

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

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

For the fiscal year ended December 31, 1996

or

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

For the transition period from Commission file number
to 1-3229

NORTHROP GRUMMAN CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE 95-1055798
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

1840 Century Park East 90067
Los Angeles, California (Zip Code)
(Address of principal executive offices)

Registrant's telephone number, including area code (310) 553-6262
Securities registered pursuant to Section 12(b) of the Act:

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

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

None

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

Yes x

No

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

As of February 14, 1997, 57,972,721 shares of Common Stock were
outstanding, and the aggregate market value of the Common Stock (based upon
the closing price of the stock on the New York Stock Exchange) of the
Registrant held by nonaffiliates was approximately \$4,400 million.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the 1997 Annual Meeting of
Stockholders. Part III

NORTHROP GRUMMAN CORPORATION

PART I

Item 1. Business

Northrop Corporation was incorporated in Delaware in 1985. Effective
May 18, 1994, Northrop Corporation was renamed Northrop Grumman
Corporation. Northrop Grumman is an advanced technology company operating
in the aircraft and electronics industry segments of the broadly defined
aerospace industry. The aircraft segment includes the design, development
and manufacturing of aircraft and aircraft subassemblies. The electronics
segment includes the design, development, manufacturing and integration of
electronic systems for military and commercial use and the operation and
support of computer systems for scientific and management information.

Additional information required by this Item is contained in Part II
Item 7 of this Annual Report on Form 10-K.

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Item 2. Properties

The major locations, general status of the company's interest in the property and identity of the industry segments that use the property described, are indicated in the following table.

Location	Property Interest
Annapolis, Maryland (2) (a) (b) (c) (d)	Owned
Arlington, Virginia (1) (3) (a)	Leased
Auburn, Washington (1) (c)	Leased
Baltimore, Maryland (2) (b) (c) (d)	Leased
Benton, Pennsylvania (2) (b)	Leased
*Bethpage, New York (2) (3) (a) (b) (c) (d)	Owned, Leased
Bohemia, New York (2) (a)	Owned, Leased
Bridgeport, West Virginia (2) (a) (b)	Owned, Leased
Burlington, Canada (2) (a) (b) (c) (d)	Owned
Calverton, New York (2) (a) (b) (c) (d) (e)	Owned
Carson, California (1) (c)	Leased
Chandler, Arizona (1) (a) (b)	Owned
Cincinnati, Ohio (2) (b)	Leased
Cleveland, Ohio (2) (b)	Owned
College Station, Texas (2) (b)	Owned
Compton, California (1) (b) (c)	Owned, Leased
El Segundo, California (1) (a) (b) (c) (d)	Owned
Fairborn, Ohio (2) (a)	Leased
Fort Tejon, California (1) (d)	Owned, Leased
Gardena, California (1) (c)	Owned
Glen Arm, Maryland (2) (b)	Owned
Glen Burnie, Maryland (2) (a)	Owned
Grand Prairie, Texas (1) (a) (b) (c) (d)	Owned, Leased
Great River, New York (2) (a) (b)	Owned
Hanover, Maryland (2) (b)	Leased
Hawthorne, California (1) (2) (3) (a) (b) (c) (d)	Owned, Leased
Herndon, Virginia (1) (2) (a)	Leased
*Hicksville, New York (2) (a) (d) (e)	Owned
Houston, Texas (2) (a)	Leased
Hunt Valley, Maryland (2) (b)	Leased
Kent, Washington (1) (c)	Leased

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Lake Charles, Louisiana (1) (a) (b) (c)	Leased
Lawton, Oklahoma (1) (a) (c)	Owned, Leased
Lexington, South Carolina (1) (a) (c)	Owned
Linthicum, Maryland (2) (a) (b) (c)	Owned, Leased
Los Angeles, California (1) (2) (3) (a)	Leased
Melbourne, Florida (2) (a) (b) (c) (e)	Owned, Leased
Melville, New York (2) (b)	Leased
Milledgeville, Georgia (1) (b) (c) (e)	Owned
Mojave, California (1) (e)	Owned, Leased
Montgomery, Pennsylvania (1) (b)	Owned
New Town, North Dakota (2) (b) (c)	Owned, Leased
Newbury Park, California (3) (a) (b) (c) (d)	Owned
Norwalk, Connecticut (2) (a) (b) (c) (d)	Leased
Norwood, Massachusetts (3) (b) (c) (e)	Owned, Leased
Orlando, Florida (2) (a) (b) (c) (d)	Leased
Palatine, Illinois (2) (c)	Leased
Palmdale, California (1) (a) (b) (c) (d) (e)	Owned, Leased
Perry, Georgia (1) (3) (a) (b) (c)	Owned
Pico Rivera, California (1) (a) (b) (c) (d)	Owned, Leased
Pittsburgh, Pennsylvania (2) (d)	Leased
Portsmouth, Rhode Island (1) (b) (e)	Owned, Leased
Rolling Meadows, Illinois (2) (a) (b)	Owned, Leased
St. Augustine, Florida (1) (a) (b) (c) (e)	Owned, Leased
Stuart, Florida (1) (b) (c)	Leased
Sturgis, Michigan (1) (a) (b) (c)	Owned, Leased
Sunnyvale, California (2) (a) (b) (c) (d)	Owned
Sykesville, Maryland (2) (b)	Owned
Titusville, Florida (2) (a) (d)	Owned, Leased

Torrance, California (1) (b) (c)	Owned, Leased
Tulare, California (1) (b)	Owned
Warner Robins, Georgia (2) (a)	Owned, Leased
Warren, Michigan (1) (b)	Leased

* Certain portions of the properties at each of these locations are leased or subleased to others. The company believes that in the aggregate the property covered by such leases or subleased to others is not material compared to the property actually utilized by the company in its business.

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Following each described property are numbers indicating the industry segments utilizing the property:

- (1) Aircraft
- (2) Electronics
- (3) General Corporate Asset

Following each described property are letters indicating the types of facilities located at each location:

- (a) office
- (b) manufacturing
- (c) warehouse
- (d) research and testing
- (e) other

Government-owned facilities used or administered by the company consist of 9 million square feet at various locations across the United States.

The company believes its properties are well-maintained and in good operating condition. Under present business conditions and the company's volume of business, productive capacity is currently in excess of requirements.

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Item 3. Legal Proceedings

False Claims Act Litigation

On June 9, 1987, a Complaint, entitled U.S. ex rel, David Peterson and Jeff Kroll v. Northrop Corporation, was filed in the U.S. District Court for the Central District of California alleging violations by the company of the False Claims Act in connection with the operation of petty cash funds, inspection, testing, and pricing for the MX Peacekeeper Missile program. On September 1, 1989, the government intervened and reduced the scope of the lawsuit by filing an amended complaint. The amended complaint did not completely specify the total amount being sought but, rather, sought damages in excess of \$1.2 million. On May 7, 1990, the Court ruled that the original plaintiffs could proceed with portions of the lawsuit that the government had declined to include in the amended complaint. In 1994, the court granted summary judgment for the company on the government's fraud allegations related to petty cash, integrated test stations, extended work week and experimental change orders.

A Federal jury trial commenced in the first quarter of 1996 with respect to the government's remaining allegations. The relators' severed allegations were resolved prior to trial. The government had asserted three separate claims totaling approximately \$13.5 million, including a claim for alleged mischarging of approximately \$12 million in violation of the False Claims Act. Damages awarded under the False Claims Act are subject to doubling or trebling and possible additional penalties including disallowance of attorneys' fees. In the second quarter of 1996, the Federal jury returned a unanimous verdict for the company. The government's motion for a new trial, filed May 30, 1996, was denied on August 16, 1996. A notice of appeal was filed by the government on October 10, 1996.

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In addition, the company is a party to a number of civil actions brought by private parties alleging violation of the False Claims Act in which the government has declined to intervene. These actions, which have been previously reported, relate to the MX Peacekeeper Missile, the Air

Launched Cruise Missile and the Advanced Technology Bomber (B-2) programs. In a number of these actions, plaintiffs also allege employment-related claims including claims of wrongful termination. Damages sought include claims for compensatory and punitive damages. A number of these civil actions were initially reported when it was unclear what position, if any, the government would take in the litigation. In light of the government's decision not to intervene or otherwise pursue the litigation, as well as the amounts involved, the cases will not be individually reported. Further, the company learns from time to time that it has been named as a defendant in lawsuits that are filed under seal pursuant to the False Claims Act. Since these matters remain under seal, the company does not possess sufficient information to report accurately on the particular allegations.

Walsh, et al. v. Northrop Grumman Corporation

In November 1994, a class action complaint was filed against Northrop Grumman Corporation, Grumman Corporation, Renso Caporali, Howard J. Dunn, Jr., Robert Denien and Robert E. Foster in the U.S. District Court for the Eastern District of New York, Case No. CV 94-5105 (Platt C.J.). A first amended complaint was filed on November 29, 1994 alleging that Grumman Corporation's March 8 and April 4, 1994 Form 14D-9 filings with the Securities and Exchange Commission incorporated a statement concerning the Grumman Severance Plan which violated Sections 10(b) and 14(e) of the Securities and Exchange Act of 1934 (the "Act") and Rule 10b-5 of the Rules and Regulations under the Act. The complaint also contains a cause of

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action for equitable estoppel based upon the same statement and plaintiffs' alleged reliance thereon. The complaint also alleges that the trustees of Grumman's Investment Plan violated their fiduciary obligations by voting the Plan's shares in favor of the merger without consulting the class members. The complaint seeks an order enjoining the defendants from amending or discontinuing the Severance Plan for a period of thirty (30) months from the date of the merger and an order mandating that defendants permit class members who have accepted voluntary termination with severance pay to rescind their elections. On December 8, 1994, the court denied plaintiffs' application for a preliminary injunction but declined to dismiss the action. On April 7, 1995, the court granted plaintiffs' motion to amend their complaint to add a claim for damages based on post acquisition changes to Grumman benefit plans. In July 1995 the court certified a class of plaintiffs consisting of all employees who, at the time of the tender offer, were Grumman employees, owned Grumman stock either directly or beneficially through the Employee Investment Plan, and were injured as a result of defendants' conduct. Absent dispositive motions, this matter will proceed to trial in 1997. The defendants intend to vigorously defend this litigation and the company does not expect this matter to have a material adverse effect on its financial condition.

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Executive Officers of the Registrant

The following individuals were the elected officers of the company as of February 1997:

Name	Age	Office Held	Since	Business Experience Last Five Years
Kent Kresa	58	Chairman, President & CEO	1990	
Herbert W. Anderson	57	Corporate Vice President and General Manager, Data Systems & Services Division	1995	Vice President and Deputy General Manager, Data Systems and Services Division; Prior to 1994, Vice President and Center General Manager, Northrop Information Services Center
Ralph D. Crosby, Jr.	49	Corporate Vice President and	1996	Corporate Vice President and

		General Manager, Commercial Aircraft Division		Deputy General Manager, Commercial Aircraft Division; Prior to March 1996, Corporate Vice President and Deputy General Manager, Military Aircraft Systems Division; Prior to January 1996 Corporate Vice President and General Manager, B-2 Division; Prior to 1994, Vice President Business and Advanced Systems Development at the B-2 Division; Prior to 1992, Vice President Business Development and Administration B-2 Division
Marvin Elkin	60	Corporate Vice President and Chief Human Resources, Communications and Administrative Officer	1996	Corporate Vice President and Chief Human Resources and Administrative Officer; Prior to 1994, Corporate Vice President Administration and Services
Nelson F. Gibbs	59	Corporate Vice President and Controller	1992	Vice President and Controller
John E. Harrison	61	Corporate Vice President and General Manager, Electronics and Systems Integration Division	1994	Senior Vice President and General Manager, Electronics Programs, Aerospace and Electronics Group, Grumman Corporation; Prior to 1992, President, Electronics Division, Grumman Corporation
Robert W. Helm	45	Corporate Vice President, Government Relations	1994	Vice President, Legislative Affairs
James C. Johnson	44	Corporate Vice President and Secretary and Assistant General Counsel	1996	Corporate Vice President and Secretary; Prior to 1995, Senior Corporate Counsel; Prior to 1992, Senior Counsel
Charles L. Jones, Jr.	55	Corporate Vice President and Chief Strategic Planning Advanced Development and Programs Officer	1996	Corporate Vice President, Quality Operations; Prior to 1992, Vice President, Quality Operations
William H. Lawler	56	Corporate Vice President and General Manager, Military Aircraft Systems Division	1997	Vice President and Deputy General Manager, Military Aircraft Systems Division; Prior to 1996, Vice President and Deputy General Manager, B-2 Division; Prior to 1995, Vice President and B-2 Program Manager; Prior to June 1994, Vice President, Business and Advanced Systems Development,

B-2 Division; Prior to 1994, Vice President and Deputy, Chief Engineer, Business and Advanced Systems Development, B-2 Division; Prior to 1993, Vice President Engineering and B-2 Chief Engineer, B-2 Division

Richard R. Molleur	64	Corporate Vice President and General Counsel	1991	
Albert F. Myers	51	Corporate Vice President and Treasurer	1994	Vice President, Business Strategy; Prior to 1992, Vice President, Test Operations, at B-2 Division
James G. Roche	57	Corporate Vice President and General Manager, Electronic Sensors and Systems Division	1996	Corporate Vice President and Chief Advanced Development, Planning, and Public Affairs Officer; Prior to 1993, Corporate Vice President Advanced Development and Planning Officer; Prior to 1992, Vice President, Advanced Development and Planning
Richard B. Waugh, Jr.	53	Corporate Vice President and Chief Financial Officer	1993	Vice President, Taxes, Risk Management and Business Analysis

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Item 4. Submission of Matters to a Vote of Security Holders
No information is required in response to this Item.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

The information required by this Item is contained in Part II, Item 8 of this Annual Report on Form 10-K.

Item 6. Selected Financial Data

The information required by this Item is contained in Part II, Item 7 of this Annual Report on Form 10-K.

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

Business Conditions

Northrop Grumman's industry segments - aircraft and electronics - are each a factor in the broadly defined aerospace industry. While Northrop Grumman is subject to the usual vagaries of the marketplace, it is also affected by the unique characteristics of the aerospace industry and by certain elements peculiar to its own business mix.

Northrop Grumman is one of the major companies that compete for the relatively small number of large, long-term programs that characterize both the defense and commercial segments of the aerospace business. It is common in the aerospace industry for work on major programs to be shared between a number of companies. A company competing to be a prime contractor can turn out to be a subcontractor. It is not uncommon to

compete with customers, and simultaneously to be both a supplier to and customer of a given competitor. Over the past several years the aerospace industry has been going through a consolidation process and along with it, significant downsizing. These actions, in which Northrop Grumman has participated, have made competition even more intense than in the past. The nature of major aerospace programs, conducted under binding contracts, allows companies that perform well to benefit from a level of program continuity unknown in many industries. Lockheed Martin and The Boeing Company, which in late 1996 announced its intention to acquire McDonnell Douglas, are the largest companies in the aerospace industry at this time. Northrop Grumman also competes against these and other companies for a number of large and smaller programs in the electronics and systems integration areas. Thus, intense competition and long operating cycles are both characteristic of the industry's - and Northrop Grumman's - business.

In the first quarter of 1996 Northrop Grumman acquired the defense and electronics systems business (ESG) of Westinghouse Electric Corporation at a cost of \$2.9 billion. The business acquired is being operated as a component of the electronics industry segment. The company purchased the outstanding common stock of Grumman Corporation (Grumman) for \$2.1 billion in the second quarter of 1994. Northrop Corporation was renamed Northrop Grumman Corporation effective May 18, 1994. In August 1994 the company purchased the remaining 51 percent interest in Vought Aircraft Company (Vought) for \$130 million. The company had purchased a 49 percent interest in Vought in 1992.

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The B-2 bomber, for which the company is the prime contractor, is Northrop Grumman's largest program. The aircraft segment is responsible for final assembly of the B-2's airframe and systems integration at its Palmdale, California facility. The company also manufactures the fuselage and elements of the B-2's navigation and electronic warfare/situation awareness system. Major subcontractors include Boeing, which produces the aft center section, outboard wing sections, landing gear and fuel system, and Hughes Electronics Corporation, which produces the radar systems. The U. S. Air Force currently plans to operate two B-2 bomber squadrons of eight aircraft each with an additional five aircraft available to fill in for those in depot for periodic maintenance.

The company also is the principal subcontractor to McDonnell Douglas on the F/A-18 program. The F/A-18 is a fighter/ground-attack aircraft with configurations equipped for either one or two crew members. Principally deployed by the U.S. Navy on aircraft carriers, it has also been purchased by several other nations as a land-based combat aircraft. The company builds approximately 40 percent of the aircraft including the center and aft fuselage, vertical tails, and associated subsystems. Of the versions of the F/A-18 currently in production, the C is a single-seat combat aircraft that was first delivered to the U.S. Navy in 1987 and the D is a two-seat version principally used for training. The F/A-18 single-seat E and two-seat F are enhanced versions currently in the test phase of development and will serve as the U.S. Navy's next-generation multimission aircraft.

The company manufactures portions of the Boeing 747, 757, 767 and 777 jetliners, the Gulfstream IV and V business jets, and the McDonnell Douglas C-17 military transport. Northrop Grumman has been a principal airframe subcontractor for the Boeing 747 jetliner since the program began in 1966, producing the fuselage and aft body section for the 747 as well as cargo and passenger doors, the vertical and horizontal body stabilizers, floor beams and smaller structural components. The majority of the Boeing jetliner work is performed at the aircraft segment's production sites in Hawthorne, California; Grand Prairie, Texas; and Stuart, Florida. Northrop Grumman manufactures engine nacelles for the Gulfstream IV and other business jets and has begun production of the wings for Gulfstream's newest business jet, the Gulfstream V. The company also produces the empennage, engine nacelles and control surfaces for the McDonnell Douglas C-17, the U.S. Air Force's most advanced airlifter. The work performed on the C-17, Gulfstream IV and V, 757, 767, 777 and some of the components of the 747 were added as a result of the Grumman and Vought acquisitions.

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Northrop Grumman also is a major producer of early warning and surveillance/battle management aircraft. The company designed and built all-weather E-2C Hawkeye airborne early warning command-and-control aircraft that has been in active service with the U.S. Navy since 1973, also is employed by the air forces of five other nations. The E-2C is produced by the company's electronics segment.

The company also serves as prime contractor for the E-8 Joint Surveillance Target Attack Radar System (Joint STARS). Joint STARS detects, locates, classifies, tracks and targets potentially hostile ground movement in all weather conditions. It is designed to operate around the

clock, in constant communication through secure data links with air force command posts, army mobile ground stations or centers of military analysis far from the point of conflict. The Joint STARS platform is a remanufactured Boeing 707-300 airframe. The 707 is remanufactured at Northrop Grumman's Lake Charles, Louisiana site. Final installation of electronics and testing are performed at the electronics segment integration and test facility in Melbourne, Florida.

ECM denotes electronic countermeasures equipment manufactured by the company's electronics segment. The company's Rolling Meadows, Illinois site produces the AN/ALQ-135, currently the largest program in this business area. The AN/ALQ-135 is an internally mounted radar jammer deployed on F-15 fighter aircraft as part of that aircraft's Tactical Electronic Warfare System. The AN/ALQ-162 Shadowbox, a jammer built specifically to counter continuous wave radars, has been installed on the AV-8B and certain foreign F/A-18 aircraft. It is also being deployed on U.S. Army helicopters and special mission aircraft and has been sold to the air forces of three other nations. The company is also under contract to develop and produce a directional infrared countermeasures (DIRCM) system for the United Kingdom and the U.S. Special Operations Command slated for use on British helicopters, transports, and U.S. Special Operations Command C-130 transports to reduce vulnerability to heatseeking missiles. DIRCM is designed to provide high-powered jamming required to counter more advanced seekers expected in the twenty-first century.

