effective yield of 11.7 percent per annum. The acquirer also assumed debt of approximately $200 million. Final valuation of the Auto transaction will occur upon settlement of purchase price adjustments, expected to be completed in the second half of 2003, and may result in additional adjustments. The company has retained certain liabilities associated with the Auto business as well as the Aeronautical Systems business that TRW divested in 2002.

In the second quarter of 2003, the company entered into an agreement with COB Support Acquisition Inc., an indirect wholly-owned subsidiary of Cobham plc, to sell the Life Support business, one of the discontinued Component Technologies businesses. The transaction is expected to close in the second half of 2003.

TRW Acquisition

The TRW acquisition is accounted for using the purchase method of accounting. Under the purchase method of accounting, the purchase price is allocated to the underlying tangible and intangible assets acquired and liabilities assumed based on their respective fair market values, with the excess recorded as goodwill. The financial statements and the information from which they were derived reflect preliminary estimates of the fair market value of the assets acquired and liabilities assumed and the related allocations of purchase price and preliminary estimates of adjustments necessary to conform TRW to the company's accounting policies. The company is currently reviewing preliminary accounting conformance adjustments and preliminary estimates of the fair market value of assets acquired and liabilities assumed, including valuations associated with certain contracts, debt, environmental and other legal contingencies, restructuring activities, warranty liabilities, income taxes, insurance liabilities, property, plant, and equipment, retiree benefits assets and liabilities, and any purchase price adjustments and retained liabilities associated with the Auto and Aeronautical Systems divestitures. The final determination of the fair market value of assets acquired and liabilities assumed and final allocation of the purchase price may differ significantly from the amounts included in the financial statements contained in this Form 10-Q. Adjustments to the purchase price allocations of TRW are expected to be finalized by the fourth quarter of 2003 and will be reflected in future filings. There can be no assurance that such adjustments will not be material.

Liquidity and Capital Resources

In the first half of 2003, the company used cash from operations of $375 million, compared with cash generated of $473 million in the first half of 2002. At June 30, 2003, net working capital deficit was $81 million which is the result of normal fluctuations in timing of receipts and disbursements, working down advances on contracts, payments associated with acquired businesses and income tax liabilities. In 2003, cash used in operations reflects $1 billion of taxes paid upon completion of the B-2 EMD contract. The IRS is presently completing its audits of the B-2 program for the tax years ended December 31, 1997, through December 31, 2000. Upon completion of these audits, the IRS may adopt a position that the B-2 program was completed in a year prior to 2002, which would create the potential for additional interest expense. Although it is not possible to predict the outcome of the tax audits at this time, management believes that its tax accounting for the B-2 program reflects the appropriate timing of contract completion. Presently, the IRS has not commenced its audits for tax years ended December 31, 2001 or 2002.

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 had been 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 approximately $642 million in aggregate principal amount for a total purchase price of $777 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 $6.4 billion at June 30, 2003, from the $9.4 billion reported at December 31, 2002.

During the second quarter of 2003, the company redeemed all outstanding shares of TRW Automotive Inc. Series A Convertible Preferred Stock and Series B Preferred Stock for $117 million.

U.S. ex rel. Bagley v. TRW Inc., previously reported in the company's public filings, has been settled for $111.2 million. The settlement payment was made in July 2003. The company reviewed this case in preparation for the acquisition of TRW Inc. and it is being accounted for as part of the acquisition. As such, the settlement did not have an effect on the company's results of operations. The relator's claim for attorneys' fees should be resolved in the third quarter and the entire action dismissed with prejudice.

For the remainder of 2003, cash generated from operations supplemented by borrowings under credit facilities are expected to be sufficient to service debt, finance capital expenditures and continue paying dividends to the company's shareholders.

Critical Accounting Policies

The company's financial statements are in conformity with generally accepted accounting principles. The preparation thereof requires management to make estimates and assumptions 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.

There have been no changes in the company's critical accounting policies during the six months ended June 30, 2003.

Financial Accounting Standards

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Forward-Looking Information

Certain statements and assumptions in this Management's Discussion and Analysis and elsewhere in this Quarterly Report on Form 10-Q 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 "project," "expect," "estimate," "assume," or variations thereof. 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.

Such "forward-looking" information is based on numerous assumptions and uncertainties, many of which are outside Northrop Grumman's control. These include Northrop Grumman's ability to successfully integrate its acquisitions, including TRW, to realize the preliminary estimates for accounting conformance and purchase accounting valuations for TRW which will be finalized in the 2003 fourth quarter and which may materially vary from these estimates, assumptions with respect to future revenues, expected program performance and cash flows, returns on pension plan assets and variability of pension actuarial and related assumptions, the outcome of litigation and appeals, environmental remediation, divestitures of businesses, successful reduction of debt, successful negotiation of contracts with labor unions, effective tax rates and timing and amounts of tax payments, and anticipated costs of capital investments, among other things. Northrop Grumman's operations are subject to various additional risks and uncertainties resulting from its position as a supplier, either directly or as subcontractor or team member, to the U.S. Government and its agencies as well as to foreign governments and agencies; actual outcomes are dependent upon factors, including, without limitation, Northrop Grumman's successful performance of internal plans; government customers' budgetary constraints; customer changes in short-range and long-range plans; domestic and international competition in both the defense and commercial areas; product performance; continued development and acceptance of new products; performance issues with key suppliers and subcontractors; government import and export policies; acquisition or termination of government contracts; the outcome of political and legal processes; legal, financial, and governmental risks related to international transactions and global needs for military aircraft, military and civilian electronic systems and support, information technology, naval vessels, space systems and related technologies, as well as other economic, political and technological risks and uncertainties and other risk factors set out in Northrop Grumman's filings from time to time with the Securities and Exchange Commission, including, without limitation, Northrop Grumman reports on Form 10-K and Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risks

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 facility, short-term investments, and long-term notes receivable. At June 30, 2003, most borrowings were fixed-rate long-term debt obligations, significant portions of which 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 facility, which had a balance outstanding of $630 million at June 30, 2003. The estimated fluctuation in expense would be 1 percent of any outstanding balance. The company may enter into interest rate swap agreements to manage its exposure to interest rate fluctuations. At June 30, 2003, no interest rate swap agreements were in effect. 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. Foreign currencies are traditionally converted to U.S. dollars upon receipt to limit currency fluctuation exposures. At June 30, 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. The company does not hold or issue derivative financial instruments for trading purposes. Standby letters of credit are used by the company to guarantee future performance on its contracts.