The company's Baltimore, Maryland site produces the Airborne Self-Protection Jammer (ASPJ) in a joint venture with IIT-Avionics. The ASPJ is an internally mounted system that protects tactical aircraft against numerous radar guided threats. It is currently installed on selected F/A-18 and F-14 aircraft.

Northrop Grumman as the prime contractor to the U.S. Army is developing a "brilliant" anti-armor submunition, designated as BAT, with production scheduled to commence in 1998. BAT is a three-foot-long, 44 pound, wide-area-attack submunition that will be used to disable and destroy armored vehicles and trucks.

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BATs are meant to be carried and dispensed by a larger missile and designed to be ejected over an armored vehicle column or attacking formation. Each BAT has an acoustic sensor that can home in on the noise created by the tank's or truck's engine and an infrared sensor that can home in on the heat generated by a vehicle's engine.

The company's electronics segment is a major producer of airborne radar systems. Included in this business area are the AN/APG-66 and AN/APG-68 fire control radars for the F-16 aircraft of which more than 6,000 have been produced since 1976. The AN/APG-66 is presently on 16 airborne platforms and is deployed in 20 countries. Northrop Grumman is currently leading a joint venture with Texas Instruments to develop the AN/APG-77 radar for the F-22 aircraft. The AN/APG-77 is designed for air-superiority and strike operations and features a low observable, active aperture, electronically-scanned array with multi-target all-weather capability. The company's electronics segment also produces the AN/APY-1/2 surveillance radar system which provides air-to-air surveillance capability for the E-3 Airborne Warning And Control System (AWACS). AWACS is designed to detect and track both enemy and friendly aircraft throughout a large volume of airspace.

The company is a leader in producing marine machinery and advanced propulsion systems, missile launchers, shipboard instrumentation and control systems, mine countermeasures and undersea vehicles. Every Nimitz-class aircraft carrier is fitted with eight turbine generator sets that are produced at the electronics segment Sunnyvale, California site. Each shipset of these powerful generators develops enough power to supply a city of 75,000 people. The company also produces the main propulsion system for the Navy's Seawolf-class attack submarines.

In addition, the company produces air defense and air traffic control radar systems for airspace management for both domestic and foreign customers. The three-dimensional AN/TPS-70/75 radars and predecessor AN/TPS-43 are among the products in this business area. They have been the U.S. Air Force air defense system standard since 1968. They are currently in operation in more than 30 countries, supporting air defense, air sovereignty, air traffic control and counternarcotics needs. The ASR-9 Terminal Radar detects and displays aircraft and weather simultaneously, helping air traffic controllers guide aircraft through the crowded skies surrounding airports.

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Northrop Grumman designs, develops, operates and supports computer systems for scientific and management information. Services provided include systems integration, systems service, information conversion and training for federal, state and local governments and private industry. The company also provides military base support functions and aircraft

maintenance at a number of U.S. Government facilities.

Tables of contract acquisitions, net sales and funded order backlog follow and complement industry segment data. The reporting of industry segment data has been realigned based upon the company's current mix of products. Operating results for those programs formerly reported in the missiles and unmanned vehicles segment along with aircraft services programs previously included in the data systems and other services segment (DSOS) are now included in the aircraft segment. The balance of the programs included in the DSOS and all of the operations of ESG are included in the electronics industry segment. Data for prior years has been restated. B-2, F/A-18, Boeing Jetliners (the 747, 757, 767 and 777) and C-17 are currently the major programs of the aircraft industry segment. Surveillance Aircraft (the E-2C Hawkeye and E-8 Joint STARS), ECM, Airborne Radar, Marine, Space and Airspace Management are included in the electronics industry segment.

Individual companies prosper in the competitive aerospace/defense environment according to their ability to develop and market innovative products. They also must have the ability to provide the people, facilities, equipment and financial capacity needed to deliver those products with maximum efficiency. It is necessary to maintain, as the company has, sources for raw materials, fabricated parts, electronic components and major subassemblies. In this manufacturing and systems integration environment, effective oversight of subcontractors and suppliers is as vital to success as managing internal operations. Northrop Grumman's operating policies are designed to enhance these capabilities. The company also believes that it maintains good relations with its employees, approximately 13 percent of whom are covered by collective bargaining agreements.

U.S. Government programs in which Northrop Grumman either participates, or strives to participate, must compete with other programs for consideration during our nation's budget formulation and appropriation processes. As a consequence of the continued pressure to reduce the federal budget deficit, the U.S. defense budget is not expected to increase substantially in the near term. Budget decisions made in this environment will have long-term consequences for the size and structure of Northrop Grumman and the entire defense industry. An important factor in determining Northrop Grumman's ability to compete successfully for future contracts will be its cost structure vis-a-vis other bidders.

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Although the ultimate size of future defense budgets remains uncertain, the defense needs of the nation are expected to provide substantial research and development (R&D) funding and other business for the company to pursue well into the future.

Northrop Grumman has historically concentrated its efforts in such high technology areas as stealth, airborne surveillance, battle management, precision weapons and systems integration. Even though a high priority has been assigned by the Department of Defense to the company's major programs, there remains the possibility that one or more of them may be reduced, stretched or terminated.

Business conditions in the commercial aircraft industry appear to be on the upswing. The major producers of jetliners recorded more than twice the number of new aircraft orders in 1995 than in 1994. This positive trend continued in 1996, potentially signifying a new commercial airplane buying cycle. Northrop Grumman, with its involvement on various Boeing jetliners, remains optimistic about the long-term prospects for its commercial structures business.

Northrop Grumman pursues new business opportunities when justified by acceptable financial returns and technological risks. The company examines opportunities to acquire or invest in new businesses and technologies to strengthen its traditional business areas. Northrop Grumman continues to capitalize on its technologies and skills by entering into joint ventures, partnerships or associations with other companies.

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Results Of Operations By Industry Segment And Major Customer

Year ended December 31, \$ in millions	1996	1995	1994	1993	1992
Revenue					
Aircraft					
United States Government	\$ 3,217	\$ 3,735	\$ 4,434	\$ 3,899	\$ 4,281
Other customers	802	837	703	567	583

Intersegment sales	256	188	74	1	1
	4,275	4,760	5,211	4,467	4,865
Electronics					
United States Government	3,482	1,969	1,238	582	677
Other customers	570	277	336	15	9
Intersegment sales	42	103	106	114	120
	4,094	2,349	1,680	711	806
Intersegment eliminations	(298)	(291)	(180)	(115)	(121)
Total revenue	\$ 8,071	\$ 6,818	\$ 6,711	\$ 5,063	5,550

Operating Profit					
Aircraft	\$ 515	\$ 471	\$ 487	\$ 251	\$ 269
Electronics	344	211	141	59	65
Total operating profit	859	682	628	310	334
Adjustments to reconcile operating profit to operating margin:					
Other income included above	(17)		(6)	(3)	(2)
State and local income taxes	(48)	(37)	(28)	(18)	(12)
General corporate expenses	(123)	(109)	(113)	(96)	(102)
Mark-to-market restricted stock rights	(13)				
Special termination benefits			(282)		
Operating margin	\$ 658	\$ 536	\$ 199	\$ 193	\$ 218

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Year ended December 31, \$ in millions	1996	1995	1994	1993	1992
Contract Acquisitions					
Aircraft	\$ 4,056	\$ 1,986	\$ 8,580	\$ 4,191	\$ 3,596
Electronics	6,468	2,606	3,385	616	568
Total acquisitions	\$10,524	\$ 4,592	\$11,965	\$ 4,807	\$ 4,164
Funded Order Backlog					
Aircraft	\$ 7,114	\$ 7,077	\$ 9,663	\$ 6,220	\$ 6,495
Electronics	5,286	2,870	2,510	699	680
Total backlog	\$12,400	\$ 9,947	\$12,173	\$ 6,919	\$ 7,175
Identifiable Assets					
Aircraft	\$ 2,387	\$ 2,537	\$ 3,222	\$ 1,993	\$ 2,148
Electronics	5,970	2,367	2,181	404	448
Operating assets	8,357	4,904	5,403	2,397	2,596
General corporate	1,065	551	644	542	566
Total assets	\$ 9,422	\$ 5,455	\$ 6,047	\$ 2,939	\$ 3,162
Capital Expenditures					
Aircraft	\$ 85	\$ 86	\$ 89	\$ 80	\$ 54
Electronics	108	44	44	54	67
General corporate	1	3	1	1	2
Total expenditures	\$ 194	\$ 133	\$ 134	\$ 135	\$ 123
Depreciation and Amortization					
Aircraft	\$ 118	\$ 172	\$ 166	\$ 150	\$ 96
Electronics	247	110	103	63	63
General corporate	2	1		1	1
Total depreciation and amortization	\$ 367	\$ 283	\$ 269	\$ 214	\$ 160

NORTHROP GRUMMAN CORPORATION

Northrop Grumman, as well as many other companies in the defense industry, suffered the effects of the Department of Defense's practice in the 1980s of structuring high-risk research and development contracts, such as the Tri-Service Standoff Attack Missile (TSSAM), as fixed-price or capped cost-reimbursement type contracts. Although Northrop Grumman has stopped accepting these types of contracts, it has experienced financial losses on TSSAM and other similar programs acquired under them in the past. In the event of termination for convenience, contractors are normally protected by provisions covering reimbursement for costs incurred subsequent to termination. The company received a termination for convenience notice on the TSSAM program in February 1995. In December 1996, the company filed a lawsuit against the U.S. Government in the U.S. Court of Federal Claims seeking the recovery of approximately \$750 million for uncompensated performance costs, investments, and a reasonable profit.

In prior years, the company had charged to operations in excess of \$600 million related to this program. Northrop Grumman is unable to predict whether it will realize some or all its claims against the U.S. Government from the TSSAM contract. The company does not expect that these actions will have a material adverse effect on the company's financial position.

Prime contracts with various agencies of the U.S. Government and subcontracts with other prime contractors are subject to a profusion of procurement regulations, with noncompliance found by any one agency possibly resulting in fines, penalties, debarment or suspension from receiving additional contracts with all agencies. Given the company's dependence on U. S. Government business, suspension or debarment could have a material adverse affect on the company's future. Moreover, these contracts may be terminated at the U. S. Government's convenience as was done with the TSSAM program. While Northrop Grumman conducts most of its business with the U.S. Government, principally the Department of Defense, commercial sales still represent a significant portion of total revenue.

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Federal, state and local laws relating to the protection of the environment affect the company's manufacturing operations. The company has provided for the estimated cost to complete remediation where it is probable that the company will incur such costs in the future, including those for which it has been named a Potentially Responsible Party (PRP) by the Environmental Protection Agency or similarly designated by other environmental agencies. The company has been designated a PRP under federal Superfund laws at 16 hazardous waste sites and under state Superfund laws at six sites. It is difficult to estimate the timing and ultimate amount of environmental cleanup costs to be incurred in the future due to the uncertainties regarding the extent of the required cleanup and the status of the law, regulations and their interpretations. Nonetheless, to assess the potential impact on the company's financial statements, management estimates the total reasonably possible remediation costs that could be incurred by the company. Such estimates take into consideration the professional judgment of the company's environmental engineers and, when necessary, consultation with outside environmental specialists. In most instances, only a range of reasonably possible costs can be estimated. However, in the determination of accruals the most probable amount is used when determinable and the minimum is used when no single amount is more probable. The company records accruals for environmental cleanup costs in the accounting period in which the company's responsibility is established and the costs can be reasonably estimated. Management estimates that at December 31, 1996, the reasonable range of future costs for environmental remediation, including Superfund sites, is \$63 million to \$107 million, of which \$64 million has been accrued. The amount accrued has not been offset by potential recoveries from insurance carriers or other PRPs. Should other PRPs not pay their allocable share of remediation costs, the company may have to incur costs in addition to those already estimated and accrued. The company is making the necessary investments to comply with environmental laws; the amounts, while not insignificant, are not considered material to the company's financial position or results of its operations.

NORTHROP GRUMMAN CORPORATION

Measures of Volume

Contract acquisitions tend to fluctuate and are determined by the size and timing of new and add-on orders. The effects of multiyear orders and/or funding can be seen in the highs and lows shown in the following table. The funded order backlog of ESG, Grumman and Vought on the date the businesses were acquired are reflected as acquisitions in the years they were acquired. The Airborne Radar, Marine and Airspace Management business areas were added as part of the ESG acquisition. The 757, 767, 777 (included in Boeing Jetliners category), Surveillance Aircraft (E-2 and E-8 Joint STARS) and C-17 programs were acquired as part of Grumman and Vought.

B-2 acquisitions in 1996 included \$453 million for the upgrade of test vehicle AV-1 to operational status increasing the program to 21 operational aircraft. The balance of B-2 acquisitions in 1996 and acquisitions for 1995 include incremental funding for ongoing development work, spares and other customer support for the operational aircraft program. In 1994, \$2.4 billion of funding to complete five B-2 production aircraft was received as well as incremental funding for ongoing development work, spares and other customer support. The company still stands to gain future new post production business, such as airframe depot maintenance, repair of components, operational software changes and product improvement modifications. The debate over the future of the B-2, which is built in the nation's only active bomber producing facility, is now taking place. Without future production orders the nation's multibillion-dollar investment in this capability will be disassembled and become retrievable only at a large additional cost.

Contract Acquisitions

\$ in millions	1996	1995	1994	1993	1992
B-2	\$ 1,682	\$ 475	\$ 3,646	\$ 2,632	\$ 2,235
Surveillance Aircraft	1,330	1,084	2,287		
F/A-18	759	888	462	832	707
Boeing Jetliners	737	464	1,177	242	76
Airborne Radar	1,639				
Marine	901				
ECM	335	592	323	445	361
Space	414				
C-17	383	208	434		
Airspace Management	629				
Data Systems	240	198	251		
All other	1,475	683	3,385	656	785
	\$10,524	\$ 4,592	\$11,965	\$ 4,807	\$ 4,164

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Acquisitions in 1996 included orders for 62 F/A-18C/D shipsets. In 1996 the company also received long-lead funding for the first phase of the Low Rate Initial Production (LRIP) of the F/A-18E/F along with continued funding of the engineering and manufacturing development (EMD) phase of the program. Orders for 128 F/A-18C/D shipsets were finalized in 1995. In 1994 the company received long-lead funding from the McDonnell Douglas Corporation for new F/A-18C/D shipsets.

The company received final authorization to produce 50 additional 747 jetliner shipsets in 1996. Advance funding was received from The Boeing Company in 1995 for the current phase of the 747 jetliner program.

The company recorded orders for 18, 16, and 5 wing shipsets for the Gulfstream V business jet in 1996, 1995 and 1994 respectively. The company is producing the Gulfstream V wings under a revenue-sharing agreement with Gulfstream Aerospace (Gulfstream). The company will recognize revenue for its proportionate share of the revenue of each business jet when they are delivered to the ultimate customer by Gulfstream. Gulfstream has received 70 orders for the Gulfstream V through December 1996. The Gulfstream V received provisional certification in December 1996 and full certification is expected late in the first quarter of 1997. The company is using program accounting for the Gulfstream V with an estimated program of 250 shipsets to be delivered over a ten-year period. Inventoried costs at December 31, 1996 include \$56 million of learning-curve costs for this program. The learning-curve costs represent the excess of production cost of delivered and in process items over the estimated average unit cost. This concept assumes that production cost per unit decreases over time due to efficiencies from continuous improvements in the performance of repetitive tasks. All nonrecurring costs for the development of the wings have been expensed as incurred.

ECM acquisitions for 1995 included an award of \$279 million from the United Kingdom Ministry of Defence to develop and produce the DIRCM systems.

The balance of ESG, Grumman and Vought funded order backlog at the dates of acquisition, for those programs not listed in the table, is included in the "all other" category. ESG accounts for the major increase in the "all other" category in 1996 over 1995 and Grumman and Vought account for the increase in 1994 over 1993.

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Year-to-year sales vary less than contract acquisitions and reflect performance under new and ongoing contracts. The 1996 results of operations include ESG since the acquisition in March 1996. Comparative results for 1995 and prior do not include ESG data. The 1994 results of operations include Grumman and Vought since the acquisitions in April and August 1994, respectively. Comparative results for 1993 and prior do not include Grumman and Vought data.

Sales for 1996 were the highest in the company's history and were 18 percent higher than the previous record registered in 1995. Without the ESG acquisition, sales for 1996 would have declined 11 percent from the 1995 level. Sales for 1995 were 2 percent higher than in 1994 and without the Grumman and Vought acquisitions, sales for 1994 would have declined 10 percent from the 1993 level.

Net Sales

\$ in millions	1996	1995	1994	1993	1992
B-2	\$ 1,725	\$ 1,914	\$ 2,392	\$ 2,881	\$ 3,212
Surveillance Aircraft	1,104	1,179	754		
F/A-18	715	822	817	641	610
Boeing Jetliners	569	569	483	531	549

Airborne Radar	560				
Marine	496				
ECM	398	351	357	372	378
Space	315				
C-17	249	244	121		
Airspace Management	223				
Data Systems	208	187	120		
All other	1,509	1,552	1,667	638	801
	\$ 8,071	\$ 6,818	\$ 6,711	\$ 5,063	\$ 5,550

The decreasing trend in the B-2 revenues from both EMD and production work continued in 1996. The level of EMD effort, included in amounts reported as contract R&D, constituted 33 percent of the total B-2 revenue, up from 30 percent in 1995 and 26 percent in 1994. Current planning data indicate that the level of overall B-2 revenue will decline roughly 20 percent per year for the remainder of the decade.

Sales increased in 1996 for the C/D version of the F/A-18 program with an increase of deliveries to 68, as compared to 56 shipsets delivered in 1995 and 42 delivered in 1994. The company currently plans to deliver 35 F/A-18C/D shipsets in 1997. F/A-18E/F revenue was lower in 1996 with the delivery of the final three shipsets for the EMD phase of the program. A total of seven shipsets were delivered under the F/A-18E/F EMD contract in 1995. The LRIP phase of the F/A-18E/F program began in late 1996.

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Deliveries of 747 shipsets were 28 in 1996, 24 in 1995 and 31 in 1994. The change in the mix of Boeing jetliners delivered in 1996 resulted in the same level of sales as in 1995. Forty-eight 747 shipsets are expected to be delivered in 1997. Increased deliveries of all Boeing jetliners planned for 1997 is expected to result in more than a 50 percent increase in revenue from these programs.

The electronics industry segment revenues increased 74 percent in 1996 as a result of the inclusion of the ESG operations, which more than offset the reduction in revenue on the company's other electronics programs. Higher revenues on the E-2 Hawkeye and E-8 Joint STARS programs were the primary reason for the 40 percent increase in 1995 electronics revenues. The increase in 1994 was due to the acquisition of Grumman which more than offset the decrease from lower BAT development revenue and lower ECM sales.

The year-end funded order backlog is the sum of the previous year-end backlog plus the year's contract acquisitions minus the year's sales. Backlog is converted into the following years' sales as costs are incurred or deliveries are made. It is expected that approximately 54 percent of the 1996 year-end backlog will be converted into sales in 1997.

Funded Order Backlog

\$ in millions	1996	1995	1994	1993	1992
B-2	\$ 3,693	\$ 3,736	\$ 5,175	\$ 3,921	\$ 4,170
Surveillance Aircraft	1,664	1,438	1,533		
F/A-18	675	631	565	920	729
Boeing Jetliners	1,480	1,312	1,417	723	1,012
Airborne Radar	1,079				
Marine	405				
ECM	684	747	506	540	467
Space	99				
C-17	411	277	313		
Airspace Management	406				
Data Systems	174	142	131		
All other	1,630	1,664	2,533	815	797
	\$12,400	\$ 9,947	\$12,173	\$ 6,919	\$ 7,175

Total U.S. Government orders, including those made on behalf of foreign governments (FMS), comprised 76 percent of the backlog at the end of 1996 compared with 77 percent at the end of 1995 and 80 percent at the end of 1994. Total foreign customer orders, including FMS, accounted for 17 percent of the backlog at the end of 1996 compared with 13 percent in 1995 and 9 percent in 1994. Domestic commercial business in backlog at the end of both 1996 and 1995 was 16 percent and 14 percent at the end of 1994.

NORTHROP GRUMMAN CORPORATION

Measures of Performance

The company's operating profit for 1996 was a record high and has improved in its electronics segment for the last three years. The improvement in 1996 is due to the addition of ESG. The improvements in 1995 and 1994 stem from both increased revenue and improved operating margin rates in the electronics segment. Company-wide efforts to reduce costs, install tighter business controls, improve cash management, dispose of excess assets and

more effectively utilize productive assets are all goals aimed at contributing to the future success of Northrop Grumman. This financial report demonstrates the degree to which the accomplishment of these goals is being achieved.

Operating profit in the aircraft segment increased to its highest level ever in 1996 principally as a result of increased operating margin on the C-17 military transport and Boeing jetliners. These items offset the reduced operating margin on the B-2 program due to lower sales volume. The amount and rate of operating margin recognized on the 747 increased in 1996 due to increased deliveries and higher operating margin on the deliveries of the last phase of a 300-shipset production contract.

Aircraft segment operating profit decreased in 1995 primarily as a result of lower overall sales volume and \$31 million in expenditures for company-sponsored research and development for commercial aerostructures. The rate and amount of operating margin recorded on the B-2 production contract increased in 1995 as a result of negotiated contract adjustments and a revised estimate of the overall operating margin expected to be earned. This increase was offset by lower operating margin recorded on decreased revenue on the other phases of the B-2 program. The rate and amount of operating margin on the F/A-18E/F increased in 1995 due to an increase in the rate of operating margin being recorded on the EMD contract. This resulted from the continuing evaluation of the overall operating margin to be earned on this phase of the program. The increase on the F/A-18E/F more than offset reduced operating margin earned, on higher sales volume, for the F/A-18C/D. Fewer deliveries and cost increases related to a stretch-out of the 300-shipset production contract for the Boeing 747 jetliner resulted in a lower rate and amount of operating margin in 1995.

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Aircraft industry segment operating profit increased in 1994 as margin rates improved on the B-2 and F/A-18 programs. The rate and amount of operating margin recorded on the F/A-18E/F increased in 1994 due to an approximately one and one-half percent increase in the rate of operating margin being recorded on the EMD contract. The F/A-18 program operating margin improved in 1994 despite reduced F/A-18C/D shipset deliveries. These increases were partially offset by a reduction in the rate of operating margin on the 747 program due to increased costs allocated as a result of establishing a separate commercial aircraft operating element in 1994 and fewer deliveries than in 1993.

B-2 operating margin improved in 1994 as the amount of margin recorded on the delivery of four aircraft more than offset reduced operating margin from lower production and EMD sales. Following the award of the last increment of production funding for the B-2, the company began recording future operating margin increases on all production aircraft as these units are delivered and accepted by the customer. At the time each unit is delivered an assessment is made of the status of the production contract so as to estimate the amount of any probable additional margin available beyond that previously recognized. That unit's proportionate share of any such unrecognized remaining balance will then be recorded. In this fashion it is believed that margin improvements will be recognized on a more demonstrable basis. The current 15 production units are scheduled for their initial delivery over a five-year period, which began in December 1993. All but two units (four equivalent units for this purpose) will be returned for scheduled retrofitting with final deliveries beginning in 1997 and ending in 2000.

Operating profit in the electronics segment reached a record level in 1996. The improvement in 1996 is due to the addition of ESG which more than offset the reductions in the company's other electronics programs. The reductions were primarily due to reduced volume and a \$29 million charge recorded as a result of the write-down of a claim related to avionics work performed by Grumman Corporation prior to its acquisition by Northrop.

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The increase in 1995 operating profit in the electronics segment was a result of an increased rate of operating margin and higher sales volume on the E-2 Hawkeye and increased sales volume on the E-8 Joint STARS program. The electronics segment operating profit increased in 1994 due primarily to the addition of the E-2 Hawkeye, E-8 Joint STARS and various other military electronics programs associated with the Grumman acquisition and an increased rate of margin recorded in the company's electronic countermeasures business, which more than offset the \$8 million in provisions recorded by the electronics segment Norwood operation for unrecoverable costs incurred.

Operating margin in 1996 included \$39 million of pension income compared with \$23 million in 1995 and \$36 million in 1994. Also impacting operating margin is the cost of providing retiree health care and life insurance benefits - \$91 million in 1996 versus \$87 million in 1995 and \$69 million in 1994. A major contributor to the increase in retiree health

care and life insurance benefits cost was the addition of the Grumman and Vought retiree plans in 1994. Operating margin in 1994 was reduced by \$282 million to record the effect of an early retirement incentive program.

In 1996 the company recorded a \$90 million pretax charge related to the closure of four plants. The charge included \$30 million for costs related to the reduction of personnel and other closure activities, which lowered operating profit in the aircraft and electronics industry segments by \$22 million and \$8 million, respectively, and \$60 million for the write-down of facilities included in Other Deductions in the Consolidated Statements of Income. The company recorded a \$42-million pretax charge in 1994 for the planned disposal of excess real estate and other assets. This charge is reported in Other Deductions in the Consolidated Statements of Income. These charges were a result of the company's continuing efforts to reduce operating costs and dispose of assets that have become excess due to changes in the company's business strategy.

Interest expense increased \$133 million in 1996, following increases of \$28 million in 1995 and \$71 million in 1994. The increase in 1996 came primarily from the issuance of debt to finance the ESG acquisition. The increases in 1995 and 1994 came primarily from the issuance of debt related to the financing of the acquisition of Grumman. Total debt at December 31, 1996 stood at \$3.4 billion compared to \$1.4 billion at the end of 1995 and \$1.9 billion at the end of 1994.

The company's effective federal income tax rate was 39.1 percent in 1996, 38.4 percent in 1995 and 46.2 percent in 1994. The decrease in the 1995 rate was due to a reduction in the ratio of expenses not deductible for income taxes to the tax provision at the statutory rate of 35 percent. The higher rates in 1996 and 1994 were due to the amount of expenses not deductible for income taxes, primarily the amortization of goodwill.

NORTHROP GRUMMAN CORPORATION

Measures of Liquidity and Capital Resources

The trend and relationship of sales volume with net accounts receivable and inventoried costs is a useful measure in assessing the company's liquidity. In 1994, the company's net investment in these balances represented 33 percent of sales. It decreased to 29 percent at the end of 1995 before increasing to 30 percent at year-end 1996 with the acquisition of ESG.

Cash flows from operations over the last three years have averaged over \$600 million annually. The \$701 million of cash flow from operations in 1996 was a decrease of \$43 million from 1995 which was an increase of \$303 million over 1994 which in turn was a \$61 million increase over that of 1993. These cash flows have been sufficient to service debt, finance capital expansion projects and continue paying dividends to shareholders.

The following table is a condensed summary of the detailed cash flow information contained in the Consolidated Statements of Cash Flows.

Year ended December 31	1996	1995	1994	1993	1992
Cash came from					
Customers	65%	96%	71%	99%	98%
Lenders	30	2	29	1	2
Shareholders	4				
Buyers of assets/other	1	2			
	100%	100%	100%	100%	100%
Cash went to					
Employees and suppliers of services and materials	57%	83%	65%	89%	93%
Sellers of assets	23	2	18		1
Lenders	14	12	15	8	3
Suppliers of facilities/other	5	2	1	2	2
Shareholders	1	1	1	1	1
	100%	100%	100%	100%	100%

The increased cash received from lenders in 1996 and 1994 resulted from borrowing for the acquisitions of ESG and Grumman respectively. The cash received from shareholders in 1996 was from a public stock offering in which the company issued approximately 8 million shares of common stock at \$63.25 per share. The net proceeds of \$493 million were used to pay down outstanding debt under the company's Credit Agreement.

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In connection with the financing of the Grumman acquisition, the company in April 1994, replaced its \$400 million Credit Agreement with a new \$2.8 billion Credit Agreement. The new facility provided for \$600 million, available on a revolving credit basis through March 1999 and a \$2.2 billion term loan payable through March 1999. The Credit Agreement was amended in May 1994 to increase the revolving credit line to \$800 million and reduce the term loan to \$2 billion. In October 1994, the company issued \$350 million of notes due in 2004 and \$250 million of

debentures due in 2024 pursuant to a public offering. The net proceeds from the offering, along with other available funds, were used to prepay \$900 million under the term loan facility in addition to paying the \$100 million September quarterly installment due under that facility. In December 1994, the company amended the Credit Agreement to provide for the repayment of the remaining \$1 billion balance of the term loan in 14 quarterly installments of \$62.5 million plus interest beginning in September 1995, with a final installment of \$125 million due in March 1999. Cash flow from operations during 1994 enabled the company to prepay the \$160 million of notes payable to institutional investors due in 1995 and acquire, in the open market, \$58 million of notes due in 1999, while paying a net premium of \$5 million for the early payments of these notes. The charge for the premium is included in Other Deductions in the Consolidated Statements of Income. Cash flow from operations in 1995 was sufficient to allow the company to make the \$125 million required term loan payment as well as \$312 million in voluntary payments for amounts that were due through March 1997.

During the first quarter of 1996 the company sold to institutional investors \$400 million of 7 percent notes due 2006, \$300 million of 7 3/4 percent debentures due 2016 and \$300 million of 7 7/8 percent debentures due 2026. The proceeds from this issuance were used to finance a portion of the purchase price of ESG. The debt indentures contain restrictions relating to limitations on liens, sale and leaseback arrangements and funded debt of subsidiaries.

To finance the balance of the purchase price of ESG the company amended its Credit Agreement with a group of domestic and foreign banks to provide for three credit facilities: \$1.8 billion available on a revolving credit basis through March 2002; a variable interest \$500 million two-year term loan due March 1, 1998, which was repaid in July 1996; and a variable interest rate \$1.5 billion six-year term loan due in 24 quarterly installments of \$62.5 million plus interest beginning June 1996. Effective November 1, 1996, the Credit Agreement was further amended to reduce the \$1.5 billion term loan to \$1.05 billion payable in 21 quarterly installments of \$50 million plus interest beginning March 1, 1997.

NORTHROP GRUMMAN CORPORATION

During 1995 the company entered into an agreement with a financial institution to sell designated pools of its commercial accounts receivable, in amounts up to \$75 million. At December 31, 1995, \$34 million of accounts receivable had been sold. Northrop Grumman terminated this agreement in 1996.

To provide for long-term liquidity the company believes it can obtain additional capital from such sources as: the public or private capital markets, the further sale of assets, sale and leaseback of operating assets, and leasing rather than purchasing new assets.

The cost reduction and cash improvement programs underway throughout the company have produced favorable results, with the expectation that further efforts will result in minimizing the need to incur additional borrowings during 1997. Cash generated from operations is expected to be sufficient in 1997 to service debt, finance capital expansion projects and continue paying dividends to the shareholders.

Capital expenditure commitments at December 31, 1996, were approximately \$127 million including \$4 million for environmental control and compliance purposes.

The company will continue to provide the productive capacity to perform its existing contracts, dispose of assets no longer needed to fulfill operating requirements, prepare for future contracts and conduct R&D in the pursuit of developing opportunities. While these expenditures tend to limit short-term liquidity, they are made with the intention of improving the long-term growth and profitability of the company.

Forward-Looking Information

Certain statements and assumptions in Management's Discussion and Analysis contain or are based on "forward-looking" information (as defined in the Private Securities Litigation and Reform Act of 1995) that involves risk and uncertainties, including statements and assumptions with respect to future revenues, program performance and cash flows, the outcome of contingencies including litigation and environmental remediation, and anticipated costs of capital investments and planned dispositions. The company's operations are necessarily subject to various risks and uncertainties; actual outcomes are dependent upon many factors, including, without limitation, the company's successful performance of internal plans; government customers' budgetary restraints; 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; 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 and commercial aircraft and electronic systems

and support; as well as other economic, political and technological risks and uncertainties.

NORTHROP GRUMMAN CORPORATION

Selected Financial Data

Year ended December 31, \$ in millions, except per share	1996	1995	1994	1993	1992
Net sales to					
United States Government	\$ 6,699	\$ 5,703	\$ 5,672	\$ 4,481	\$ 4,958
The Boeing Company	569	569	483	531	549
Other customers	803	546	556	51	43
Total net sales	8,071	6,818	6,711	5,063	5,550
Net income	234	252	35	96	121
Earnings per share	4.33	5.11	.72	1.99	2.56
Cash dividends per share	1.60	1.60	1.60	1.60	1.20
Net working capital	(3)	357	467	481	354
Current ratio	1.00 to 1	1.21 to 1	1.24 to 1	1.45 to 1	1.25 to 1
Total assets	\$ 9,422	\$ 5,455	\$ 6,047	\$ 2,939	\$ 3,162
Long-term debt	2,950	1,163	1,633	160	160
Total long-term obligations	4,619	2,234	2,757	468	426
Long-term debt as a percentage of shareholders' equity	138.6%	79.7%	126.6%	12.1%	12.8%
Operating margin as a percentage of					
Net sales	8.2	7.9	3.0	3.8	3.9
Average operating assets	9.9	10.4	5.2	7.7	8.2
Net income as a percentage of					
Net sales	2.9	3.7	.5	1.9	2.2
Average assets	3.1	4.4	.8	3.1	3.8
Average shareholders' equity	13.1	18.3	2.7	7.5	9.9
Research and development expenses					
Contract	\$ 1,628	\$ 1,175	\$ 1,477	\$ 1,603	\$ 1,693
Noncontract	255	164	121	97	93
Payroll and employee benefits	3,096	2,656	2,661	1,906	2,001
Number of employees at year-end	46,600	37,300	42,400	29,800	33,600
Number of shareholders at year-end	10,136	10,834	11,241	11,618	12,599
Depreciation	\$ 204	\$ 226	\$ 227	\$ 214	\$ 160
Amortization of					
Goodwill	81	36	27		
Other purchased intangibles	82	21	15		
Maintenance and repairs	93	80	105	87	106
Rent expense	90	89	84	47	52
Floor area (millions of square feet)					
Owned	22.5	20.1	21.3	12.9	12.6
Commercially leased	8.7	7.0	7.5	3.2	4.2
Leased from United States Government	9.0	10.2	9.4	2.1	1.9

NORTHROP GRUMMAN CORPORATION

Item 8. Financial Statements and Supplementary Data

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

December 31, \$ in millions	1996	1995	1994	1993	1992
Assets:					
Current assets					
Cash and cash equivalents	\$ 44	\$ 18	\$ 17	\$ 100	\$ 230

Accounts receivable	1,356	1,197	1,202	820	791
Inventoried costs	1,053	771	1,043	569	670
Deferred income taxes	77	25	38	46	38
Prepaid expenses	67	61	47	25	31
Refundable federal income taxes			84		
Total current assets	2,597	2,072	2,431	1,560	1,760
Property, plant and equipment at cost					
Land and land improvements	207	192	203	118	117
Buildings	801	780	857	744	719
Machinery and other equipment	2,078	1,864	2,024	1,898	1,982
Leasehold improvements	68	64	62	29	59
	3,154	2,900	3,146	2,789	2,877
Accumulated depreciation	(1,752)	(1,724)	(1,768)	(1,773)	(1,753)
	1,402	1,176	1,378	1,016	1,124
Other assets					
Goodwill, net of amortization of \$144 in 1996, \$63 in 1995 and \$27 in 1994	3,436	1,403	1,359		
Other purchased intangibles, net of amortization of \$116 in 1996, \$36 in 1995 and \$15 in 1994	988	356	376		
Prepaid pension cost, intangible pension asset and benefit trust fund	229	99	222	278	190
Deferred income taxes	520	255	203	7	7
Investments in and advances to affiliates and sundry assets	250	94	78	78	81
	5,423	2,207	2,238	363	278
	\$ 9,422	\$ 5,455	\$ 6,047	\$ 2,939	\$ 3,162

NORTHROP GRUMMAN CORPORATION

December 31, \$ in millions	1996	1995	1994	1993	1992
Liabilities and Shareholders' Equity:					
Current liabilities					
Notes payable to banks	\$ 228	\$ 65	\$ 171	\$	\$ 100
Current portion of long-term debt	200	144	130		250
Trade accounts payable	452	360	396	324	363
Accrued employees' compensation	315	203	228	146	144
Advances on contracts	230	98	184	40	39
Income taxes payable	25	57	55	12	
Deferred income taxes	629	471	413	426	389
Other current liabilities	521	317	387	131	121
Total current liabilities	2,600	1,715	1,964	1,079	1,406
Long-term debt	2,950	1,163	1,633	160	160
Accrued retiree benefits	1,624	1,048	1,070	308	266
Other long-term liabilities	59	39	74	23	26
Deferred income taxes	61	31	16	47	50
Shareholders' equity					
Paid-in capital					
Preferred stock, 10,000,000 shares authorized; none issued					
Common stock, 200,000,000 shares authorized; issued and outstanding 1996 - 57,928,466; 1995 - 49,462,615; 1994 - 49,241,642; 1993 - 48,913,403; 1992 - 47,398,303	784	272	264	254	205
Retained earnings	1,348	1,199	1,026	1,070	1,051
Unfunded pension losses, net of taxes	(4)	(12)		(2)	(2)
	2,128	1,459	1,290	1,322	1,254
	\$ 9,422	\$ 5,455	\$ 6,047	\$ 2,939	\$ 3,162

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

NORTHROP GRUMMAN CORPORATION

CONSOLIDATED STATEMENTS OF INCOME

Year ended December 31, \$ in millions, except per share	1996	1995	1994	1993	1992
Net sales	\$8,071	\$6,818	\$6,711	\$5,063	\$5,550
Cost of sales					
Operating costs	6,216	5,319	5,477	4,385	4,877
Administrative and general expenses	1,197	963	753	485	455
Special termination benefits			282		
Operating margin	658	536	199	193	218
Other income(deductions)					
Interest income	9	1	6	2	4
Other, net	(13)	9	(31)	13	5
Interest expense	(270)	(137)	(109)	(38)	(47)
Income before income taxes	384	409	65	170	180
Federal and foreign income taxes	150	157	30	74	59
Net income	\$ 234	\$ 252	\$ 35	\$ 96	\$ 121
Weighted average common shares outstanding, in millions	54.0	49.4	49.1	48.1	47.2
Earnings per share	\$ 4.33	\$ 5.11	\$.72	\$ 1.99	\$ 2.56

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

NORTHROP GRUMMAN CORPORATION

CONSOLIDATED STATEMENTS OF CHANGES
IN SHAREHOLDERS' EQUITY

Year ended December 31, \$ in millions, except per share	1996	1995	1994	1993	1992
Paid-in Capital					
At beginning of year	\$ 272	\$ 264	\$ 254	\$ 205	\$ 195
Stock issuance	493				
Employee stock awards and options exercised, net of forfeitures	19	8	10	49	10
At end of year	784	272	264	254	205
Retained Earnings					
At beginning of year	1,199	1,026	1,070	1,051	987
Net income	234	252	35	96	121
Cash dividends	(85)	(79)	(79)	(77)	(57)
At end of year	1,348	1,199	1,026	1,070	1,051
Unfunded Pension Losses, Net of Taxes					
At beginning of year	(12)		(2)	(2)	
Change in excess of additional minimum liability over unrecognized prior service costs	8	(12)	2		(2)
At end of year	(4)	(12)		(2)	(2)
Total shareholders' equity	\$ 2,128	\$ 1,459	\$ 1,290	\$ 1,322	\$ 1,254
Book value per share	\$ 36.74	\$ 29.50	\$ 26.20	\$ 27.04	\$ 26.46
Cash dividends per share	1.60	1.60	1.60	1.60	1.20