As disclosed in the company's Annual Report on Form 10-K for the year ended 2002, investments in RF Micro Devices, Inc. (RFMD) and Applera Corporation-Celera Genomics Group (Celera) acquired in connection with the acquisition of TRW, and the related hedge portion of the forward share sale agreements are carried at fair market value. As of June 30, 2003, the value of the investments and the hedge were equivalent. Accordingly, no gains or losses are expected to be recorded from these agreements.

Item 4. Controls and Procedures

(a) Evaluation of disclosure controls and procedures. Registrant's principal executive officer (Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated Registrant's disclosure controls and procedures and have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, these controls and procedures are designed to ensure that information required to be disclosed by the Registrant in this Quarterly Report on Form 10-Q is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and Form 10-Q. These disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by Registrant in the reports that it files or submits under the Securities Exchange Act of 1934 (15 USC § 78a et seq) is accumulated and communicated to Registrant's management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure. The principal executive officer and the principal financial officer have also concluded, based upon their evaluation, that there are no significant deficiencies or material weaknesses in these disclosure controls and procedures.

(b) Changes in internal controls. There were no changes in the Registrant's internal controls over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting.

INDEPENDENT ACCOUNTANTS' REPORT

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

We have reviewed the accompanying consolidated condensed statement of financial position of Northrop Grumman Corporation and subsidiaries as of June 30, 2003, and the related consolidated condensed statements of operations for the three-month and six-month periods ended June 30, 2003 and 2002, and the related consolidated condensed statements of cash flows and changes in shareholders' equity for the six-month periods ended June 30, 2003 and 2002. These interim financial statements are the responsibility of the Corporation's management.

We conducted our reviews in accordance with standards established by the American Institute of Certified Public Accountants. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with auditing standards generally accepted in the United States of America, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our reviews, we are not aware of any material modifications that should be made to such consolidated condensed interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with auditing standards generally accepted in the United States of America, the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2002, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for the year then ended (not presented herein); and in our report dated March 18, 2003, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated condensed statement of financial position as of December 31, 2002 is fairly stated, in all material respects, in relation to the consolidated statement of financial position from which it has been derived.

/s/ DELOITTE & TOUCHE LLP

Los Angeles, California
July 25, 2003

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Various claims and legal proceedings arise in the ordinary course of business and are pending against the company and its properties. Based upon the information available, the company does not believe that the resolution of any of these proceedings will have a material adverse affect upon its operations or financial condition.

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, 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 results of operations or financial condition. Matters described below include cases in which the U.S. Government is a party. The company is unable to predict whether or not adverse decisions in these matters would have a material adverse effect on the company's financial condition.

U.S. ex rel. Bagley v. TRW Inc., previously reported in the company's public filings, has been settled for $111.2 million. The settlement payment was made in July 2003. The company reviewed this case in preparation for the acquisition of TRW Inc. and it is being accounted for as part of the acquisition. As such, the settlement did not have an effect on the company's results of operations. The relator's claim for attorneys' fees should be resolved in the third quarter and the entire action dismissed with prejudice. The action involved allegations that TRW misclassified various costs and improperly charged those costs to certain of its federal contracts, that the United States had incurred substantial damages, and that TRW was liable for approximately $56 million in single damages, subject to trebling, plus penalties, post-judgment interest, costs (including attorneys' fees) and "all other proper relief."

As previously reported, on February 3, 2003, the Department of Justice filed a civil False Claims Act case against Newport News Shipbuilding, Inc. in the United States District Court for the Eastern District of Virginia in U.S. v. Newport News Shipbuilding, Inc. The government seeks single damages in an amount in excess of $72 million, plus penalties, costs and interest. Damages may be trebled under the False Claims Act. The complaint alleges that the company improperly charged certain independent research and development costs to its government contracts with respect to the years 1994 through 1999. The company denies the allegations and intends to vigorously defend the matter. Trial is scheduled for August 18, 2003.

Environmental Matters

As previously reported, on December 18, 2000, the Mississippi Department of Environmental Quality (MDEQ) delivered to the Ingalls subsidiary of Litton, a notice of violation alleging use of non-compliant coatings, opacity violations and VOC emissions violations. The MDEQ subsequently requested that Ingalls, now named Northrop Grumman Ship Systems, Inc. (NGSS), perform an air permit compliance review. NGSS and the MDEQ have reached agreement on the terms of a full and complete settlement of the alleged air violations. Under the Agreed Order, NGSS will pay $350,000 to the MDEQ within 30 days after entry of the Order, and expend an additional $600,000 in capital expenditures toward implementation of an agreed upon Supplemental Environmental Project. The Agreed Order was entered on July 7, 2003. NGSS must remit the $350,000 payment by August 6, 2003.

Other Matters

Like many other industrial companies in recent years, and as a result of acquisition activities, 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. The company no longer incorporates asbestos in any currently manufactured products. Many of these claims have been dismissed with no payment and the remaining resolved claims have involved amounts that were not material either singly or in the aggregate. Based on the information available to the company as of the date of filing of this report, the company does not believe that disposition of any or all of these matters would have a material adverse effect upon it.

All of the company's segments engage in international business, for which the company maintains a large 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 of the company's export privileges, which could have a material adverse consequence.