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31, \$ in millions	1996	1995	1994	1993	1992
Operating Activities					
Sources of Cash					
Cash received from customers					
Progress payments	\$ 2,226	\$ 2,289	\$ 2,616	\$ 2,028	\$ 2,647
Other collections	5,822	4,355	4,767	2,924	2,914
Interest received	9	1	6	2	4
Income tax refunds received	12	48	11	3	
Other cash receipts	8	7	13	6	5
Cash provided by operating activities	8,077	6,700	7,413	4,963	5,570
Uses of Cash					
Cash paid to suppliers and employees	7,040	5,750	6,786	4,484	5,186
Interest paid	219	144	94	42	47
Income taxes paid	117	59	90	52	48
Other cash payments		3	2	5	5
Cash used in operating activities	7,376	5,956	6,972	4,583	5,286
Net cash provided by operating activities	701	744	441	380	284
Investing Activities					
Payment for purchase, net of cash acquired, of ESG	(2,886)				
Grumman Corporation			(1,842)		
Vought Aircraft Company			(12)		
Additions to property, plant and equipment	(194)	(133)	(134)	(135)	(123)
Proceeds from sale of property, plant and equipment	58	33	17	2	5
Proceeds from sale of affiliates/operations	45	5		8	
Proceeds from sale of marketable securities			28		
Funding of retiree benefit trust	(25)		(31)		
Dividends from affiliates, net of investments			5	2	(47)
Other investing activities	4	(21)	6		
Net cash used in investing activities	(2,998)	(116)	(1,963)	(123)	(165)
Financing Activities					
Borrowings under lines of credit	2,734	153	2,371	55	100
Repayment of borrowings under lines of credit	(635)	(259)	(1,200)	(155)	
Proceeds from issuance of long-term debt	1,000		600		
Principal payments of long-term debt	(1,090)	(446)	(251)	(251)	(140)
Proceeds from issuance of stock	499	4	7	41	5
Dividends paid	(85)	(79)	(79)	(77)	(57)
Other financing activities	(100)		(9)		
Net cash provided by (used in) financing activities	2,323	(627)	1,439	(387)	(92)
Increase(decrease) in cash and cash equivalents	26	1	(83)	(130)	27
Cash and cash equivalents balance at beginning of year	18	17	100	230	203
Cash and cash equivalents balance at end of year	\$ 44	\$ 18	\$ 17	\$ 100	\$ 230

NORTHROP GRUMMAN CORPORATION

Year ended December 31, \$ in millions	1996	1995	1994	1993	1992
Reconciliation of Net Income to Net Cash Provided by Operating Activities:					
Net income	\$ 234	\$ 252	\$ 35	\$ 96	\$ 121
Adjustments to reconcile net income to					

net cash provided					
Depreciation	204	226	227	214	160
Amortization of intangible assets	163	57	42		
Common stock issued to employees	10		1	3	3
Loss on disposals of property, plant and equipment	32	34	33	26	11
Retiree benefits cost(income)	52	64	33	(39)	(42)
Special termination benefits			282		
Decrease(increase) in					
Accounts receivable	(101)	197	209	(4)	339
Inventoried costs	7	426	(368)	142	63
Prepaid expenses	12	(15)	10	(5)	4
Refundable income taxes		84	(84)		
Increase(decrease) in					
Progress payments	84	(282)	407	(90)	(340)
Accounts payable and accruals	25	(111)	(319)	(34)	(65)
Provisions for contract losses	(1)	(143)	(84)	36	9
Provisions for disposal of real estate and other assets	50	(8)	42	1	1
Deferred income taxes	126	84	78	26	48
Income taxes payable	(32)	2	(25)	12	(25)
Retiree benefits	(170)	(114)	(80)	(1)	(1)
Other noncash transactions	6	(9)	2	(3)	(2)
Net cash provided by operating activities	\$ 701	\$ 744	\$ 441	\$ 380	\$ 284

Noncash Investing and Financing Activities:

Purchase of ESG					
Fair value of assets acquired	\$ 4,003				
Cash paid	(2,888)				
Liabilities assumed	\$ 1,115				
Purchase of Grumman Corporation					
Fair value of assets acquired			\$ 3,495		
Cash paid			(2,129)		
Liabilities assumed			\$ 1,366		
Purchase of Vought Aircraft Company					
Fair value of assets acquired			\$ 722		
Cash paid			(130)		
Liabilities assumed			\$ 592		

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

NORTHROP GRUMMAN CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the corporation and its subsidiaries. All material intercompany accounts, transactions and profits are eliminated in consolidation.

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 from those estimates.

Nature of Operations

Northrop Grumman is a major producer of military and commercial aircraft subassemblies and defense electronics and is the prime contractor on the U.S. Air Force B-2 Stealth Bomber. The company operates in the aircraft and electronics industry segments within the broadly defined aerospace industry. The majority of the company's products and services are ultimately sold to the U.S. Government and the company is therefore affected by the federal budget process and the competition in the aerospace and defense environment.

Sales to the U.S. Government (including foreign military sales) are reported within each industry segment and in total in the Selected Financial Data. The company does not conduct a significant volume of activity through foreign operations or in foreign currencies.

Descriptions of the company's principal products and services along

with industry segment data, which is considered to be an integral part of these financial statements, can be found in the Management's Discussion and Analysis section of this report. Intersegment sales are transacted at cost incurred with no profit added. Operating profit is defined to include the Other Income earned by each industry segment, but to exclude costs allocated to segments for General Corporate Expenses and State and Local Income Taxes. General corporate assets include cash and cash equivalents, corporate office furnishings and equipment, other unallocable property, investments in affiliates, prepaid pension cost, intangible pension asset, benefit trust fund assets, deferred tax assets and certain assets held for sale.

NORTHROP GRUMMAN CORPORATION

Sales

Sales under cost-reimbursement, service, research and development, and construction-type contracts are recorded as costs are incurred and include estimated earned fees or profits calculated on the basis of the relationship between costs incurred and total estimated costs (cost-to-cost type of percentage-of-completion method of accounting). Construction-type contracts embrace those fixed-price type contracts that provide for the delivery at a low volume per year or a small number of units after a lengthy period of time over which a significant amount of costs have been incurred. Sales under other types of contracts are recorded as deliveries are made and are computed on the basis of the estimated final average unit cost plus profit (units-of-delivery type of percentage-of-completion method of accounting).

Certain contracts contain provisions for price redetermination or for cost and/or performance incentives. Such redetermined amounts or incentives are included in sales when the amounts can reasonably be determined. In the case of the B-2 bomber production contract, future changes in operating margin will be recognized on a units-of-delivery basis and recorded as each equivalent production unit is delivered. Amounts representing contract change orders, claims or limitations in funding are included in sales only when they can be reliably estimated and realization is probable. In the period in which it is determined that a loss will result from the performance of a contract, the entire amount of the estimated ultimate loss is charged against income. Loss provisions are first offset against costs that are included in assets, with any remaining amount reflected in Other Current Liabilities. Other changes in estimates of sales, costs, and profits are recognized using the cumulative catch-up method of accounting. This method recognizes in the current period the cumulative effect of the changes on current and prior periods. Hence, the effect of the changes on future periods of contract performance is recognized as if the revised estimates had been the original estimates.

NORTHROP GRUMMAN CORPORATION

Contract Research and Development

Customer-sponsored research and development costs (direct and indirect costs incurred pursuant to contractual arrangements) are accounted for like other contracts.

Noncontract Research and Development

This category includes independent research and development costs and company-sponsored research and development costs (direct and indirect costs not recoverable under contractual arrangements). Independent research and development (IR&D) costs are included in administrative and general expenses (indirect costs allocable to U.S. Government contracts) whereas company-sponsored research and development costs are charged against income as incurred.

Environmental Costs

Environmental liabilities are accrued when the company determines it is responsible for remediation costs and such amounts are reasonably estimable. When only a range of amounts is established and no amount within the range is better than another, the minimum amount in the range is recorded. The company does not anticipate and record insurance recoveries before collection is probable.

Interest Rate Swap Agreements

The company may enter into interest rate swap agreements to offset the variable-rate characteristic of certain variable-rate term loans outstanding under the company's Credit Agreement. Interest on these interest rate swap agreements is recognized as an adjustment to interest expense in the period incurred.

NORTHROP GRUMMAN CORPORATION

Income Taxes

Provisions for federal, state and local income taxes are calculated on reported financial statement pretax income based on current tax law and also include, in the current period, the cumulative effect of any changes in tax rates from those used previously in determining deferred tax assets and liabilities. Such provisions differ from the amounts currently payable because certain items of income and expense are recognized in different time periods for financial reporting purposes than for income tax purposes.

The company accounts for certain contracts in process using different methods of accounting for financial statements and tax reporting and thus provides deferred taxes on the difference between the financial and taxable income reported during the performance of such contracts.

In accordance with industry practice, state and local income and franchise tax provisions are included in administrative and general expenses.

Earnings per Share

Earnings per share are based on the weighted average number of shares of common stock outstanding during each period, after giving recognition to stock splits and stock dividends. The dilutive effect of common stock equivalents, shares under stock options, was insignificant.

Cash and Cash Equivalents

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

Accounts Receivable

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

NORTHROP GRUMMAN CORPORATION

Inventoried Costs

Inventoried costs primarily relate to work in process under fixed-price type contracts (excluding those included in unbilled accounts receivable as previously described). They represent accumulated contract costs less the portion of such costs allocated to delivered items. Accumulated contract costs include direct production costs, factory and engineering overhead, production tooling costs, and allowable administrative and general expenses (except for general corporate expenses and IR&D allocable to commercial contracts, which are charged against income as incurred).

In accordance with industry practice, inventoried costs are classified as a current asset and include amounts related to contracts having production cycles longer than one year.

Depreciable Properties

Property, plant and equipment owned by the company are depreciated over the estimated useful lives of individual assets. Capital leases providing for the transfer of ownership upon their expiration or containing bargain purchase options are amortized over the estimated useful lives of individual assets. Most of these assets are depreciated using declining-balance methods, with the remainder using the straight-line method, with the following lives:

	Years
Land improvements	5-20
Buildings	5-45
Machinery and other equipment	1-18
Leasehold improvements	Length of lease

NORTHROP GRUMMAN CORPORATION

Goodwill and Other Purchased Intangible Assets

Goodwill and other purchased intangible assets are amortized on a straight-line basis over periods of 40 years and a weighted average 15 years, respectively. Goodwill and other purchased intangibles balances are included in the identifiable assets of the industry segment to which they have been assigned and amortization is charged against the respective industry segment operating profit. The recoverability of goodwill and

other purchased intangibles is evaluated at least annually considering the projected future profitability and cash flow at the operations to which they relate. When it is determined that an impairment has occurred, an appropriate charge to operations is recorded.

Acquisitions

On March 1, 1996 the company purchased substantially all of the defense and electronics systems business (ESG) of Westinghouse Electric Corporation at a cost of \$2.9 billion and financed the transaction with new borrowings. The operations of ESG have been consolidated with Northrop Grumman effective March 1, 1996 and are included in the electronics industry segment.

In April 1994 the company purchased the outstanding stock of Grumman Corporation (Grumman) at a cost of \$2.1 billion and financed the transaction mainly with new borrowings. The operations of Grumman since acquisition are included in the industry segments to which products are associated.

In August 1994 the company purchased the remaining 51 percent interest in Vought Aircraft Company (Vought) for \$130 million cash. The company had previously purchased a 49 percent interest in Vought for \$45 million in September 1992. The operations of Vought since August 1994 are included in the aircraft industry segment.

NORTHROP GRUMMAN CORPORATION

The purchase method of accounting was used to record all three acquisitions with estimated fair values being assigned to assets and liabilities. The excess of the purchase price over the net tangible assets acquired was assigned to identifiable intangible assets and the remaining balance to goodwill.

The following unaudited pro forma financial information combines Northrop Grumman's and ESG's results of operations as if the acquisitions had taken place on January 1, 1995, and is not necessarily indicative of future operating results for Northrop Grumman.

\$ in millions, except per share	1996	1995
Sales	\$8,318	\$9,158
Net income	214	136
Earnings per share	3.95	2.76

The following unaudited pro forma financial information combines Northrop's, Grumman's and Vought's results of operations as if the acquisitions had taken place on January 1, 1993, and is not necessarily indicative of future operating results for Northrop Grumman.

\$ in millions, except per share	1994	1993
Sales	\$7,770	\$8,653
Net income	57	112
Earnings per share	1.16	2.33

Financial Statement Reclassification

To conform to the presentation in 1996, certain amounts for 1995 and prior years have been reclassified in the Consolidated Financial Statements. The reclassifications had no effect on net income or earnings per share for any period presented.

NORTHROP GRUMMAN CORPORATION

ACCOUNTS RECEIVABLE

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

Amounts due upon contract completion are retained by customers until work is completed and customer acceptance is obtained.

In 1996 the company terminated an agreement that was entered into in 1995 with a financial institution to sell designated pools of its commercial accounts receivables, with limited recourse, in amounts up to \$75 million. At December 31, 1995, \$34 million of accounts receivable had been sold.

Accounts receivable at December 31, 1996, are expected to be collected in 1997 except for approximately \$255 million due in 1998 and \$188 million due in 1999 and later. These amounts principally relate to long-term contracts with the U.S. Government.

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

Account receivable were comprised of the following:

\$ in millions	1996	1995	1994	1993	1992
Due from U.S. Government, long-term contracts					
Current accounts					
Billed	\$ 396	\$ 261	\$ 420	\$ 65	\$ 82
Unbilled	3,463	3,235	3,140	3,050	3,100
Progress payments received	(2,721)	(2,426)	(2,532)	(2,410)	(2,467)
Net current accounts	1,138	1,070	1,028	705	715
Due upon contract completion	2	9	55	14	19
	1,140	1,079	1,083	719	734
Due from other customers, long-term contracts					
Current accounts					
Billed	78	14	74	66	31
Unbilled	47	50	41	43	48
	125	64	115	109	79
Total due, long-term contracts	1,265	1,143	1,198	828	813
Trade and other accounts receivable					
Due from U.S. Government	75	61	34	36	28
Due from other customers	71	61	34	13	7
Total due, trade and other	146	122	68	49	35
	1,411	1,265	1,266	877	848
Allowances for doubtful amounts	(55)	(68)	(64)	(57)	(57)
	\$ 1,356	\$ 1,197	\$ 1,202	\$ 820	\$ 791

NORTHROP GRUMMAN CORPORATION

INVENTORIED COSTS

Inventoried costs were comprised of the following:

\$ in millions	1996	1995	1994	1993	1992
Production costs of contracts in process	\$ 1,169	\$ 924	\$ 1,314	\$ 800	\$ 920
Excess of production cost of delivered items over the estimated average unit cost	105	85	43		
Administrative and general expenses	199	166	270	95	109
	1,473	1,175	1,627	895	1,029
Progress payments received	(533)	(428)	(611)	(326)	(359)
	940	747	1,016	569	670
Product inventories - at the lower of average cost or market	113	24	27		
	\$ 1,053	\$ 771	\$ 1,043	\$ 569	\$ 670

Inventoried costs relate to long-term contracts in process and include expenditures for raw materials and work in process beyond what is required for recorded orders. These expenditures are incurred to help maintain stable and efficient production schedules. The excess of production costs of delivered and in process items over the estimated average costs is carried in inventory under the learning curve concept. Under this concept, production costs per unit are expected to decrease over time due to efficiencies arising from continuous improvement in the performance of repetitive tasks. However, no material amount representing claims, unamortized tooling or other deferred costs is included in inventoried costs.

The ratio of inventoried administrative and general expenses to total inventoried costs is estimated to be the same as the ratio of total administrative and general expenses incurred to total contract costs incurred.

According to the provisions of U.S. Government contracts, the customer

has title to, or a security interest in, substantially all inventories related to such contracts.

NORTHROP GRUMMAN CORPORATION

INCOME TAXES

Income tax expense, both federal and foreign (which arises primarily from work performed abroad by domestic operations), was comprised of the following:

\$ in millions	1996	1995	1994	1993	1992
Currently payable					
Federal income taxes	\$ 41	\$ 76	\$ 61	\$ 41	\$ 7
Foreign income taxes	2	1	1	1	1
	43	77	62	42	8
Change in deferred federal income taxes	107	80	(32)	32	51
	\$ 150	\$ 157	\$ 30	\$ 74	\$ 59

Income tax expense differs from the amount computed by multiplying the statutory federal income tax rate times the income before income taxes due to the following:

\$ in millions	1996	1995	1994	1993	1992
Income tax expense at statutory rate	\$ 135	\$ 143	\$ 23	\$ 59	\$ 61
Goodwill amortization	16	13	9		
Provision for nondeductible expenses	2	4	4	1	1
Benefit from ESOP dividends	(3)	(3)	(4)	(4)	(3)
Dividend exclusion			(2)		
Retroactive effect of statutory rate increase				18	
	\$ 150	\$ 157	\$ 30	\$ 74	\$ 59

Deferred income taxes arise because of differences in the treatment of income and expense items for financial reporting and income tax purposes. The principal type of temporary difference stems from the recognition of income on contracts being reported under different methods for tax purposes than for financial reporting.

NORTHROP GRUMMAN CORPORATION

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

\$ in millions	1996	1995	1994	1993	1992
Deferred tax assets					
Deductible temporary differences					
Retiree benefit plan expense	\$ 602	\$ 421	\$ 409	\$ 21	\$ 21
Provision for estimated expenses	79	25	39	28	27
Income on contracts	49	14	17	21	13
Other	41	35	52	2	2
	771	495	517	72	63
Taxable temporary differences					
Purchased intangibles	(110)	(124)	(133)		
Excess tax over book depreciation	(64)	(71)	(94)		

Retiree benefit plan income	(18)	(48)	(19)	(15)
Administrative and general expenses period costed for tax purposes	(2)	(1)		(3)
	(174)	(215)	(276)	(18)
	\$ 597	\$ 280	\$ 241	\$ 53
			\$ 45	
Deferred tax liabilities				
Taxable temporary differences				
Income on contracts	\$ 868	\$ 795	\$ 744	\$ 811
Administrative and general expenses period costed for tax purposes	1	1	18	18
Retiree benefit plan income	9			94
Excess tax over book depreciation	10	2		70
Other	14	15	9	89
	902	813	771	993
				960
Deductible temporary differences				
Provision for estimated expenses	(82)	(117)	(145)	(135)
Retiree benefit plan expense	(1)	(2)	(2)	(106)
Other				(9)
	(83)	(119)	(147)	(250)
				(224)
Tax carryforwards				
Tax credits	(39)	(102)	(105)	(129)
Alternative minimum tax credit	(90)	(90)	(90)	(87)
Operating losses				(54)
	(129)	(192)	(195)	(270)
	\$ 690	\$ 502	\$ 429	\$ 473
				\$ 439
Net deferred tax liability				
Total deferred tax liabilities (taxable temporary differences above)	\$1,076	\$1,028	\$1,047	\$1,012
Less total deferred tax assets (deductible temporary differences and tax carryforwards above)	983	806	859	592
	\$ 93	\$ 222	\$ 188	\$ 420
				\$ 394

NORTHROP GRUMMAN CORPORATION

The tax carryforward benefits are expected to be used in the periods in which net deferred tax liabilities mature. The expiration dates for these tax credit carryforwards are in various amounts over the years 1997 through 2007. The alternative minimum tax credit can be carried forward indefinitely.

NOTES PAYABLE TO BANKS AND LONG-TERM DEBT

The company has available short-term credit lines in the form of money market facilities with several banks. The amount and conditions for borrowing under these credit lines depend on the availability and terms prevailing in the marketplace. No fees or compensating balances are required for these credit facilities. At December 31, 1996, \$226 million was outstanding at a weighted average interest rate of 6.44 percent. At December 31, 1995, \$65 million was outstanding at a weighted average interest rate of 6.15 percent. At December 31, 1994, \$171 million was outstanding at a weighted average interest rate of 7 percent.

Additionally, the company has a credit agreement with a group of domestic and foreign banks to provide for three credit facilities: \$1.8 billion available on a revolving credit basis through March 2002; a variable interest rate \$500 million two-year term loan due March 1, 1998, that was repaid in July 1996; and a variable interest rate \$1.5 billion six-year term loan due in 24 quarterly installments of \$62.5 million plus interest beginning June 1996. Effective November 1, 1996, the Credit Agreement was further amended to reduce the \$1.5 billion term loan to \$1.05 billion payable in 21 quarterly installments of \$50 million plus interest beginning March 1, 1997. The company pays, at least quarterly, interest on the outstanding debt under the Credit Agreement at rates that vary based in part on the company's credit rating and leverage ratio. At December 31, 1996, \$1.05 billion under the term loan was outstanding at a weighted average interest rate of 5.97 percent. Principal payments permanently reduce the amount available under this agreement as well as the debt outstanding.

At December 31, 1996, \$500 million at a weighted average interest rate of 5.79 percent was outstanding under the company's revolving credit facility. In 1995 there were no borrowings under the company's revolving credit facility. Under these agreements, in the event of a "change in control," the banks are relieved of their commitments. Compensating balances are not required under these agreements.

The company's credit agreements contain restrictions relating to the payment of dividends, acquisition of the company's stock, aggregate indebtedness for borrowed money and interest coverage. At December 31, 1996, \$326 million of retained earnings were unrestricted as

to the payment of dividends. Total indebtedness for all types of borrowed money is limited under the company's credit agreement covenants. At December 31, 1996, indebtedness was limited to \$7.4 billion.

NORTHROP GRUMMAN CORPORATION

Long-term debt consisted of the following:

\$ in millions	1996	1995	1994	1993	1992
Notes due 1999, 8.4%	\$ 350	\$ 143	\$ 153	\$	\$
Notes due 2004, 8.625%	400	350	350		
Notes due 2006, 7%	300				
Debentures due 2016, 7.75%	250	250	250		
Debentures due 2024, 9.375%	300				
Debentures due 2026, 7.875%					
Notes payable and mortgages		1	10	160	370
Revolving credit facility	500				
Term loans payable to banks due in quarterly installments through 2002 at floating rates	1,050	563	1,000		40
	3,150	1,307	1,763	160	410
Less current portion	200	144	130		250
	\$2,950	\$ 1,163	\$ 1,633	\$ 160	\$ 160

During the first quarter of 1996 the company sold to institutional investors \$400 million of 7 percent notes due 2006, \$300 million of 7 3/4 percent debentures due 2016 and \$300 million of 7 7/8 percent debentures due 2026. The proceeds from this issuance were used to finance a portion of the purchase price of ESG. The debt indenture contains restrictions relating to limitations on liens, sale and leaseback arrangements and funded debt of subsidiaries.

In November 1995 the notes due in 1999 were called for redemption at face value, on January 2, 1996. The December 31, 1995 balance of \$143 million was classified as current. The debentures due in 2024 are callable after October 15, 2004 at a premium of 4 percent declining to par after 2013.

The principal amount of long-term debt outstanding at December 31, 1996, due in each of the years 1997 through 2001 is \$200 million with \$2,150 million due after five years.

NORTHROP GRUMMAN CORPORATION

FAIR VALUE OF FINANCIAL INSTRUMENTS

The following methods and assumptions were used by the company in estimating its fair value disclosures for financial instruments:

The carrying amount reported in the consolidated Statements of Financial Position for Cash and Cash Equivalents, Accounts Receivable and amounts borrowed under the company's short-term credit lines approximate their fair value.

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

The company has limited involvement with derivative financial instruments and does not use them for trading purposes. To mitigate the variable rate characteristic of the term loans, the company entered into interest rate swap agreements maturing at various dates through May 1999 with several banks resulting in a fixed interest rate of 6.23 percent on a notional amount of \$425 million at December 31, 1996. Unrealized gain(loss) on interest rate swap agreements are calculated based upon the amounts at which they could be settled at current interest rates. The market gain(loss) on interest rate swaps was \$(1) million, \$(7) million and \$7 million at December 31, 1996, 1995 and 1994 respectively. The institutions have options to extend \$200 million of the swaps through May 1998. The company expects the banks to fully satisfy their obligations under the arrangements.

Carrying amounts and the related estimated fair values of the company's financial instruments at December 31 of each year are as follows:

\$ in millions	1996	1995	1994	1993	1992
Long-term debt					
Carrying amount	3,150	1,307	1,763	160	410
Fair value	3,221	1,405	1,758	160	443
Interest rate swap agreements					
Notional amount	425	300	200		
Gains(losses)	(1)	(7)	7		

NORTHROP GRUMMAN CORPORATION

RETIREMENT BENEFITS

The company sponsors several defined-benefit pension plans covering substantially all employees. Pension benefits for most employees are based on the employee's years of service and compensation during the last ten years before retirement. It is the policy of the company to fund at least the minimum amount required for all qualified plans, using actuarial cost methods and assumptions acceptable under U.S. Government regulations, by making payments into a trust separate from the company. Five of the company's fifteen qualified plans which cover over 80 percent of all employees, were in a legally defined full-funding limitation status at December 31, 1996. To protect the assets in the master trust from a "change in control" the trust agreement and the Northrop Grumman Pension Plan were appropriately amended during 1991.

The company and subsidiaries also sponsor defined-contribution plans in which most employees are eligible to participate. Company contributions, up to 4 percent of compensation, are based on a matching of employee contributions.

In addition, the company and its subsidiaries provide certain health care and life insurance benefits for retired employees. Employees achieve eligibility to participate in these contributory plans upon retirement from active service and if they meet specified age and years of service requirements. Election to participate must be made at the date of retirement. Qualifying dependents are also eligible for medical coverage. Approximately 85 percent of the company's current retirees participate in the medical plans. The cost and funded status for the medical and life benefits are combined in the tables that follow because (1) life benefits constitute an insignificant amount of the combined cost, and (2) for those plans with assets, the assets in trust for each plan can be used to pay benefits under either plan. Plan documents reserve the company's right to amend or terminate the plans at any time. Premiums charged retirees for medical coverage are based on years of service and are adjusted annually for changes in the cost of the plans as determined by an independent actuary. In addition to this medical inflation cost-sharing feature, the plans also have provisions for deductibles, copayments, coinsurance percentages, out-of-pocket limits, schedule of reasonable fees, managed care providers, maintenance of benefits with other plans, Medicare carve-out and a maximum lifetime benefit of from \$250,000 to \$1,000,000 per covered individual. It is the policy of the company to fund the maximum amount deductible for income taxes into the VEBA trust established for the Northrop Retiree Health Care Plan for Retired Employees for payment of benefits.

NORTHROP GRUMMAN CORPORATION

The cost to the company of these plans in each of the last five years is shown in the following table.

\$ in millions	1996	1995	1994	1993	1992
Defined benefit pension plans					
Actual return on assets	\$(1,379)	\$(1,856)	\$ 25	\$ (449)	\$ (298)
Deferral of actual return on assets	618	1,233	(541)	153	38
Expected return on assets	(761)	(623)	(516)	(296)	(260)
Service cost	174	125	176	104	99
Interest cost	570	520	372	190	175
Amortization of unrecognized items					
Transition asset, net	(42)	(42)	(42)	(42)	(42)
Prior service costs	41	31	14	15	13
Net gain from previous years	(21)	(34)	(40)	(42)	(68)
Net periodic pension income	\$ (39)	\$ (23)	\$ (36)	\$ (71)	\$ (83)

Defined contribution plans	\$ 73	\$ 54	\$ 59	\$ 47	\$ 48
Retiree health care and life insurance benefit plans					
Actual return on assets	\$ (60)	\$ (95)	\$ 22	\$ (19)	\$ (10)
Deferral of actual return on assets	38	76	(42)	(1)	(10)
Expected return on assets	(22)	(19)	(20)	(20)	(20)
Service cost	27	20	28	21	25
Interest cost	91	89	61	37	39
Amortization of unrecognized gain from previous years	(5)	(3)	(2)	(6)	(3)
Excess dependent cost			2		
Net periodic postretirement benefit cost	\$ 91	\$ 87	\$ 69	\$ 32	\$ 41

In addition to the net periodic pension income and postretirement benefit cost, in 1994 the company recognized the effect of an early retirement incentive program of \$250 million for pension and \$32 million for postretirement benefits. The total \$282 million effect on the company's 1994 operating margin is shown in the Consolidated Statements of Income under the caption Special Termination Benefits.

NORTHROP GRUMMAN CORPORATION

Major assumptions as of each year-end used in the accounting for the defined-benefit plans are shown in the following table. Pension cost is determined using all three factors as of the end of the preceding year, whereas the funded status of the plans, shown later, uses only the first two factors, as of the end of each year.

	1996	1995	1994	1993	1992
Discount rate for obligations	7.50%	7.00%	8.25%	7.00%	8.00%
Rate of increase for compensation	4.50	5.00	5.25	5.50	5.50
Expected long-term rate of return on plan assets	9.00	9.00	8.75	8.25	8.25

These assumptions were also used in retiree health care and life insurance benefit calculations with one modification. Since, unlike the pension trust, the earnings of the VEBA trust are taxable, the above 9 percent expected rate of return on plan assets was reduced accordingly to 5.25 percent after taxes. A significant factor used in estimating future per capita cost, for the company and its retirees, of covered health care benefits is the health care cost trend rate assumption. The rate used was 7 percent for 1996 and is assumed to decrease gradually to 6 percent for 2006 and remain at that level thereafter. An additional one-percentage-point of increase each year in that rate would result in a \$12 million annual increase in the aggregate of the service and interest cost components of net periodic postretirement benefit cost, and a \$111 million increase in the accumulated postretirement benefit obligation at December 31, 1996.

The following tables set forth the funded status and amounts recognized in the Consolidated Statements of Financial Position at each year-end for the company's defined-benefit pension and retiree health care and life insurance benefit plans. The summary showing pension plans whose accumulated benefits are in excess of assets at December 31, 1996, is comprised of seven qualified plans along with twelve unfunded nonqualified plans for benefits provided to directors, officers and employees either beyond those provided by, or payable under, the company's main plans.

The company revised its estimate of the discount rate for obligations and rate of increase for compensation assumptions in calculating the funded status of the plans at December 31, 1996. The changes resulted in a \$483 million decrease in the projected benefit obligation for pension plans and a \$59 million decrease in the accumulated postretirement benefit obligation.

NORTHROP GRUMMAN CORPORATION

\$ in millions	1996	1995	1994	1993	1992
Pension plans whose assets exceed accumulated benefits					

Actuarial present value of benefit obligations					
Vested benefits	\$ 6,255	\$ 6,572	\$ 2,487	\$ 2,059	\$ 1,690
Nonvested benefits	328	320	228	175	153
Accumulated benefit obligations	6,583	6,892	2,715	2,234	1,843
Effect of assumed salary rate increases	391	469	409	453	421
Projected benefit obligations	6,974	7,361	3,124	2,687	2,264
Less market value of plan assets	9,184	8,319	4,210	3,970	3,642
Excess of assets over projected benefit obligations	(2,210)	(958)	(1,086)	(1,283)	(1,378)
Unrecognized items					
Net transition asset	247	289	332	374	415
Prior service costs	(248)	(286)	(307)	(114)	(133)
Net gain	2,067	921	897	764	916
Accrued retiree benefits pension asset included in Consolidated Statements of Financial Position					
	\$ (144)	\$ (34)	\$ (164)	\$ (259)	\$ (180)
Pension plans whose accumulated benefits exceed assets					
Actuarial present value of benefit obligations					
Vested benefits	\$ 839	\$ 311	\$ 2,865	\$ 57	\$ 33
Nonvested benefits	51	8	252	3	
Accumulated benefit obligations	890	319	3,117	60	33
Effect of assumed salary rate increases	145	15	16	19	3
Projected benefit obligations	1,035	334	3,133	79	36
Less market value of plan assets	436	177	2,872	16	
Excess of projected benefit obligations over assets	599	157	261	63	36
Unrecognized items					
Net transition obligation	(3)	(3)	(4)	(5)	(4)
Prior service costs	(16)	(5)	(8)	(14)	5
Net gain(loss)	(10)	(31)	1	(7)	(3)
Additional minimum liability	22	29	6	12	7
Accrued retiree benefits liability included in Consolidated Statements of Financial Position					
	\$ 592	\$ 147	\$ 256	\$ 49	\$ 41

NORTHROP GRUMMAN CORPORATION

Pension plan assets at December 31, 1996, were comprised of 49 percent domestic equity type investments in listed companies (including 4 percent in Northrop Grumman common stock), 17 percent equity investments listed on international exchanges, 27 percent in fixed income type investments, principally U.S. Government securities, 3 percent in venture capital and real estate investments, and 4 percent in cash. The investment in Northrop Grumman represents 4,798,523 shares, or eight percent of the company's total shares outstanding.

Effective January 1, 1995, the company adopted amendments to two of the company's retirement plans to cap the maximum years of service credit that an employee can earn and adjusted the amount of service credit earned each year. The effect of these changes was to increase the projected benefit obligation at December 31, 1994 by \$210 million.

\$ in millions	1996	1995	1994	1993	1992
Retiree health care and life insurance benefit plans					
Accumulated postretirement benefit obligation (APBO)					
Retirees	\$ 841	\$ 960	\$ 575	\$ 274	\$ 243
Fully eligible active employees	81	88	172	86	82
Active employees not yet eligible	383	288	258	192	194
	1,305	1,336	1,005	552	519
Less market value of plan assets	468	433	353	373	369
Excess of APBO over assets	837	903	652	179	150
Unrecognized items					
Prior service cost	(2)	(1)			
Net gain(loss)	191	(15)	156	74	72
Accrued retiree benefits liability included in Consolidated Statements of Financial Position					
	\$1,026	\$ 887	\$ 808	\$ 253	\$ 222

Retiree health care and life insurance plan assets at December 31, 1996, were almost entirely comprised of equity type investments in listed

companies.

CONTINGENCIES

The corporation and its subsidiaries have been named as defendants in various legal actions. Based upon available information, it is the company's expectation that those actions are either without merit or will have no material adverse effect on the company's results of operations or financial position.

NORTHROP GRUMMAN CORPORATION

In accordance with company policy on environmental remediation, the estimated cost to complete remediation has been accrued where it is probable that the company will incur such costs in the future, including those for which it has been named a Potentially Responsible Party by the Environmental Protection Agency or similarly designated by other environmental agencies. To assess the potential impact on the company's financial statements, management estimates the total reasonably possible remediation costs that could be incurred by the company, taking into account currently available facts on each site as well as the current state of technology and prior experience in remediating contaminated sites. These estimates are reviewed periodically and adjusted to reflect changes in facts and technical and legal circumstances. Management estimates that at December 31, 1996, the reasonable range of future costs for environmental remediation, including those sites acquired in the purchase of ESG, is \$63 million to \$107 million, of which \$64 million has been accrued. Although management cannot predict whether new information gained as projects progress will materially affect the estimated liability accrued, management does not anticipate that future remediation expenditures will have a material adverse effect on the company's results of operations or financial position.

Minimum rental commitments under long-term noncancellable operating leases total \$239 million which is payable as follows: 1997 - \$64 million, 1998 - \$45 million, 1999 - \$37 million, 2000 - \$27 million, and 2001 - \$19 million, and 2002 and thereafter - \$47 million.

NORTHROP GRUMMAN CORPORATION

STOCK RIGHTS

The company has a Common Stock Purchase Rights plan with one right issued in tandem with each share of common stock. The rights will become exercisable on the tenth business day after a person or group has acquired 15 percent or more of the general voting power of the company, or announces an intention to make a tender offer for 30 percent or more of such voting power, without the prior consent of the Board of Directors. If the rights become exercisable, a holder will be entitled to purchase one share of common stock from the company at an initial exercise price of \$105.

If a person acquires more than 15 percent of the then outstanding voting power of the company or if the company is combined with an acquiror, each right will entitle its holder to receive, upon exercise, shares of the company's or the acquiror's (depending upon which is the surviving company) common stock having a value equal to two times the exercise price of the right.

The company will be entitled to redeem the rights at \$.02 per right at any time prior to the earlier of the date that a person has acquired or obtained the right to acquire 15 percent of the general voting power of the company or the expiration of the rights in October 1998. The rights are not exercisable until after the date on which the company's prerogative to redeem the rights has expired. The rights do not have voting or dividend privilege and cannot be traded independently from the company's common stock until such time as they become exercisable.

STOCK COMPENSATION PLANS

At December 31, 1996, the company had two stock-based compensation plans -- the 1993 Long-Term Incentive Stock Plan (LTISP) and the 1995 Stock Option Plan for Non-Employee Directors (SOPND).

The LTISP permits grants to key employees of three general types of stock incentive awards: stock options, stock appreciation rights (SARs) and stock awards. With shareholder approval of this plan and subsequent amendment, a total of 4.1 million additional shares were made available for future grants. Up to 1.8 million of these shares may be in the form of stock awards. At December 31, 1996, 227,062 shares remained available for future grants under the LTISP.

NORTHROP GRUMMAN CORPORATION

Under the LTISP each grant of a stock option is made at the closing

market price on the date of grant. Options generally vest in 25 percent increments, two, three, four and five years from the grant date and expire ten years after the grant date. No SARs have been granted under the LTISP. Stock awards, in the form of restricted performance stock rights, are granted to key employees without payment to the company. Recipients of the rights earn shares of stock based on a total-shareholder-return measure of performance over a five-year period with interim distributions three and four years after grant. If at the end of the five-year period the performance objectives have not been met, up to 70 percent of the original grant will be forfeited. Termination of employment can result in forfeiture of some or all of the benefits extended under the plan.

The shareholder approval of the SOPND in 1995 made available 300,000 shares for grants of stock options to nonemployee directors. Each grant of a stock option is made at the closing market price on the date of the grant, is immediately exercisable and expires ten years after the grant date. At December 31, 1996, 289,500 shares were available for future grants under the SOPND.

The company applies Accounting Principles Board Opinion 25 - Accounting for Stock Issued to Employees and related Interpretations in accounting for awards made under the plans. When stock options are exercised, the amount of the cash proceeds to the company is recorded as an increase to paid-in capital. No compensation expense is recognized in connection with stock options. Compensation expense for restricted performance stock rights is estimated and accrued over the vesting period. The fixed 30 percent minimum distribution portion is recorded at grant value and the variable portion is recorded at market value. Compensation expense recognized for stock awards was \$25 million in 1996, \$4 million in 1995, \$4 million in 1994, \$5 million in 1993, and \$4 million in 1992.