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

a) Annual Meeting –

The annual meeting of stockholders of Northrop Grumman Corporation was held May 21, 2003.

Election of Directors –

The following Class III Director nominees were elected at the annual meeting:

John T. Chain, Jr.
Vic Fazio
Charles R. Larson
Ronald D. Sugar

b) The Directors whose terms of office continue are:

Lewis W. Coleman
Phillip Frost
Kent Kresa
Charles H. Noski
Jay H. Nussbaum
Philip A. Odeen
Aulana L. Peters
John Brooks Slaughter

c) The matters voted upon at the meeting and the results of each vote are as follows:

Directors:	Votes For	Votes Withheld
John T. Chain, Jr.	147,701,502	9,693,516
Vic Fazio	147,561,458	9,833,560
Charles R. Larson	147,566,863	9,828,155
Ronald D. Sugar	152,624,336	4,770,682

	Votes For	Votes Against	Votes Abstaining	Broker Non-Votes
Ratification of the appointment of Deloitte & Touche LLP as the Company's independent auditors	145,544,193	10,535,892	1,314,933	0
Proposal to approve amendments to the 2001 Long-Term Incentive Stock Plan to increase the number of shares available for issuance	91,867,612	46,391,051	2,008,749	17,127,606
Proposal to amend the Certificate of Incorporation to decrease the vote requirement for amending certain charter provisions	132,674,673	5,827,443	1,765,296	17,127,606
Shareholder Proposal regarding military activities in space	4,971,503	125,914,722	9,381,187	17,127,606
Shareholder Proposal regarding the shareholder rights plan	100,567,791	37,171,091	2,528,530	17,127,606

Item 6. Exhibits and Reports on Form 8-K

(a) **Exhibits**

3	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).
10(a)	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, 2003).
*10(b)	Time Sharing Agreement between Kent Kresa and Northrop Grumman Corporation dated April 16, 2003.
*10(c)	July 2003 Amendment to the Northrop Grumman Supplemental Plan 2.
*10(d)	Tenth Amendment to the CPC Supplemental Executive Retirement Program.
*15	Letter from independent accountants regarding unaudited interim financial information.
*31.1	Rule 13a-14a/15d-14(a) Certification of Ronald D. Sugar (Section 302 of the Sarbanes-Oxley Act of 2002).
*31.2	Rule 13a-14a/15d-14(a) Certification of Richard B. Waugh, Jr. (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 Richard B. Waugh, Jr. 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.

(b) **Reports on Form 8-K**

A report on Form 8-K was dated and submitted July 28, 2003, by Northrop Grumman Corporation including as an exhibit pursuant to Item 7 and furnishing as an exhibit pursuant to Item 12 information with respect to financial results for the quarter ended June 30, 2003.

A report on Form 8-K was dated and submitted April 10, 2003, by Northrop Grumman Corporation furnishing as an exhibit pursuant to Item 9 the First Amendment dated as of November 26, 2002 to the 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), as borrowers, and the lenders and agents specified therein.

A report on Form 8-K was dated and submitted April 29, 2003, by Northrop Grumman Corporation including as an exhibit pursuant to Item 7 and furnishing as an exhibit pursuant to Item 9 information with respect to financial results for the quarter ended March 31, 2003.

A report on Form 8-K was dated March 21, 2003, and submitted March 24, 2003, by Northrop Grumman Corporation, furnishing pursuant to Item 9 a transmittal letter to the Securities and Exchange Commission and certifications of its Chairman and Chief Executive Officer and Corporate Vice President and Chief Financial Officer in connection with its Annual Report on Form 10-K for the year ended December 31, 2002. Such certifications were made pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

SIGNATURES

Pursuant to the requirements 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.

NORTHROP GRUMMAN CORPORATION (Registrant)

Date: August 6, 2003	By:	/S/ SANDRA J. WRIGHT
		Sandra J. Wright Corporate Vice President and Controller
Date: August 6, 2003	By:	/S/ JOHN H. MULLAN
		John H. Mullan Corporate Vice President and Secretary

Exhibit 10(b)

TIME SHARING AGREEMENT

This Time Sharing Agreement ("Agreement"), between Northrop Grumman Systems Corporation ("NGSC") and Kent Kresa ("Mr. Kresa"), is effective 16 April 2003 and shall terminate on April 1, 2008, unless terminated sooner by either party pursuant to Article 1 below.

This Agreement sets forth the understanding of the Parties as to the terms under which NGSC will provide Mr. Kresa with the use, on a periodic basis, of the aircraft currently leased by Northrop Grumman Aviation, Inc. to NGSC. The aircraft available for Mr. Kresa's use are described in Exhibit A hereto.

The use of the aircraft will at all times be pursuant to and in full compliance with the requirements of Federal Aviation Regulations ("FAR") 91.501(b)(6), 91.501(c)(1), and 91.501(d);

1. Term.

This Agreement shall remain in force until either party gives the other party thirty (30) days written notice of its desire to terminate.

2. Use of Aircraft.

(a) Mr. Kresa may use the aircraft from time to time, with the permission and approval of NGSC's Flight Operations, for any and all purposes allowed by FAR 91.501(b)(6).

(b) Mr. Kresa shall provide NGSC's Flight Operations with notice of his desire to use the Aircraft and shall provide all pertinent information relevant to the flight.

(c) NGSC shall notify Mr. Kresa as to whether or not the requested use of the aircraft can be accommodated and, if not, the Parties shall discuss alternatives.

3. Operation, Management and Control of Aircraft.

(a) The Aircraft will, at all times, be operated by and under the control of pilots and crew provided by NGSC. The pilots will have complete authority and discretion over the Aircraft, support facilities, and all matters concerning the preparation and operation of the Aircraft and all factors affecting flight safety. All persons on board the Aircraft shall comply with all requests and orders of the flight crew.

(b) On Mr. Kresa's behalf, NGSC will make all necessary take-off, flight, and landing arrangements.