NORTHROP GRUMMAN CORPORATION

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

	Shares Under Option	Weighted- Average Exercise Prices	Shares Exercisable
Outstanding at January 1, 1992	2,823,870	\$25	1,841,070
Granted	635,700	26	
Cancelled	(43,380)	20	
Exercised	(281,660)	21	
Outstanding at December 31, 1992	3,134,530	25	1,798,550
Granted	515,300	36	
Cancelled	(96,640)	25	
Exercised	(1,405,330)	29	
Outstanding at December 31, 1993	2,147,860	25	738,300
Granted	708,700	43	
Cancelled	(61,215)	28	
Exercised	(265,430)	25	
Outstanding at December 31, 1994	2,529,915	30	817,660
Granted	762,500	56	
Cancelled	(130,885)	31	
Exercised	(170,810)	23	
Outstanding at December 31, 1995	2,990,720	37	1,064,925
Granted	987,800	78	
Cancelled	(87,921)	49	
Exercised	(240,334)	28	
Outstanding at December 31, 1996	3,650,265	49	1,236,689

Had compensation expense been determined based on the fair value at the grant dates for stock option awards granted in 1996 and 1995, consistent with the method of Financial Accounting Standards Board Statement 123 - Accounting for Stock Based Compensation, net income and earnings per share in 1996 would have been lower by \$2 million and three cents, respectively. For 1995 net income would have been unchanged and earnings per share would have been lower by one cent. These amounts were determined using weighted-average per share fair values of options granted in 1996 and 1995 of \$25 and \$19, respectively. The fair value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model based on an expected life of six years and for 1996 and 1995, respectively, the following additional assumptions: dividend yield - 2.1% and 2.8%; expected volatility - 28% and 31%; and risk-free interest rate - 6.2% and 5.8%.

NORTHROP GRUMMAN CORPORATION

At December 31, 1996, the following stock options were outstanding:

Options Outstanding

Options Exercisable

Range of Exercise Prices	Number Outstanding at 12/31/96	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Prices	Number Exercisable at 12/31/96	Weighted-Average Exercise Prices
\$16 to 25	632,070	3.1 years	\$18	632,070	\$18
\$26 to 40	686,001	6.3 years	32	415,846	30
\$41 to 55	673,837	7.8 years	43	181,266	43
\$56 to 70	796,557	8.8 years	58	7,507	57
\$71 to 81	861,800	10.0 years	81		
	3,650,265			1,236,689	

Restricted performance stock rights were granted with weighted-average grant-date fair values per share as follows: 1996 - 802,800 at \$81; 1995 - 22,660 at \$53; 1994 - 141,540 at \$43; 1993 - 473,000 at \$36; and 1992 - none granted.

NORTHROP GRUMMAN CORPORATION

UNAUDITED SELECTED QUARTERLY DATA

Quarterly financial results, previously reported are set forth in the following tables together with dividend and common stock price data.

1996 Quarters, \$ in millions, except per share	4	3	2	1
Net sales	\$2,282	\$2,043	\$2,143	\$1,603
Operating margin	146	165	208	139
Net income	17	70	86	61
Earnings per share	.30	1.21	1.69	1.23
Dividend per share	.40	.40	.40	.40
Stock price:				
High	84 1/4	80 1/4	69 1/4	67 3/8
Low	76 3/8	63 3/4	57 3/4	58 3/8

The fourth quarter of 1996 includes a \$90 million pretax charge related to the closure of four plants. The charge included \$30 million for costs related to the reduction of personnel and other closure activities and \$60 million for the write-down of facilities. The sale of shares owned by the company in ETEC Systems, Inc. generated pretax gains of \$10 million, \$6 million and \$12 million in the fourth, third and second quarters, respectively. The first quarter includes a \$25 million charge related to nacelles work the company performed for Fokker Aircraft N.V., which declared bankruptcy in March 1996.

The sum of quarterly earnings per share for 1996 does not equal earnings per share for the year because the average number of common shares outstanding for the second half of 1996 was disproportionately higher than the full year average due to the issuance in June of approximately 8 million shares of common stock in a public stock offering.

NORTHROP GRUMMAN CORPORATION

1995 Quarters, \$ in millions, except per share	4	3	2	1
Net sales	\$1,812	\$1,630	\$1,759	\$1,617
Operating margin	121	131	167	117
Net income	58	61	79	54
Earnings per share	1.17	1.25	1.59	1.10
Dividend per share	.40	.40	.40	.40
Stock price:				
High	64 1/4	62 5/8	54	49 3/4
Low	56	51 7/8	47	39 3/4

The operating margin in the second quarter of 1995 benefited from a net \$34 million in cumulative operating margin adjustments. Positive adjustments on the B-2 stealth bomber and C-17 military transport programs were partially offset by a downward adjustment on the Boeing 747 jetliner program. The 747 adjustment reflected cost increases related to the stretch-out of the current production contract. The B-2 adjustment was made as a result of negotiated contract adjustments and a revised estimate of the overall operating margin expected to be earned on the B-2 production contract. The positive adjustment on the C-17 reflected improved operating performance on this program.

The corporation's common stock is traded on the New York and Pacific Stock Exchanges (trading symbol NOC). The approximate number of holders of record of the corporation's common stock at January 31, 1997, was 10,106.

NORTHROP GRUMMAN CORPORATION

INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying consolidated statements of financial position of Northrop Grumman Corporation and Subsidiaries as of December 31 for each of the years 1992 through 1996, and the related consolidated statements of income, changes in shareholders' equity, and cash flows for the years then ended. Our audits also included the financial statement schedule listed in the Index at Item 14. These financial statements and financial statement schedule are the responsibility of the company's management. Our responsibility is to express an opinion on the financial statements and financial statement schedule based on our audits.

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

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Northrop Grumman Corporation and Subsidiaries at December 31 for each of the years 1992 through 1996, and the results of their operations and their cash flows for the years then ended in conformity with generally accepted accounting principles. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

Deloitte & Touche LLP
Los Angeles, California
February 5, 1997

NORTHROP GRUMMAN CORPORATION

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

No information is required in response to this Item.

PART III

Item 10. Directors and Executive Officers of the Registrant

The information as to Directors will be incorporated herein by reference to the Proxy Statement for the 1997 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

The information as to Executive Officers is contained in Part I of this report as permitted by General Instruction G(3).

Item 11. Executive Compensation

The information required by this Item will be incorporated herein by reference to the Proxy Statement for the 1997 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required by this Item will be incorporated herein by reference to the Proxy Statement for the 1997 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

Item 13. Certain Relationships and Related Transactions

The information required by this Item will be incorporated herein by reference to the Proxy Statement for the 1997 Annual Meeting of Stockholders to be filed within 120 days after the end of the company's fiscal year.

PART IV

Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K

- (a) 1. Financial Statements
 - Consolidated Statements of Financial Position
 - Consolidated Statements of Income
 - Consolidated Statements of Changes in Shareholders' Equity
 - Consolidated Statements of Cash Flows
 - Notes to Consolidated Financial Statements
 - Independent Auditors' Report
- 2. Financial Statement Schedule
 - Schedule II - Valuation and Qualifying Accounts

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

Separate financial statements of the parent company are omitted since it is primarily an operating company and minority equity interests in and/or nonguaranteed long-term debt of subsidiaries held by others than the company are in amounts which together do not exceed 5 percent of the total consolidated assets at December 31, 1996.

- (b) No reports on Form 8-K were filed during the last quarter of the period covered by this report.

NORTHROP GRUMMAN CORPORATION

Exhibits:

- 3(a) Certificate of Incorporation, as amended (incorporated by reference to Form S-3 Registration Statement, filed August 18, 1994)
- 3(b) Northrop Grumman Corporation Bylaws, amended and restated as of January 27, 1997.
- 4(a) Common Stock Purchase Rights Agreement (incorporated by reference to Form 8-A filed September 22, 1988), amended on August 2, 1991 (incorporated by reference to Form 8 filed August 2, 1991) and amended on September 28, 1994 (incorporated by reference to Form 8/A-A filed October 7, 1994)
- 4(b) Indenture Agreement dated as of October 15, 1994 (incorporated by reference to Form 8-K filed October 25, 1994)
- 4(c) Form of Officer's Certificate (without exhibits) establishing the terms of Northrop Grumman Corporation's 7% Notes Due 2006, 7 3/4% Debentures Due 2016 and 7 7/8% Debentures Due 2026 (incorporated by reference to Form S-4 Registration Statement, filed April 19, 1996)
- 4(d) Form of Northrop Grumman Corporation's 7% Notes Due 2006 (incorporated by reference to Form S-4 Registration Statement, filed April 19, 1996)
- 4(e) Form of Northrop Grumman Corporation's 7 3/4% Debentures Due 2016 (incorporated by reference to Form S-4 Registration Statement, filed April 19, 1996)
- 4(f) Form of Northrop Grumman Corporation's 7 7/8% Debentures Due 2026 (incorporated by reference to Form S-4 Registration Statement, filed April 19, 1996)
- 10(a) Second Amended and Restated Credit Agreement dated as of April 15, 1994, Amended and Restated as of March 1, 1996 among Northrop Grumman Corporation, Bank of American National Trust and Savings Association, as Documentation Agent, Chemical Securities, Inc., as Syndication Agent, The Chase Manhattan Bank (National Association), as Administrative Agent, and the Banks Signatories thereto (incorporated by reference to Form 8-K, filed March 18, 1996), and amended as of November 1, 1996
- 10(b) Uncommitted Credit Facility dated October 10, 1994, between Northrop Grumman Corporation and Wachovia Bank of Georgia, N.A., which is

substantially identical to facilities between Northrop Grumman Corporation and certain banks some of which are parties to the Credit Agreement filed as Exhibit 10(a) hereto (incorporated by reference to Form 10-K filed February 22, 1996)

- *10(c) 1973 Incentive Compensation Plan (incorporated by reference to Form 8-B filed June 21, 1985)
- *10(d) 1973 Performance Achievement Plan (incorporated by reference to Form 8-B filed June 21, 1985)

NORTHROP GRUMMAN CORPORATION

- *10(e) Northrop Supplemental Plan 2 (incorporated by reference to Form 10-K filed February 22, 1996), and amended as of June 19, 1996.
- *10(f) Northrop Grumman Corporation ERISA Supplemental Plan 1 (incorporated by reference to Form 10-K filed February 28, 1994).
- *10(g) Retirement Plan for Independent Outside Directors (incorporated by reference to Form SE filed March 29, 1991), amended September 21, 1994 (incorporated by reference to Form 10-K filed March 21, 1995)
- *10(h) 1987 Long-Term Incentive Plan, as amended (incorporated by reference to Form SE filed March 30, 1989)
- *10(i) Executive Life Insurance Policy (incorporated by reference to Form 10-K filed February 22, 1996)
- *10(j) Executive Accidental Death, Dismemberment and Plegia Insurance Policy (incorporated by reference to Form 10-K filed February 22, 1996)
- *10(k) Executive Long-Term Disability Insurance Policy (incorporated by reference to Form 10-K filed February 22, 1996)
- *10(l) Key Executive Medical Plan Benefit Matrix (incorporated by reference to Form 10-K filed February 22, 1996)
- *10(m) Executive Dental Insurance Policy Group Numbers 5134 and 5135 (incorporated by reference to Form 10-K filed February 22, 1996)
- *10(n) Group Excess Liability Policy (incorporated by reference to Form 10-K filed February 22, 1996)
- *10(o) Northrop Grumman 1993 Long-Term Incentive Stock Plan, as amended (incorporated by reference to Northrop Grumman Corporation Proxy Statement filed March 30, 1995), as amended (incorporated by reference to Northrop Grumman Corporation Proxy Statement filed April 1, 1996) and amended on December 18, 1996

NORTHROP GRUMMAN CORPORATION

- *10(p) Northrop Corporation 1993 Stock Plan for Non-Employee Directors (incorporated by reference to Northrop Corporation 1993 Proxy Statement filed March 30, 1993), amended as of September 21, 1994 (incorporated by reference to Form 10-K filed March 21, 1995)
- *10(q) Northrop Grumman Corporation 1995 Stock Option Plan for Non-Employee Directors (incorporated by reference to 1995 Proxy Statement filed March 30, 1995)
- *10(r) Form of Northrop Grumman Corporation Special Agreement
- *10(s) Executive Deferred Compensation Plan (effective December 29, 1994) (incorporated by reference to Form 10-K filed February 22, 1996)
- 10(t) Memorandum of Agreement dated December 16, 1996 (W. C. Solberg Retirement Arrangements) and Release Agreement between Northrop Grumman Corporation and W. C. Solberg

- 11 Statement Re Computation of Per Share Earnings
- 23 Independent Auditors' Consent
- 24 Power of Attorney
- 27 Financial Data Schedule

* Listed as Exhibits pursuant to Item 601(b)(10) of Regulation S-K

NORTHROP GRUMMAN CORPORATION

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 25th day of February 1997.

Northrop Grumman Corporation

By: Nelson F. Gibbs
Nelson F. Gibbs
Corporate Vice President and Controller
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed on behalf of the registrant this 25th day of February 1997, by the following persons and in the capacities indicated.

Signature	Title
Kent Kresa*	Chairman of the Board, President and Chief Executive Officer and Director (Principal Executive Officer)
Jack R. Borsting*	Director
John T. Chain, Jr.*	Director
Jack Edwards*	Director
Phillip Frost*	Director
Aulana L. Peters*	Director
John E. Robson*	Director
Richard R. Rosenberg*	Director
Brent Scowcroft*	Director
John Brooks Slaughter*	Director
Wallace C. Solberg*	Director
Richard J. Stegemeier*	Director
Richard B. Waugh, Jr.*	Corporate Vice President and Chief Financial Officer

*By James C. Johnson
James C. Johnson, Attorney-in-Fact
pursuant to a power of attorney

NORTHROP GRUMMAN CORPORATION

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
(Dollars in Thousands)

COL. A	COL. B	COL. C	COL. D	COL. E
Classification	Balance at Beginning of Period	Additions At Cost(2)	Other Changes-- Add (Deduct)(1)	Balance at End of Period
Description:				

Year ended December 31, 1992
Reserves and allowances deducted

from asset accounts:				
Allowances for doubtful amounts	\$52,001	\$ 7,571	\$ (2,412)	\$57,160
Year ended December 31, 1993				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts	\$57,160	\$ 9,304	\$ (9,759)	\$56,705
Year ended December 31, 1994				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts	\$56,705	\$25,283	\$(18,262)	\$63,726
Year ended December 31, 1995				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts	\$63,726	\$ 6,357	\$ (2,129)	\$67,954
Year ended December 31, 1996				
Reserves and allowances deducted from asset accounts:				
Allowances for doubtful amounts	\$67,954	\$19,364	\$(31,873)	\$55,445

(1) Uncollectible amounts written off, net of recoveries

(2) Additions include allowances for bad debts from acquired companies - \$15,625 in 1994 and \$4,751 in 1996

NORTHROP GRUMMAN CORPORATION

EXHIBIT 11
STATEMENT RE COMPUTATION OF PER SHARE EARNINGS
(in thousands, except per share)

	1996	1995	1994	1993	1992
Primary:					
Average shares outstanding	54,012	49,364	49,139	48,085	47,179
Net effect of the assumed exercise of stock options - based on the treasury stock method	1,260	1,111	758	792	251
Totals	55,272	50,475	49,897	48,877	47,430
Net Income	\$234,126	\$252,159	\$35,264	\$95,755	\$120,922
Earnings per share(1)	\$ 4.24	\$ 5.00	\$.71	\$ 1.96	\$ 2.55
Fully diluted:					
Average shares outstanding	54,012	49,364	49,139	48,085	47,179
Net effect of the assumed exercise of stock options - based on the treasury stock method	1,474	1,356	837	872	805
Totals	55,486	50,720	49,976	48,957	47,984
Net Income	\$234,126	\$252,159	\$35,264	\$95,755	\$120,922
Earnings per share(1)	\$ 4.22	\$ 4.97	\$.71	\$ 1.96	\$ 2.52

(1) This calculation was made in compliance with Item 601 of Regulation S-K. Earnings per share presented elsewhere in this report exclude from their calculation shares issuable under employee stock options, since their dilutive effect is less than 3%.

NORTHROP GRUMMAN CORPORATION

EXHIBIT 23

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statements Nos. 2-73293, 2-98614, 33-15764, 33-49667, 33-55146, 33-59815, 33-59853, 333-03959, 333-02653 and 333-02453 of Northrop Grumman Corporation on Form S-8 of our report appearing in this Annual Report on Form 10-K of Northrop Grumman Corporation for the year ended December 31, 1996.

DELOITTE & TOUCHE LLP
Los Angeles, California
February 25, 1997

BYLAWS
OF
NORTHROP GRUMMAN CORPORATION
(A Delaware Corporation)

ARTICLE I

OFFICES

Section 1.01. REGISTERED OFFICE. The registered office of Northrop Grumman Corporation (the "Corporation") in the State of Delaware shall be at Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, and the name of the registered agent at that address shall be The Corporation Trust Company.

Section 1.02. PRINCIPAL EXECUTIVE OFFICE. The principal executive office of the Corporation shall be located at 1840 Century Park East, Los Angeles, California 90067. The Board of Directors of the Corporation (the "Board of Directors") may change the location of said principal executive office.

Section 1.03. OTHER OFFICES. The Corporation may also have an office or offices at such other place or places, either within or without the State of Delaware, as the Board of Directors may from time to time determine or as the business of the Corporation may require.

ARTICLE II

MEETINGS OF STOCKHOLDERS

Section 2.01. ANNUAL MEETINGS. The annual meeting of stockholders of the Corporation shall be held between May 1 and July 1 of each year on such date and at such time as the Board of Directors shall determine. At each annual meeting of stockholders, directors shall be elected in accordance with the provisions of Section 3.04 hereof and any other proper business may be transacted.

Section 2.02. SPECIAL MEETINGS. Special meetings of stockholders for any purpose or purposes may be called at any time by a majority of the Board of Directors, the Chairman of the Board, or by the President and Chief Executive Officer. Special meetings may not be called by any other person or persons. Each special meeting shall be held at such date and time as is requested by the person or persons calling the meeting, within the limits fixed by law.

Section 2.03. PLACE OF MEETINGS. Each annual or special meeting of stockholders shall be held at such location as may be determined by the Board of Directors or, if no such determination is made, at such place as may be determined by the Chairman of the Board. If no location is so determined, any annual or special meeting shall be held at the principal executive office of the Corporation.

Section 2.04. NOTICE OF MEETINGS. Written notice of each annual or special meeting of stockholders stating the date and time when, and the place where, it is to be held shall be delivered either personally or by mail to stockholders entitled to vote at such meeting not less than ten (10) nor more than sixty (60) days before the date of the meeting. The purpose or purposes for which the meeting is called may, in the case of an annual meeting, and shall, in the case of a special meeting, also be stated. If mailed, such notice shall be directed to a stockholder at his address as it shall appear on the stock books of the Corporation, unless he shall have filed with the Secretary of the Corporation a written request that notices intended for him be mailed to some other address, in which case such notice shall be mailed to the address designated in such request.

Section 2.05. CONDUCT OF MEETINGS. All annual and special meetings of stockholders shall be conducted in accordance with such rules and procedures as the Board of Directors may determine subject to the requirements of applicable law and, as to matters not governed by such rules and procedures, as the chairman of such meeting shall determine. The chairman of any annual or special meeting of stockholders shall be the Chairman of the Board. The Secretary, or in the absence of the Secretary, a person designated by the Chairman of the Board, shall act as secretary of the meeting.