(c) NGSC shall maintain liability insurance for bodily injury and property damage for the Aircraft in an amount not less than $1 billion combined single limit liability coverage. Mr. Kresa agrees that the proceeds of such insurance to which he is entitled shall be deemed to be accepted as Mr. Kresa's sole recourse against NGSC for any loss or damage to Mr. Kresa or his employees, agents, representatives, guests, or invitees, including any loss occasioned by or due to the gross negligence or willful misconduct of NGSC. Kresa's sole recourse against NGSC for any loss or damage to Mr. Kresa or his employees, agents, representatives, guests, or invitees, including any loss occasioned by or due to the gross negligence or willful misconduct of NGSC.

4. Cost of Use of Aircraft.

(a) In exchange for use of the aircraft, Mr. Kresa shall pay the direct operating costs of the aircraft. Pursuant to FAR 91.501(d), those costs shall be limited to the following expenses for each use of the aircraft:

(i) Cost of Fuel, Oil and Lubricants;

(ii) Overnight expenses, if required, for the flight crew;

(iii) Aircraft ramp and hanger fees;

(iv) Flight planning and weather contract services;

(v) landing fees;

(vi) international fees;

(vii) an additional charge equal to 100 percent of the expenses listed in (i) above.

(b) NGSC will invoice, and Mr. Kresa will pay, for all appropriate charges.

5. Limitation of Liability.

(a) Mr. Kresa agrees that when, in the reasonable view of NGSC's Flight Operations or the pilots of the Aircraft, safety may be compromised, NGSC or the pilots may terminate a flight, refuse to commence a flight, or take other action necessitated by such safety considerations without liability for loss, injury, damage, or delay.

(b) In no event shall NGSC be liable to Mr. Kresa or his employees, agents, representatives, guests, or invitees for any claims or liabilities, including property damage or injury and death, and expenses, including attorney's fees, in excess of the amount paid by NGSC's insurance carrier in the event of such loss.

(c) NGSC SHALL IN NO EVENT BE LIABLE TO MR. KRESA OR HIS EMPLOYEES, AGENTS, REPRESENTATIVES, GUESTS, OR INVITEES FOR ANY INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES AND/OR PUNITIVE DAMAGES OF ANY KIND OR NATURE UNDER ANY CIRCUMSTANCES OR FOR ANY REASON INCLUDING ANY DELAY OR FAILURE TO FURNISH THE AIRCRAFT OR CAUSED OR OCCASIONED BY THE PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES COVERED BY THIS AGREEMENT.

6. Entire Agreement.

This Time Sharing Agreement constitutes the entire understanding among the Parties with respect to its subject matter, and there are no representations, warranties, rights, obligations, liabilities, conditions, covenants, or agreements other than as expressly set forth herein.

7. Governing Law.

This Time Sharing Agreement shall be interpreted and governed by the laws of the State of California, excluding California's conflict of laws rules. The Parties waive any right to a jury trial.

8. Counterparts.

This Time Sharing Agreement may be executed in one or more counterparts, each of which shall be deemed an original.

9. Severability.

In the event that any one or more of the provisions of the Agreement shall for any reason be held to be invalid, illegal, or unenforceable, those provisions shall be replaced by provisions acceptable to both Parties to this Agreement

TRUTH-IN-LEASING. THE PARTIES CERTIFY THAT TO THE BEST OF THEIR KNOWLEDGE, THE AIRCRAFT HAS BEEN MAINTAINED AND INSPECTED DURING THE TWELVE MONTHS PRECEDING THE EXECUTION OF THIS AGREEMENT IN ACCORDANCE WITH PART 91 OF THE FEDERAL AVIATION REGULATIONS, AND CONTINUES TO BE MAINTAINED AND INSPECTED AS REQUIRED FOR THE OPERATIONS TO BE CONDUCTED UNDER THIS AGREEMENT. NGSC HEREBY CERTIFIES THAT IT IS RESPONSIBLE FOR OPERATIONAL CONTROL OF THE AIRCRAFT DURING THE TIME THE AIRCRAFT IS OPERATED PURSUANT TO THIS AGREEMENT AND NGSC IS FAMILIAR WITH ITS RESPONSIBILITIES FOR COMPLIANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS, AND THAT AN EXPLANATION OF FACTORS BEARING ON OPERATIONAL CONTROL AND PERTINENT FEDERAL AVIATION REGULATIONS CAN BE OBTAINED FROM THE NEAREST FAA FLIGHT STANDARDS DISTRICT OFFICE, GENERAL AVIATION DISTRICT OFFICE OR AIR CARRIER DISTRICT OFFICE.

The Parties, intending that this Agreement be legally binding, have executed this Agreement by their duly authorized representatives:

Northrop Grumman Systems Corporation		Kent Kresa	
By:	/s/ J. MICHAEL HATELEY	By:	/s/ KENT KRESA
Name:	J. Michael Hateley	Name:	Kent Kresa
Title:	Corp. VP, HR&A	Title:	Chairman, NOC
Date:	16 April 03	Date:	16 April 03

EXHIBIT A

Aircrafts Subject to Time Sharing Agreement

Each of the undersigned is a party to the Time Sharing Agreement dated April 1, 2003, by and between Northrop Grumman Systems Corporation ("NGSC") and Kent Kresa (collectively the "Parties"), and agrees that from and after the date below, until this Exhibit A shall be superseded and replaced through agreement of the Parties or the Time Sharing Agreement shall be terminated pursuant to its terms, the Aircrafts described below shall constitute the "Aircraft" described in and subject to the terms of the Time Sharing Agreement.