Section 2.06. NOTICE OF BUSINESS. At any meeting of stockholders, only such business shall be conducted as shall be a proper matter for stockholder action under the laws of the State of Delaware and as shall have been brought before the meeting (a) by or at the direction of the Board of Directors or (b) by any stockholder of the Corporation who is a stockholder

of record at the time of giving of the notice provided for in this Section 2.06 who shall be entitled to vote at such meeting and who complies with the notice procedures set forth in this Section 2.06. For business to be properly brought before a meeting of stockholders by a stockholder, the stockholder shall have given timely notice thereof in writing to the Secretary. To be timely, a stockholder's notice shall be delivered to or mailed and received at the principal executive office of the Corporation not less than sixty (60) days nor more than ninety (90) days prior to the meeting: provided, however, that in the event that less than seventy (70) days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 10th day following the date on which such notice of the date of the meeting was mailed or such public disclosure was made, whichever first occurs. Such stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the meeting (a) a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and, in the event that such business includes a proposal to amend either the Certificate of Incorporation or these Bylaws, the language of the proposed amendment, (b) the name and address as they appear on the Corporation's books of the stockholder proposing such business, (c) the class and number of shares of capital stock of the Corporation which are beneficially owned by such stockholder and (d) any material interest of such stockholder in such business. Notwithstanding anything in these Bylaws to the contrary, no business shall be conducted at a stockholder meeting except in accordance with the procedures set forth in this Section 2.06. The chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting and in accordance with the provisions of these Bylaws and if he should so determine, he shall so declare to the meeting and any such business not properly brought before the meeting shall not be transacted. Notwithstanding the foregoing provisions of this Section 2.06, a stockholder shall also comply with all applicable requirements of the Securities Exchange Act of 1934 as amended and the rules and regulations thereunder with respect to the matters set forth in this Section 2.06. Nothing in this Bylaw shall be deemed to affect any rights of stockholders or the Corporation under Rule 14a-8 of the Securities Exchange Act of 1934 with respect to proposals which are requested to be included in the Corporation's proxy statement.

Section 2.07. QUORUM. At any meeting of stockholders, the presence, in person or by proxy, of the holders of record of a majority of shares then issued and outstanding and entitled to vote at the meeting shall constitute a quorum for the transaction of business; provided, however, that this Section 2.07 shall not affect any different requirement which may exist under statute, pursuant to the rights of any authorized class or series of stock, or under the Certificate of Incorporation of the Corporation (the "Certificate") for the vote necessary for the adoption of any measure governed thereby. In the absence of a quorum, the stockholders present in person or by proxy, by majority vote and without further notice, may adjourn the meeting from time to time until a quorum is attained. At any reconvened meeting following such an adjournment at which a quorum shall be present, any business may be transacted which might have been transacted at the meeting as originally notified.

Section 2.08. VOTES REQUIRED. A majority of the votes cast at a duly called meeting of stockholders, at which a quorum is present, shall be sufficient to take or authorize action upon any matter which may properly come before the meeting, unless the vote of a greater or different number thereof is required by statute, by the rights of any authorized class of stock or by the Certificate. Unless the Certificate or a resolution of the Board of Directors adopted in connection with the issuance of shares of any class or series of stock provides for a greater or lesser number of votes per share, or limits or denies voting rights, each outstanding share of stock, regardless of class, shall be entitled to one vote on each matter submitted to a vote at a meeting of stockholders.

Section 2.09. PROXIES. A stockholder may vote the shares owned of record by him either in person or by proxy executed in writing (which shall include writings sent by telex, telegraph, cable or facsimile transmission) by the stockholder himself or by his duly authorized attorney-in-fact. No proxy shall be valid after three (3) years from its date, unless the proxy provides for a longer period. Each proxy shall be in writing, subscribed by the stockholder or his duly authorized attorney-in-fact, and dated, but it need not be sealed, witnessed or acknowledged.

Section 2.10. STOCKHOLDER ACTION. Any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual meeting or special meeting of stockholders of the Corporation, unless such action requiring or permitting shareholder approval is approved by a majority of the Continuing Directors (as defined in the Certificate), in which case such action may be authorized or taken by the written consent

of the holders of outstanding shares of stock having not less than the minimum voting power that would be necessary to authorize or take such action at a meeting of stockholders at which all shares entitled to vote thereon were present and voted, provided all other requirements of applicable law and the Certificate have been satisfied.

Section 2.11. LIST OF STOCKHOLDERS. The Secretary of the Corporation shall prepare and make (or cause to be prepared and made), at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order and showing the address of, and the number of shares registered in the name of, each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the duration thereof, and may be inspected by any stockholder who is present.

Section 2.12. INSPECTORS OF ELECTION. In advance of any meeting of stockholders, the Board of Directors may appoint Inspectors of Election to act at such meeting or at any adjournment or adjournments thereof. If such Inspectors are not so appointed or fail or refuse to act, the chairman of any such meeting may (and, upon the demand of any stockholder or stockholder's proxy, shall) make such an appointment.

The number of Inspectors of Election shall be one (1) or three (3). If there are three (3) Inspectors of Election, the decision, act or certificate of a majority shall be effective and shall represent the decision, act or certificate of all. No such Inspector need be a stockholder of the Corporation.

The Inspectors of Election shall determine the number of shares outstanding, the voting power of each, the shares represented at the meeting, the existence of a quorum and the authenticity, validity and effect of proxies; they shall receive votes, ballots or consents, hear and determine all challenges and questions in any way arising in connection with the right to vote, count and tabulate all votes or consents, determine when the polls shall close and determine the result; and finally, they shall do such acts as may be proper to conduct the election or vote with fairness to all stockholders. On request, the Inspectors shall make a report in writing to the secretary of the meeting concerning any challenge, question or other matter as may have been determined by them and shall execute and deliver to such secretary a certificate of any fact found by them.

ARTICLE III

DIRECTORS

Section 3.01. POWERS. The business and affairs of the Corporation shall be managed by and be under the direction of the Board of Directors. The Board of Directors shall exercise all the powers of the Corporation, except those that are conferred upon or reserved to the stockholders by statute, the Certificate or these Bylaws.

Section 3.02. NUMBER. Except as otherwise fixed pursuant to the provisions of Section 2 of Article Fourth of the Certificate in connection with rights to elect additional directors under specified circumstances which may be granted to the holders of any class or series of Preferred Stock, par value One Dollar (\$1.00) per share of the Corporation ("Preferred Stock"), the number of directors shall be fixed from time to time by resolution of the Board of Directors but shall not be less than three (3). The Board of Directors, as of May 17, 1989, and thereafter, shall consist of fourteen (14) directors until changed as herein provided.

Section 3.03. INDEPENDENT OUTSIDE DIRECTORS. At least sixty percent (60%) of the members of the Board of Directors of the Corporation shall at all times be "Independent Outside Directors", which term is hereby defined to mean any director who:

1. has not in the last five (5) years been an officer or employee of the Corporation or any of its subsidiaries or affiliates; and
2. is not related to an officer of the Corporation (or an officer of any of the Corporation's parents, subsidiaries or affiliates) by blood, marriage or adoption (except relationships more remote than first cousin); and
3. is not, and has not within the last two (2) years been, an

officer, director or employee of, and does not own, and has not within the last two (2) years owned, directly or indirectly, in excess of one percent (1%) of any firm, corporation or other business or professional entity which has made or proposes to make during either the Corporation's or such entity's last or next fiscal year payments for property or services in excess of one percent (1%) of the gross revenues either of the Corporation for its last fiscal year or of such entity for its last fiscal year, but excluding payments determined by competitive bids, public utility services at rates set by law or government authority, or payments arising solely from the ownership of securities, or to which the corporation was indebted at any time during the Corporation's last fiscal year in an aggregate amount in excess of one percent (1%) of the Corporation's total assets at the end of such fiscal year or Five Million Dollars (\$5,000,000), whichever is less, but excluding debt securities which have been publicly offered or which are publicly traded; and

4. is not a director, partner, officer or employee of an investment banking firm which has performed services for the Corporation in the last two (2) years or which the Corporation proposes to have perform services in the next year other than as a participating underwriter in a syndicate; and

5. is not a control person of the Corporation (other than as a director of the Corporation) as defined by the regulations of the Securities and Exchange Commission.

Section 3.04. ELECTION AND TERM OF OFFICE. Except as provided in Section 3.07 hereof and subject to the right to elect additional directors under specified circumstances which may be granted, pursuant to the provisions of Section 2 of Article Fourth of the Certificate, to the holders of any class or series of Preferred Stock, directors shall be elected by the stockholders of the Corporation. The Board of Directors shall be and is divided into three classes: Class I, Class II and Class III. The number of directors in each class shall be the whole number contained in the quotient obtained by dividing the authorized number of directors (fixed pursuant to Section 3.02 hereof) by three. If a fraction is also contained in such quotient, then additional directors shall be apportioned as follows: if such fraction is one-third, the additional director shall be a member of Class I; and if such fraction is two-thirds, one of the additional directors shall be a member of Class I and the other shall be a member of Class II. Each director shall serve for a term ending on the date of the third annual meeting of stockholders of the Corporation following the annual meeting at which such director was elected; provided, however, that the directors first elected to Class I shall serve for a term ending on the date of the annual meeting next following the end of the calendar year 1985, the directors first elected to Class II shall serve for a term ending on the date of the second annual meeting next following the end of the calendar year 1985 and the directors first elected to Class III shall serve for a term ending on the date of the third annual meeting next following the end of the calendar year 1985.

Notwithstanding the foregoing provisions of this Section 3.04: each director shall serve until his successor is elected and qualified or until his death, resignation or removal; no decrease in the authorized number of directors shall shorten the term of any incumbent director; and additional directors, elected pursuant to Section 2 of Article Fourth of the Certificate in connection with rights to elect such additional directors under specified circumstances which may be granted to the holders of any class or series of Preferred Stock, shall not be included in any class, but shall serve for such term or terms and pursuant to such other provisions as are specified in the resolution of the Board of Directors establishing such class or series.

Nominations for the election of directors may be made by the Board or a committee thereof or by any stockholder entitled to vote in the election of directors; provided, however, that a stockholder may nominate a person for election as a director at a meeting only if written notice of such stockholder's intent to make such nomination has been given by such stockholder to, and received by, the Secretary of the Corporation at the principal executive offices of the Corporation not less than sixty (60) days nor more than ninety (90) days prior to the meeting; provided, however, that (a) in the event that less than seventy (70) days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 10th day following the date on which such notice of the date of the meeting was mailed or such public disclosure was made, whichever first occurs; and (b) in the event that less than seventy (70) days shall remain from the date of public disclosure of the adoption of this bylaw provision to the date of any meeting, notice by the stockholder to be timely with respect to such meeting must be so received not later than the close of business on the 10th day following the date on which such public disclosure

was made. Each such notice shall set forth: (a) the name and address of the stockholder who intends to make the nomination and of the person or persons to be nominated; (b) the name and address as they appear on the Corporation's books of the stockholder intending to make such nomination; (c) the class and number of shares of capital stock of the Corporation which are beneficially owned by such stockholder (d) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the stockholder; (e) the occupations and business history for the previous five years, other directorships, names of business entities of which the proposed nominee owns a 10 percent or more equity interest, a list of any criminal convictions, including federal and state securities violations and such other information regarding each proposed nominee as may be required by the federal proxy rules in effect at the time the notice is submitted and (f) the consent of each nominee to serve as a director of the Corporation if so elected. No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the procedures set forth in this Section 3.04. The Chairman of any meeting of stockholders shall direct that any nomination not made in accordance with these procedures be disregarded.

Section 3.05. ELECTION OF CHAIRMAN OF THE BOARD. At the organizational meeting immediately following the annual meeting of stockholders, the directors shall elect a Chairman of the Board from among the directors who shall hold office until the corresponding meeting of the Board of Directors in the next year and until his successor shall have been elected or until his earlier resignation or removal. Any vacancy in such office may be filled for the unexpired portion of the term in the same manner by the Board of Directors at any regular or special meeting.

Section 3.06. REMOVAL. Subject to the right to elect directors under specified circumstances which may be granted pursuant to Section 2 of Article Fourth of the Certificate to the holders of any class or series of Preferred Stock, any director may be removed from office only as provided in Article Tenth of the Certificate.

Section 3.07. VACANCIES AND ADDITIONAL DIRECTORSHIPS. Except as otherwise provided pursuant to Section 2 of Article Fourth of the Certificate in connection with rights to elect additional directors under specified circumstances which may be granted to the holders of any class or series of Preferred Stock, newly created directorships resulting from any increase in the number of directors and any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other cause shall be filled solely by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of directors in which the new directorship was created or the vacancy occurred and until such director's successor shall have been elected and qualified. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 3.08. REGULAR AND SPECIAL MEETINGS. Regular meetings of the Board of Directors shall be held immediately following the annual meeting of stockholders, and at 9:00 o'clock a.m. on the third Wednesday of each succeeding month (or, should such day fall upon a legal holiday, then on the first day thereafter which is not a legal holiday), unless a regular meeting is otherwise called by the Chairman of the Board in accordance with applicable law.

Special meetings of the Board of Directors shall be held upon call by or at the direction of the Chairman of the Board, the President either of whom may be the, Chief Executive Officer, or any two directors, except that when the Board of Directors consists of one director, then the one director may call a special meeting. Except as otherwise required by law, notice of each special meeting shall be mailed to each director, addressed to him at his residence or usual place of business, at least two days before the day on which the meeting is to be held, or shall be sent to him at such place by telex, telegram, cable, facsimile transmission or telephoned or delivered to him personally, not later than the day before the day on which the meeting is to be held. Such notice shall state the time and place of such meeting, but need not state the purpose or purposes thereof unless otherwise required by law, the Certificate or these Bylaws.

Notice of any meeting need not be given to any director who shall attend such meeting in person or who shall waive notice thereof, before or after such meeting, in a signed writing.

Section 3.09. QUORUM. At all meetings of the Board of Directors, a majority of the fixed number of directors shall constitute a quorum for the transaction of business, except that when the Board of Directors consists of

one director, then the one director shall constitute a quorum. In the absence of a quorum, the directors present, by majority vote and without notice other than by announcement, may adjourn the meeting from time to time until a quorum shall be present. At any reconvened meeting following such an adjournment at which a quorum shall be present, any business may be transacted which might have been transacted at the meeting as originally notified.

Section 3.10. VOTES REQUIRED. Except as otherwise provided by applicable law or by the Certificate, the vote of a majority of the directors present at a meeting duly held at which a quorum is present shall be sufficient to pass any measure.

Section 3.11. PLACE AND CONDUCT OF MEETINGS. Each regular meeting and special meeting of the Board of Directors shall be held at a location determined as follows: The Board of Directors may designate any place, within or without the State of Delaware, for the holding of any meeting. If no such designation is made: (i) any meeting called by a majority of the directors shall be held at such location, within the county of the Corporation's principal executive office, as the directors calling the meeting shall designate; and (ii) any other meeting shall be held at such location, within the county of the Corporation's principal executive office, as the Chairman of the Board may designate or, in the absence of such designation, at the Corporation's principal executive office. Subject to the requirements of applicable law, all regular and special meetings of the Board of Directors shall be conducted in accordance with such rules and procedures as the Board of Directors may approve and, as to matters not governed by such rules and procedures, as the chairman of such meeting shall determine. The chairman of any regular or special meeting shall be the Chairman of the Board, or in his absence a person designated by the Board of Directors. The Secretary, or in the absence of the Secretary a person designated by the chairman of the meeting, shall act as secretary of the meeting.

Section 3.12. FEES AND COMPENSATION. Directors shall be paid such compensation as may be fixed from time to time by resolutions of the Board of Directors (a) for their usual and contemplated services as directors, (b) for their services as members of committees appointed by the Board of Directors, including attendance at committee meetings as well as services which may be required when committee members must consult with management staff, and (c) for extraordinary services as directors or as members of committees appointed by the Board of Directors, over and above those services for which compensation is fixed pursuant to items (a) and (b) in this Section 3.12. Compensation may be in the form of an annual retainer fee or a fee for attendance at meetings, or both, or in such other form or on such basis as the resolutions of the Board of Directors shall fix. Directors shall be reimbursed for all reasonable expenses incurred by them in attending meetings of the Board of Directors and committees appointed by the Board of Directors and in performing compensable extraordinary services. Nothing contained herein shall be construed to preclude any director from serving the Corporation in any other capacity, such as an officer, agent, employee, consultant or otherwise, and receiving compensation therefor.

Section 3.13. COMMITTEES OF THE BOARD OF DIRECTORS. Subject to the requirements of applicable law, the Board of Directors may from time to time establish committees, including standing or special committees, which shall have such duties and powers as are authorized by these Bylaws or by the Board of Directors. Committee members, and the chairman of each committee, shall be appointed by the Board of Directors. The Chairman of the Board, in conjunction with the several committee chairmen, shall make recommendations to the Board of Directors for its final action concerning members to be appointed to the several committees of the Board of Directors. Any member of any committee may be removed at any time with or without cause by the Board of Directors. Vacancies which occur in any committee shall be filled by a resolution of the Board of Directors. If any vacancy shall occur in any committee by reason of death, resignation, disqualification, removal or otherwise, the remaining members of such committee, so long as a quorum is present, may continue to act until such vacancy is filled by the Board of Directors. The Board of Directors may, by resolution, at any time deemed desirable, discontinue any standing or special committee. Members of standing committees, and their chairmen, shall be elected yearly at the organizational meeting of the Board of Directors which is held immediately following the annual meeting of stockholders.

Section 3.14. AUDIT COMMITTEE. There shall be an Audit Committee of the Board of Directors which shall serve at the pleasure of the Board of Directors and be subject to its control. The Committee shall have the following membership and powers:

1. The Committee shall have at least three (3) members.

All members of the Committee shall be Independent Outside Directors.

2. The Committee shall recommend to the Board of Directors for its action the appointment or discharge of the Corporation's independent auditors, based upon the Committee's judgment of the independence of the auditors (taking into account the fees charged both for audit and non-audit services) and the quality of its audit work. Ratification by the stockholders of the Board of Directors' appointment of the Corporation's independent auditors may be sought in conjunction with management's solicitation of proxies for the annual meeting of stockholders, if so determined by the Board of Directors. If the auditors must be replaced, the Committee shall recommend to the Board of Directors for its action the appointment of new auditors until the next annual meeting of stockholders.

3. The Committee shall review and approve the scope and plan of the audit.

4. The Committee shall meet with the independent auditors at appropriate times to review, among other things, the results of the audit and any certification, report or opinion which the auditors propose to render in connection with the Corporation's financial statements.

5. The Committee shall review and approve each professional service of a non-audit nature to be provided by the auditors.

6. The Committee shall meet with the Corporation's chief internal auditor at least once a year to review his comments concerning the adequacy of the Corporation's system of internal accounting controls and such other matters as the Committee may deem appropriate.

7. The Committee shall have the power to direct the auditors and the internal audit staff to inquire into and report to it with respect to any of the Corporation's contracts, transactions or procedures, or the conduct of the Corporate Office, or any division, profit center, subsidiary or other unit, or any other matter having to do with the Corporation's business and affairs. If authorized by the Board of Directors, the Committee may initiate special investigations in these regards.

8. The Committee shall have such other duties as may be lawfully delegated to it from time to time by the Board of Directors.

Section 3.15. COMPENSATION AND MANAGEMENT DEVELOPMENT COMMITTEE.

There shall be a Compensation and Management Development Committee of the Board of Directors which shall serve at the pleasure of the Board of Directors and be subject to its control. The Committee shall have the following membership and powers:

1. The Committee shall be composed of at least three (3) members. All members of the Committee shall be Independent Outside Directors. The principal Human Resources officer of the Corporation shall be a non-voting member of the Committee.

2. The Committee shall recommend to the Board of Directors for its action the amount to be appropriated for awards to be made each year to elected officers under the Corporation's incentive compensation plan.

3. The Committee shall establish the Corporation's annual performance objectives under the Corporation's incentive compensation plans.

4. The Committee shall make recommendations to the Board of Directors with respect to the base salary and incentive compensation of the elected officers. The Committee shall take final action with respect to the base salary and incentive compensation of all other officers and employees receiving a base salary over an amount as shall be determined from time to time either by the Committee or the Board of Directors.