Model	Manufacturer's Serial No.	FAA Registration No.
Jets		
GIV-SP	1485	N5NG
Citation X	204	N22NG
Citation X	39	N32NG
Citation Excel	5133	N23NG
Citation Excel	5124	N24NG
Citation Excel	5250	N25NG
Falcon 50	247	N740R
Falcon 50	243	N742R
Learjet 35A	343	N21NG
Turboprops		
King Air 200	BB581	N12NG
King Air 200	BB666	N15NG
King Air 200	UC2	N19NG

Date: 16 April, 2003

Northrop Grumman Systems Corporation		Kent Kresa	
By:	/s/ J. MICHAEL HATELEY	By:	/s/ KENT KRESA
Name:	J. Michael Hateley	Name:	Kent Kresa
Title:	Corp. VP, HR&A	Title:	Chairman, NOC

JULY 2003 AMENDMENT TO THE NORTHROP GRUMMAN SUPPLEMENTAL PLAN 2

This amendment to the Northrop Grumman Supplemental Plan 2 effective December 1, 1993 ("Plan"), as described below, restates the Plan appendix entitled the Officers Supplemental Executive Retirement Program in order to make certain clarifying changes to that program. The provisions in this amendment are effective July 1, 2003.

1. **Section 2.01 (In General) is amended by replacing the first paragraph as follows:**

   2.01 In General. The Plan contains a number of different benefit Programs which are set forth in the Appendices. The Appendices describe the eligibility conditions and the amount of benefits payable under the Programs. The Company, in its sole discretion, will determine all eligibility conditions, make all benefit determinations, and otherwise exercise sole authority to interpret the Plan and Programs.

2. **Appendix G is completely restated as follows:**

APPENDIX G

Officers Supplemental Executive Retirement Program

G.01 Purpose. The purpose of this Program is to give enhanced retirement benefits to eligible officers of the Company. This Program is intended to supplement benefits that are otherwise available under the Qualified Plans.

G.02 Definitions and Construction.

(a) Capitalized terms used in this Appendix which are not defined in this Appendix or Article 1 of the Plan are taken from the Northrop Grumman Pension Plan and Cash Balance Plans (the "Qualified Plans"), and are intended to have the same meaning.

(b) The benefits under this Program are designed to supplement benefits under the Qualified Plans and are therefore to be construed utilizing the same principles and benefit calculation methodologies applicable under the Qualified Plans except where expressly modified below.

(c) Benefits under this Program will be determined with reference to the terms of the Qualified Plans (including Eligible Pay and Credited Service) even if Participants are transferred to positions with the Affiliated Companies in which they are no longer covered by the Qualified Plans.

(1) That is, if such a transfer occurs, for purposes of the formula under this Program, Participants will continue to earn deemed compensation and service credits as if they were still participating under the Qualified Plans.

(2) Notwithstanding (1), such deemed compensation and service credits will not be considered as earned under the Qualified Plans for purposes of determining:

(i) benefits under the Qualified Plans or supplements to the Qualified Plans other than this Program, or

(ii) the Benefit Limit under Section G.05(a) below.

G.03 Eligibility. Eligibility for benefits under this Program is limited to elected or appointed officers of the Company. No employees of Newport News Shipbuilding Inc., Northrop Grumman Space & Mission Systems Corp. (formerly TRW Inc.), Component Technologies or Premier America Credit Union are eligible for benefits under this Program. No Participant is entitled to any benefits under this Appendix G until he or she becomes vested under the Qualified Plans, except to the extent provided in Section G.08. No individual who is, was, or will be eligible to participate in and receive benefits under Appendix F of the Northrop Grumman Supplemental Plan 2 (the “CPC SERP”) is eligible to participate under this Appendix G.

G.04 Benefit Amount.

(a) A Participant’s annual Normal Retirement Benefit under this Program equals the sum of (1) through (3) below, subject to the limit described in Section G.05(a) below:

(1) 2.0% x Final Average Salary x Months of Benefit Service up to 120 months ÷ 12

(2) 1.5% x Final Average Salary x Months of Benefit Service in excess of 120 months up to 240 months ÷ 12

(3) 1.0% x Final Average Salary x Months of Benefit Service in excess of 240 months up to 540 months ÷ 12

However, in the event an employee performs service during his or her career in covered positions under both this Appendix G and the CPC SERP, such an employee’s entire benefit will be calculated under the terms of Section F.04 of the CPC SERP and payable under the terms of that program, all benefits accrued under this Program will be eliminated, and no amounts will be payable under this Appendix G.

(b) The total benefit payable is a single, straight life annuity benefit for the Participant commencing at age 65, assuming an annual benefit equal to the benefit formula amount in (a). The form of benefit and timing of commencement will be determined under Section G.06.

(c) Months of Benefit Service will be determined under the rules of the Qualified Plans for determining service after June 30, 2003 or the date after which the Participant is covered by a Cash Balance Plan, if later. For periods of service prior to becoming a participant in a Cash Balance Plan, Benefit Service will be computed using the Special Elapsed Time Method described under the Qualified Plans.

(d) Months of Benefit Service will continue to be counted for a Participant until the earlier of (1) or (2):

(1) The date the Participant ceases to earn benefit accrual service under either the Qualified Plans or some other defined benefit plan of the Affiliated Companies that is qualified under section 401(a) of the Code (“Successor Qualified Plan”).

(2) Cessation of the Participant’s status as an elected or appointed officer of the Company.

(e) Benefits are calculated without regard to the limits in sections 401(a)(17) and 415 of the Code.

(f) If a Participant’s benefit is paid under this Program prior to reaching age 65, the benefit will be adjusted as follows. The Early Retirement Benefit is a monthly benefit equal to the Normal Retirement Benefit reduced by the lesser of:

(1) $^{1}/_{12}$th of 2.5% for each calendar month the payment of benefits begins prior to the Participant reaching age 65; or

(2) 2.5% for each point less than 85 where the number of points applicable to such Participant is equal to the sum of:

(i) his or her age (computed to the nearest $^{1}/_{12}$th of a year) at the annuity starting date and

(ii) $^{1}/_{12}$th of his or her months of points service under the applicable Qualified Plan (also computed to the nearest $^{1}/_{12}$th of a year) as of the date his or her employment terminated.

To determine whether the Early Retirement Benefit provisions apply and to calculate the early retirement reduction, the Participant's Vesting Service and months of points service earned under the Qualified Plans (or deemed earned under G.02(c)) will be utilized.

(g) Except as provided under Sections G.06(c) and G.07, no benefit will be paid under this Program in the event a Participant:

(1) experiences a Termination of Employment prior to attaining age 55 and completing 120 Months of Benefit Service; or

(2) is not an active Participant in the Plan at the time of his or her Termination of Employment.

(h) Final Average Salary for any Plan Year is the Participant's average Eligible Pay for the highest three of the last ten consecutive plan years in which the Participant was a covered employee. For this purpose, years will be deemed to be consecutive even though a break in service year intervenes.

(i) Eligible Pay for any plan year will be determined by reference to the definition (including all provisions concerning mid-year transfers affecting participation) found in the defined benefit restoration plan, including the Litton Industries, Inc. Restoration Plan, the Litton Industries, Inc. Restoration Plan II, or the Northrop

Grumman Supplemental Plan 2, under which the Participant benefits. In the event the Participant is not a participant under a benefit restoration plan, Eligible Pay will be determined by reference to the applicable qualified retirement plan under which the Participant benefits, including compensation deferred under the Northrop Grumman Executive Deferred Compensation Plan and compensation deferred under the Northrop Grumman Deferred Compensation Plan; provided, however, that any compensation deferred shall only be treated as compensation for Plan benefit calculation purposes in the year(s) payment would otherwise have been made and not in the year(s) of actual payment. A Participant's Eligible Pay will also exclude any amounts received as retention or acquisition bonuses as a result of the acquisition by Northrop Grumman Corporation of Litton Industries, Inc.

G.05 Benefit Limit. Accruals under Section G.04 will be limited as provided in this Section.

(a) Accruals for a Participant under this Program may not exceed the lesser of (1) or (2) below, adjusted as described in (b):

(1) 60% of Final Average Salary; or

(2) the amount calculated under Section G.04 above.

(b) The amounts calculated under (1) and (2) above will be multiplied by any applicable early retirement factor and further reduced by the early retirement benefits the participant is eligible for, including all early retirement subsidies, supplements, and other such benefits, under all plans, programs, and arrangements maintained by the Company, whether qualified (excluding all defined contribution plans) or nonqualified (excluding contributory plans), including, but not limited to, the following:

(1) the Qualified Plans and any other defined benefit plan qualified under section 401(a) of the Code which is maintained by the Affiliated Companies, was maintained by any other employer while it was an Affiliated Company, or was maintained by an Affiliated Company prior to being acquired by the Company;

(2) the Northrop Grumman ERISA Supplemental Plan 1 and the Northrop Grumman Supplemental Plan 2, including the ERISA Supplemental Program 2 described in Appendix B of that plan;

(3) the Grumman Corporation Supplemental Retirement Plan and the Grumman Excess Plan;

(4) the Litton Restoration Plan (Part I benefits only), the Litton Restoration Plan II (Part I benefits only), and the Litton Supplemental Executive Retirement Plan;

(5) any benefit enhancements under change-in-control Special Agreements (including enhancements for age and service) that Participants have entered into

with the Company ("Special Agreements") for those entitled to it; and

(6) any other Company plan, program, arrangement or individual contract which provides a nonqualified, defined benefit pension benefit.

(c) The limits in (a) may not be exceeded even after the benefits under this Program have been enhanced by the benefit under Special Agreements enhancing age and service.

(d) For purposes of the offset in (b):

(1) in the event a Participant's benefit under this Program commences prior to reaching age 65, benefits under this Program will be offset for the plans described in (b) by converting the benefits paid or payable from such plans to an actuarially equivalent single life annuity benefit commencing upon the earliest retirement age under this Program. For this purpose, the benefit will be converted to an early retirement benefit under each applicable plan's terms and adjusted for different normal forms of benefits or different commencement dates using the actuarial assumptions of Section G.09;

(2) in the event a Participant's benefit under this Program or any plan described in (b) commences upon reaching age 65, benefits under all the plans will be compared on the basis of a single, straight

life annuity commencing at age 65using the assumptions stated in Section G.09; or

(3) in the event a participant has previously received a distribution from one of the applicable Qualified Plans for a period of prior service that is included for purposes of calculating a benefit under this Program, that previously received benefit will not true-up with any other plan upon retirement, but will be treated as accrued separately for all purposes and included for purposes of the Benefit Limit.

(e) For purposes of this Section, Final Average Salary will be calculated without regard to the limits in section 401(a)(17) of the Code.

(f) Example: A Participant elects to receive an early retirement benefit at age 55 after completing 240 Months of Benefit Service with Final Average Salary equal to $250,000. The Participant has accrued monthly benefits under the Northrop Grumman Electronic Sensors & Systems Sector Pension Plan (the "ES Plan") equal to $2,550, the Northrop Grumman ERISA Supplemental Program 2 ("ERISA 2") equal to $600, and the Northrop Grumman Electronic Sensors & Systems Sector Executive Pension Plan (the "ES EPP") equal to $600. The Participant's pre-offset benefit under this Program, calculated in accordance with Section G.04, will equal 35% of the Participant's Final Average Salary ($250,000) x 75% to account for the early retirement reduction under Section G.04(f). This will result in a monthly gross benefit under this Program, prior to the application of the Benefit Limit, equal to $5,468.75. The Participant's total net benefit will be calculated, taking into account the offset under (b) above, by reducing the gross benefit by the following:

(1) the $2,550 monthly benefit under the ES Plan payable at age 55 pursuant to that plan's conversion factors; and

(2) the $600 ERISA 2 early retirement single life annuity payable at age 55.

(3) There is, however, no offset applicable to the ES EPP due to the fact that the Participant is not eligible for an early retirement benefit at age 55 under that plan.

This will result in a monthly gross benefit under this Program equal to $2,318.75.

G.06 Payment of Benefits.

(a) Benefits will be paid in accordance with Section 2.02 of the Plan, utilizing the benefit forms available under the Qualified Plan under which the Participant last accrued benefits.

(b) Except as provided in (c), benefits will commence effective the first of the month following Termination of Employment or, if later, effective as of the earliest date an early retirement benefit would commence for the Participant under the Qualified Plans.

(c) If a Participant has a Termination of Employment because of disability before the Participant is eligible for an early retirement benefit from a Qualified Plan, benefits may commence immediately, subject to adjustment for early commencement using the applicable factors under Section G.04(f).

(d) If a Participant dies after commencement of benefits, any survivor benefits will be paid in accordance with the form of benefit selected by the Company. If a Participant dies prior to commencement of benefits, payment will be made under Section G.07.

G.07 Preretirement Death Benefits. If a Participant dies before commencement of benefits, preretirement surviving spouse benefits will be payable under this Program on behalf of the Participant if his or her surviving spouse is eligible for a qualified preretirement survivor annuity (as required under section 401(a)(11) of the Code) from a Qualified Plan.

(a) A preretirement death benefit will be calculated for a Participant's surviving spouse in the same manner as if the benefits earned under this Program were benefits under the Qualified Plan from which the Participant retired. For example, in the case of a Northrop Grumman Pension Plan participant, the death benefit will be the survivor benefit portion of a 100% joint-and-survivor annuity based on the benefit in G.04, as adjusted for early commencement under Section G.04(f) and as limited by G.05.

(b) (1) Benefits may commence effective the first of the month following the death of the Participant, subject to adjustment for early commencement using the applicable factors under G.04(f).

(2) The Company may delay payment in the event there is a dispute as to whom payment is due until the dispute is settled.

(c) The benefit in (a) will be determined without regard to the limits in sections 401(a)(17) and 415 of the Code.

(d) No benefit will be payable under this Program with respect to a spouse after the death of that spouse.

G.08 Individual Arrangements. This Section applies to a Participant who has an individually-negotiated arrangement with the Company for supplemental retirement pension benefits. Notwithstanding any other provision to the contrary, this Section will not be applicable to any individually-negotiated arrangements between a Participant and the Company concerning severance payments.

(a) Intent: It is the intent of this Section to coordinate the benefits under this Program with those of any individually-negotiated arrangement. Participants with such arrangements will be paid the better of the benefits under the arrangement or under Sections G.04 or G.07 (as limited by G.05).

(b) No duplication of benefits: In no case will duplicate benefits be paid under this Program and such an individual arrangement. Any payments under this Program will be counted toward the Company's obligations under an individual arrangement, and vice-versa.

(c) If the individually-negotiated arrangement provides a benefit in excess of the one payable under this Program, then the individual benefit will be substituted as the benefit payable under this Program (even if it exceeds the limit under G.05).

(d) In order to determine which benefit is greater, all benefits will be compared on the basis of an actuarial equivalent single, straight life annuity commencing at the Participant's Normal Retirement Date.

(e) For purposes of (d), the individually-negotiated benefit will be determined in accordance with all of its terms and conditions. Nothing in this Section is meant to alter any of those terms and conditions.

(f) This Section does not apply to the Special Agreements.

G.09 Actuarial Assumptions. The following defined terms and actuarial assumptions will be used to the extent necessary under Sections G.05 and G.08 to convert benefits to straight life annuity form commencing upon the Participant reaching age 65:

Interest: Five percent (5%)

Mortality: The applicable mortality table under section 417(e)(3) of the Code, which would be used to calculate a lump sum value for the benefit under the Qualified Plans.

Increase in Code Section 415 Limit: 2.8% per year.

Variable Unit Values: Variable Unit Values are presumed not to increase for future periods after commencement of benefits.

IN WITNESS WHEREOF, this Compensation Committee has caused this Amendment to be executed by its duly authorized representative on this 22nd day of July, 2003.

COMPENSATION COMMITTEE OF
NORTHROP GRUMMAN CORPORATION

By: /s/ J. MICHAEL HATELEY

J. Michael Hateley
Vice President and Chief Human Resources and
Administrative Officer

TENTH AMENDMENT TO THE CPC SUPPLEMENTAL EXECUTIVE RETIREMENT PROGRAM

This amendment to the CPC Supplemental Executive Retirement Program (“CPC SERP”), as described below, clarifies the limitations applied to the benefit formula under the program. The provisions in this amendment are effective July 1, 2003.

1. Section F.05 (Benefit Limit) is replaced with the following:

F.05 Benefit Limit. Accruals under Section F.04 will be limited as provided in this Section.

(a) Accruals for a Participant under this Program may not exceed the lesser of (1) or (2) below, adjusted as described in (b):

(1) 60% of Final Average Salary; or

(2) the amount calculated under Section G.04 above.

(b) The amounts calculated under (1) and (2) above will be multiplied by any applicable early retirement factor and further reduced by the early retirement benefits the participant is eligible for, including all early retirement subsidies, supplements, and other such benefits, under all plans, programs, and arrangements maintained by the Company, whether qualified (excluding all defined contribution plans) or nonqualified (excluding contributory plans), including, but not limited to, the following:

(1) the Qualified Plans and any other defined benefit plan qualified under section 401(a) of the Code

which is maintained by the Affiliated Companies, was maintained by any other employer while it was an Affiliated Company, or was maintained by an Affiliated Company prior to being acquired by the Company;

(2) the Northrop Grumman ERISA Supplemental Plan 1 and the Northrop Grumman Supplemental Plan 2, including the ERISA Supplemental Program 2 described in Appendix B of that plan;

(3) the Grumman Corporation Supplemental Retirement Plan and the Grumman Excess Plan;

(4) the Litton Restoration Plan (Part I benefits only), the Litton Restoration Plan II (Part I benefits only), and the Litton Supplemental Executive Retirement Plan;

(5) any benefit enhancements under change-in-control Special Agreements (including enhancements for age and service) that Participants have entered into with the Company (“Special Agreements”) for those entitled to it; and

(6) any other Company plan, program, arrangement or individual contract which provides a nonqualified, defined benefit pension benefit.

(c) The limits in (a) may not be exceeded even after the benefits under this Program have been enhanced by the benefit under Special Agreements enhancing age and service.

(d) For purposes of the offset in (b):

(1) in the event a Participant's benefit under this Program commences prior to reaching age 65, benefits under this Program will be offset for the plans described in (b) by converting the benefits paid or payable from such plans to an actuarially equivalent single life annuity benefit commencing upon the earliest retirement age under this Program. For this purpose, the benefit will be converted to an early retirement benefit under each applicable plan's terms and adjusted for different normal forms of benefits or different commencement dates using the actuarial assumptions of Section F.09;

(2) in the event a Participant's benefit under this Program or any plan described in (b) commences upon reaching age 65, benefits under all the plans will be compared on the basis of a single, straight life annuity commencing at age 65 using the assumptions stated in Section F.09; or

(3) in the event a participant has previously received a distribution from one of the applicable Qualified Plans for a period of prior service that is included for purposes of calculating a benefit under this Program, that previously received benefit will not true-up with any other plan upon retirement, but will be treated as accrued separately for all

purposes and included for purposes of the Benefit Limit.

(e) For purposes of this Section, Final Average Salary will be calculated without regard to the limits in section 401(a)(17) of the Code.

(f) Grandfathered Minimum Benefit. For active Participants under the Program as of June 30, 2003, their benefit at any point in time will never be less than the benefit as computed under the terms of the Program, as they existed on June 30, 2003.

IN WITNESS WHEREOF, this Compensation Committee has caused this Amendment to be executed by its duly authorized representative on this 22 day of July , 2003.

COMPENSATION COMMITTEE OF NORTHROP GRUMMAN CORPORATION

By: /s/ J. MICHAEL HATELEY

J. Michael Hateley
Vice President and Chief Human Resources and Administrative Officer

EXHIBIT 15

August 6, 2003

Northrop Grumman Corporation
1840 Century Park East
Los Angeles, California 90067

We have made a review, in accordance with standards established by the American Institute of Certified Public Accountants, of the unaudited interim financial information of Northrop Grumman Corporation and subsidiaries for the periods ended June 30, 2003 and 2002, as indicated in our report dated July 25, 2003; because we did not perform an audit, we expressed no opinion on that information.

We are aware that our report referred to above, which is included in your Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, is incorporated by reference in Registration Statement Nos. 033-59815, 033-59853, 333-03959, 333-68003, 333-61936, 333-67266, 333-100179, 333-100180, and 333-103429 on Form S-8; Registration Statement Nos. 333-78251, 333-85633, 333-71290, 333-77056 on Form S-3; and Registration Statement Nos. 333-40862, 333-54800, and 333-83672 on Form S-4.

We also are aware that the aforementioned report, pursuant to Rule 436(c) under the Securities Act of 1933, is not considered a part of the Registration Statement prepared or certified by an accountant or a report prepared or certified by an accountant within the meaning of Sections 7 and 11 of that Act.

/s/ *DELOITTE & TOUCHE LLP*
Los Angeles, California

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS APPROVED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Ronald D. Sugar, Chief Executive Officer and President, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Northrop Grumman Corporation ("registrant");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2003

By: /s/ RONALD D. SUGAR

Ronald D. Sugar
Chief Executive Officer and President

Exhibit 31.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS APPROVED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Richard B. Waugh, Jr., Corporate Vice President and Chief Financial Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Northrop Grumman Corporation (“registrant”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and we have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

   (b) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 6, 2003

By: /s/ RICHARD B. WAUGH, JR.

Richard B. Waugh, Jr.
Corporate Vice President and Chief Financial Officer

Exhibit 32.1

Exhibit under line item (32) of Item 601 of Regulation S-K accompanying this Report on Form 10-Q pursuant to Securities and Exchange Commission Release No. 33-8238 et al. and not deemed filed herewith:

Certification of the Chief Executive Officer and President of Northrop Grumman Corporation furnished in connection with its Quarterly Report on Form 10-Q for the quarter ended June 30, 2003 pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Northrop Grumman Corporation (the "Company") on Form 10-Q for the quarterly period ended June 30, 2003, as filed with the Securities and Exchange Commission on August 6, 2003 (the "Report"), I, Ronald D. Sugar, Chief Executive Officer and President of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /S/ RONALD D. SUGAR

Ronald D. Sugar
Chief Executive Officer and President

August 6, 2003

A signed original of this written statement required by Section 906 has been provided to Northrop Grumman Corporation and will be retained by Northrop Grumman Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

Exhibit under line item (32) of Item 601 of Regulation S-K accompanying this Report on Form 10-Q pursuant to Securities and Exchange Commission Release No. 33-8238 et al. and not deemed filed herewith:

Certification of the Corporate Vice President and Chief Financial Officer of Northrop Grumman Corporation furnished in connection with its Quarterly Report on Form 10-Q for the quarter ended June 30, 2003 pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Northrop Grumman Corporation (the "Company") on Form 10-Q for the quarterly period ended June 30, 2003, as filed with the Securities and Exchange Commission on August 6, 2003 (the "Report"), I, Richard B. Waugh, Jr., Corporate Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes)-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ RICHARD B. WAUGH, JR.

Richard B. Waugh, Jr.
Corporate Vice President and
Chief Financial Officer

August 6, 2003

A signed original of this written statement required by Section 906 has been provided to Northrop Grumman Corporation and will be retained by Northrop Grumman Corporation and furnished to the Securities and Exchange Commission or its staff upon request.