5. The Committee shall review management's recommendations and take final action with respect to all awards to be made under the Corporation's long-term incentive plans or other similar benefit plans which may be adopted by the Board of Directors or the stockholders and in which corporate officers or directors are eligible to participate, provided however that all such awards relative to the five (5) most highly compensated officers must be reported to the Board of Directors.

6. The Committee shall review on a continuing basis the Corporation's general compensation policies and practices, fringe benefits and the Corporation's compliance with its various affirmative action plans and programs. The committee shall also review and recommend to the Board of Directors for its final action all compensation plans in which elected officers or directors are eligible to participate.

7. The Committee shall review from time to time and report to the Board of Directors actions taken by management concerning the Corporation's overall executive structure and the steps being taken to assure the succession of qualified management.

8. The Committee shall have such other duties as may be lawfully delegated to it from time to time by the Board of Directors.

Section 3.16. EXECUTIVE AND PUBLIC POLICY COMMITTEE. There shall be an Executive and Public Policy Committee of the Board of Directors which shall serve at the pleasure of the Board of Directors and be subject to its control. The Committee shall have the following membership and powers:

1. The Committee shall have at least five (5) members. At least sixty percent (60%) of the members shall be Independent Outside Directors.

2. The Committee shall review, approve and monitor the policy, organization, charter and implementation of the Northrop Grumman Employees Political Action Committee.

3. The Committee shall review and approve the policy of the Corporation for engaging the services of Consultants and Commission Agents.

4. The Committee shall review and report to the Board of Directors from time to time concerning the Corporation's compliance with the Corporation's policies, practices and procedures with respect to consultants and commission agents.

5. The Committee shall review and make policy and budget recommendations to the Board of Directors for its actions concerning proposed charitable contributions and aid to higher education to be given by the Corporation each year.

6. The Committee shall have such other duties as lawfully may be delegated to it from time to time by the Board of Directors.

Section 3.17. FINANCE COMMITTEE. There shall be a Finance Committee of the Board of Directors which shall serve at the pleasure of the Board of Directors and be subject to its control. The Committee shall have the following membership and powers:

1. The Committee shall have at least five (5) members. At least fifty percent (50%) of the members of the Committee shall be Independent Outside Directors. The chief financial officer of the Corporation shall be a non-voting member of the Committee.

2. The Committee shall review and give consideration to management requests for required specific new financing of a long-term nature, whether debt or equity, and make recommendations to the Board of Directors for its final action.

3. The Committee shall review the current financial condition of the Company and planned financial requirements.

4. The Committee shall review periodically the Corporation's dividend policy in connection with dividend declarations and make recommendations to the Board of Directors for its final action.

5. The Committee shall consider management's recommendations concerning acquisitions, mergers or divestments which management has determined to be of an unusual or material nature and shall make recommendations to the Board of Directors for its final action.

6. The Committee shall consider management's recommendations concerning contracts or programs which management has determined to be of an unusual or material nature and shall make recommendations to the Board of Directors for its final action.

7. The Committee shall periodically review the investment performance of the employee benefit plans, capital asset requirements and short-term investment policy when appropriate.

8. The Committee shall have such other duties as lawfully may be delegated to it from time to time by the Board of Directors.

Section 3.18. NOMINATING COMMITTEE. There shall be a Nominating Committee of the Board of Directors which shall serve at the pleasure of the Board of Directors and be subject to its control. The Committee shall have the following membership and powers:

1. The Committee shall have at least three (3) members. All members of the Committee shall be Independent Outside Directors.

2. The Committee shall review candidates to serve as directors and shall recommend nominees to the Board of Directors for election at each annual meeting of stockholders or other special meetings where directors are to be elected and shall recommend persons to serve as proxies to vote proxies solicited by management in connection with such meetings.

3. The Committee shall cause the names of all director candidates that are approved by the Board of Directors to be listed in the Corporation's proxy materials and shall support the election of all candidates so nominated by the Board of Directors to the extent permitted by law.

4. The Committee shall review and make recommendations to the Board of Directors for its final action concerning the composition and size of the Board of Directors, its evaluation of the performance of incumbent directors, its recommendations concerning the compensation of the Directors, its recommendations concerning directors to fill vacancies and its evaluation and recommendations concerning potential candidates to serve in the future on the Board of Directors to assure the Board's continuity and succession.

5. The Committee shall have such other duties as lawfully may be delegated to it from time to time by the Board of Directors.

Section 3.19. MEETINGS OF COMMITTEES. Each committee of the Board of Directors shall fix its own rules of procedure consistent with the provisions of applicable law and of any resolutions of the Board of Directors governing such committee. Each committee shall meet as provided by such rules or such resolution of the Board of Directors, and shall also meet at the call of its chairman or any two (2) members of such committee. Unless otherwise provided by such rules or by such resolution, the provisions of these Bylaws under Article III entitled "Directors" relating to the place of holding meetings and the notice required for meetings of the Board of Directors shall govern the place of meetings and notice of meetings for committees of the Board of Directors. A majority of the members of each committee shall constitute a quorum thereof, except that when a committee consists of one (1) member, then the one (1) member shall constitute a quorum. In the absence of a quorum, a majority of the members present at the time and place of any meeting may adjourn the meeting from time to time until a quorum shall be present and the meeting may be held as adjourned without further notice or waiver. Except in cases where it is otherwise provided by the rules of such committee or by a resolution of the Board of Directors, the vote of a majority of the members present at a duly constituted meeting at which a quorum is present shall be sufficient to pass any measure by the committee.

ARTICLE IV

OFFICERS

Section 4.01. DESIGNATION, ELECTION AND TERM OF OFFICE. The Corporation shall have a Chairman of the Board and/or a President either of whom may be designated Chief Executive Officer by the Board of Directors, such Vice Presidents (each of whom may be assigned by the Board of Directors or the Chief Executive Officer an additional title descriptive of the functions assigned to him and one or more of whom may be designated Executive, Group or Senior Vice President) as the Board of Directors deems appropriate, a Secretary and a Treasurer. These officers shall be elected annually by the Board of Directors at the organizational meeting immediately following the annual meeting of stockholders, and each such officer shall hold office until the corresponding meeting of the Board of Directors in the next year or until his earlier resignation, death or removal. Any vacancy in any of the above offices may be filled for an unexpired portion of the term by the Board of Directors at any regular special meeting. The Chief Executive Officer may, by a writing filed with the Secretary, designate titles for employees and agents, as, from time to time, may appear necessary or advisable in the conduct of the affairs of the Corporation and, in the same

manner, terminate or change such titles.

Section 4.02. CHAIRMAN OF THE BOARD. The Board of Directors shall designate the Chairman of the Board from among its members. The Chairman of the Board of Directors shall preside at all meetings of the Board and the Shareholders, and shall perform such other duties as shall be delegated to him by the Board or the officer designated as chief executive.

Section 4.03. PRESIDENT. The President shall perform such duties and have such responsibilities as may from time to time be delegated or assigned to him by the Board of Directors or the officer designated as chief executive.

Section 4.04. CHIEF EXECUTIVE. The Board of Directors shall designate either the Chairman of the Board or the President to be the chief executive of the Corporation. The officer so designated shall be responsible for the general supervision, direction and control of the business and affairs of the Corporation.

Section 4.05. CHIEF FINANCIAL OFFICER. The Chief Financial Officer of the Corporation shall be responsible to the Chief Executive Officer for the management and supervision of all financial matters and to provide for the financial growth and stability of the Corporation. He shall attend all regular meetings of the Board of Directors and keep the Directors currently informed concerning all significant financial matters that could impact upon the business or affairs of the Corporation. He shall also perform such additional duties as may be assigned to him from time to time by the Board of Directors or the Chief Executive Officer.

Section 4.06. EXECUTIVE VICE PRESIDENTS, SENIOR VICE PRESIDENTS AND VICE PRESIDENTS. Executive vice presidents, senior vice presidents and vice presidents of the Corporation that are elected by the Board of Directors shall perform such duties as may be assigned to them from time to time by the Chief Executive Officer.

Section 4.07. CHIEF LEGAL OFFICER. The chief legal officer of the Corporation shall be the General Counsel who shall be responsible to the Chief Executive Officer for the management and supervision of all legal matters. The General Counsel shall attend all regular meetings of the Board of Directors and shall keep the Directors currently informed concerning all significant legal matters, particularly those involving important business, legal, moral or ethical issues that could impact upon the business or affairs of the Corporation.

Section 4.08. SECRETARY. The Secretary shall keep the minutes of the meetings of the stockholders, the Board of Directors and all committee meetings. The Secretary shall be the custodian of the corporate seal and shall affix it to all documents which he is authorized by law or the Board of Directors to sign and seal. The Secretary also shall perform such other duties as may be assigned from time to time by the Chief Executive Officer.

Section 4.09. TREASURER. The Treasurer shall be accountable to the Senior Vice President, Finance, and shall perform such duties as may be assigned to the Treasurer from time to time by the Senior Vice President, Finance.

Section 4.10. APPOINTED OFFICERS. The Chief Executive Officer may appoint one or more Corporate Staff Vice Presidents, officers of groups or divisions or assistant secretaries, assistant treasurers and such other assistant officers as the business of the Corporation may require, each of whom shall hold office for such period, have such authority and perform such duties as may be specified from time to time by the Chief Executive Officer.

Section 4.11. ABSENCE OR DISABILITY OF AN OFFICER. In the case of the absence or disability of an officer of the Corporation the Board of Directors, or any officer designated by it, or the Chief Executive Officer may, for the time of the absence or disability, delegate such officer's duties and powers to any other officer of the Corporation.

Section 4.12. OFFICERS HOLDING TWO OR MORE OFFICES. The same person may hold any two or more of the above-mentioned offices. However, no officer shall execute, acknowledge or verify any instrument in more than one capacity, if such instrument is required by law, by the Certificate or by these Bylaws, to be executed, acknowledged or verified by any two or more officers.

Section 4.13. COMPENSATION. The Board of Directors shall have the power to fix the compensation of all officers and employees of the Corporation.

Section 4.14. RESIGNATIONS. Any officer may resign at any time by giving written notice to the Board of Directors, to the Chief Executive Officer, or to the Secretary of the Corporation. Any such resignation shall

take effect at the time specified therein unless otherwise determined by the Board of Directors. The acceptance of a resignation by the Corporation shall not be necessary to make it effective.

Section 4.15. REMOVAL. Any officer of the Corporation may be removed, with or without cause, by the affirmative vote of a majority of the entire Board of Directors. Any assistant officer of the Corporation may be removed, with or without cause, by the Chief Executive Officer, or by the Board of Directors.

ARTICLE V

INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS

Section 5.01. RIGHT TO INDEMNIFICATION. Each person who was or is made a party, or is threatened to be made a party, to any actual or threatened action, suit, or proceeding, whether civil, criminal, administrative, or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director, officer, employee, or agent of the Corporation (hereinafter an "indemnitee") shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended, or by other applicable law as then in effect, against all expense, liability, and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties, and amounts paid in settlement) actually and reasonably incurred or suffered by such indemnitee in connection therewith. Any person who was or is made a party, or is threatened to be made a party, to any proceeding by reason of the fact that he or she is or was serving at the request of an executive officer of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, shall also be considered an indemnitee for the purposes of this Article. The right to indemnification provided by this Article shall apply whether or not the basis of such proceeding is alleged action in an official capacity as such director, officer, employee or agent or in any other capacity while serving as such director, officer, employee or agent. Notwithstanding anything in this Section 5.01 to the contrary, except as provided in Section 5.03 of this Article with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if such proceeding (or part thereof) was authorized by the Corporation.

Section 5.02. ADVANCEMENT OF EXPENSES. (a) The right to indemnification conferred in Section 5.01 shall include the right to have the expenses incurred in defending or preparing for any such proceeding in advance of its final disposition (hereinafter an "advancement of expenses") paid by the Corporation; provided, however, that an advancement of expenses incurred by an indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is to be rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of an undertaking containing such terms and conditions, including the requirement of security, as the Board of Directors deems appropriate (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Article or otherwise; and provided, further, that an advancement of expenses shall not be made if the Corporation's Board of Directors makes a good faith determination that such payment would violate any applicable law. The Corporation shall not be obligated to advance fees and expenses to a director, officer, employee or agent in connection with a proceeding instituted by the Corporation against such person. (b) Notwithstanding anything in Section 5.02(a) to the contrary, the right of employees or agents to advancement of expenses shall be at the discretion of the Board of Directors and on such terms and conditions, including the requirement of security, as the Board of Directors deems appropriate. The Corporation may, by action of its Board of Directors, authorize one or more executive officers to grant rights for the advancement of expenses to employees and agents of the Corporation on such terms and conditions as such officers deem appropriate.

Section 5.03. RIGHT OF INDEMNITEE TO BRING SUIT. If a claim under Section 5.01 is not paid in full by the Corporation within sixty (60) calendar days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses under Section 5.02 in which case the applicable period shall be thirty (30) calendar days, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If the indemnitee is successful in whole or in part in any such suit, the indemnitee shall also be entitled to be paid the expense of prosecuting or defending such suit.

Section 5.04. NONEXCLUSIVITY OF RIGHTS. (a) The rights to indemnification and to the advancement of expenses conferred in this Article shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, provisions of the Certificate of Incorporation, Bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. Notwithstanding any amendment to or repeal of this Article, any indemnitee shall be entitled to indemnification in accordance with the provisions hereof with respect to any acts or omissions of such indemnitee occurring prior to such amendment or repeal. (b) The Corporation may maintain insurance, at its expense, to protect itself and any past or present director, officer, employee, or agent of the Corporation or another corporation, partnership, joint venture, trust, or other enterprise against any expense, liability, or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability, or loss under the Delaware General Corporation Law. The Corporation may enter into contracts with any indemnitee in furtherance of the provisions of this Article and may create a trust fund, grant a security interest or use other means (including, without limitation, a letter of credit) to ensure the payment of such amounts as may be necessary to effect indemnification as provided in this Article. (c) The Corporation may without reference to Sections 5.01 through 5.04 (a) and (b) hereof, pay the expenses, including attorneys fees, incurred by any director, officer, employee or agent of the Corporation who is subpoenaed, interviewed or deposed as a witness or otherwise incurs expenses in connection with any civil, arbitration, criminal, or administrative proceeding or governmental or internal investigation to which the Corporation is a party, target, or potentially a party or target, or of any such individual who appears as a witness at any trial, proceeding or hearing to which the Corporation is a party, if the Corporation determines that such payments will benefit the Corporation and if, at the time such expenses are incurred by such individual and paid by the Corporation, such individual is not a party, and is not threatened to be made a party, to such proceeding or investigation.

ARTICLE VI

STOCK

Section 6.01. CERTIFICATES. Except as otherwise provided by law, each stockholder shall be entitled to a certificate or certificates which shall represent and certify the number and class (and series, if appropriate) of shares of stock owned by him in the Corporation. Each certificate shall be signed in the name of the Corporation by the Chairman of the Board, or the President, or a Vice President, together with the Secretary, or an Assistant Secretary, or the Treasurer or Assistant Treasurer. Any or all of the signatures on any certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were an officer, transfer agent or registrar at the date of issue.

Section 6.02. TRANSFER OF SHARES. Shares of stock shall be transferable on the books of the Corporation only by the holder thereof, in person or by his duly authorized attorney, upon the surrender of the certificate representing the shares to be transferred, properly endorsed, to the Corporation's registrar if the Corporation has a registrar. The Board of Directors shall have power and authority to make such other rules and regulations concerning the issue, transfer and registration of certificates of the Corporation's stock as it may deem expedient.

Section 6.03. TRANSFER AGENTS AND REGISTRARS. The Corporation may have one or more transfer agents and one or more registrars of its stock whose respective duties the Board of Directors or the Secretary may, from time to time, define. No certificate of stock shall be valid until countersigned by a transfer agent, if the Corporation has a transfer agent, or until registered by a registrar, if the Corporation has a registrar. The duties of transfer agent and registrar may be combined.

Section 6.04. STOCK LEDGERS. Original or duplicate stock ledgers, containing the names and addresses of the stockholders of the Corporation and the number of shares of each class of stock held by them, shall be kept at the principal executive office of the Corporation or at the office of its transfer agent or registrar.

Section 6.05. RECORD DATES. The Board of Directors shall fix, in advance, a date as the record date for the purpose of determining stockholders entitled to notice of, or to vote at, any meeting of stockholders or any adjournment thereof, or stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or

entitled to exercise any rights in respect of any change, conversion or exchange of stock, or in order to make a determination of stockholders for any other proper purpose. Such date in any case shall be not more than sixty (60) days, and in case of a meeting of stockholders, not less than ten (10) days, prior to the date on which the particular action, requiring such determination of stockholders is to be taken. Only those stockholders of record on the date so fixed shall be entitled to any of the foregoing rights, notwithstanding the transfer of any such stock on the books of the Corporation after any such record date fixed by the Board of Directors.

Section 6.06. NEW CERTIFICATES. In case any certificate of stock is lost, stolen, mutilated or destroyed, the Board of Directors may authorize the issuance of a new certificate in place thereof upon such terms and conditions as it may deem advisable; or the Board of Directors may delegate such power to any officer or officers or agents of the Corporation; but the Board of Directors or such officer or officers or agents, in their discretion, may refuse to issue such a new certificate unless the Corporation is ordered to do so by a court of competent jurisdiction.

ARTICLE VII

RESTRICTIONS ON SECURITIES REPURCHASES

Section 7.01. RESTRICTIONS ON SECURITIES REPURCHASES.

1. Vote required for certain acquisition of securities. Except as set forth in Subsection 2 of this Section 7.01, in addition to any affirmative vote of stockholders required by any provision of law, the Certificate of Incorporation or Bylaws of this Corporation, or any policy adopted by the Board of Directors, neither the Corporation nor any Subsidiary shall knowingly effect any direct or indirect purchase or other acquisition of any equity security of a class of securities which is registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), issued by the Corporation at a price which is in excess of the highest Market Price of such equity security on the largest principal national securities exchange in the United States on which such security is listed for trading on the date that the understanding to effect such transaction is entered into by the Corporation (whether or not such transaction is concluded or a written agreement relating to such transaction is executed on such date, and such date to be conclusively established by determination of the Board of Directors), from any Interested Person, without the affirmative vote of the holders of the Voting Shares representing at least a majority of the aggregate voting power of all outstanding voting shares, excluding Voting Shares beneficially owned by such Interested Person, voting together as a single class. Such affirmative vote shall be required notwithstanding the fact that no vote may be required, or that a lesser percentage may be specified, by law or any agreement with any national securities exchange, or otherwise.

2. When A Vote Is Not Required. The provisions of Subsection 1 of this Section 7.01 shall not be applicable with respect to:

a. any purchase, acquisition, redemption or exchange of such equity securities, the purchase, acquisition, redemption or exchange of which is provided for in the Corporation's Certificate of Incorporation;

b. any purchase or other acquisition of equity securities made as part of a tender or exchange offer by the Corporation to purchase securities of the same class made on the same terms to all holders of such securities and complying with the applicable requirements of the Exchange Act of 1934, as amended and the rules and regulations thereunder (or any successor provisions to such Act, rules or regulations);

c. any purchase or acquisition of equity securities made pursuant to an open market purchase program which has been approved by the Board of Directors.

3. Certain definitions. For the purpose of this Section:

a. "Affiliate" and "Associate" shall have their respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Exchange Act, as in effect on January 1, 1991.

b. "Beneficial Owner" and "Beneficial Ownership" shall have the meanings ascribed to such terms in Rule 13d-3 and Rule 13d-5 of the General Rules and Regulations under the Exchange Act, as in effect on January 1, 1991.

c. "Interested person" shall mean any person (other than the Corporation or any subsidiary) that is the direct or indirect Beneficial Owner of five percent (5%) or more of the aggregate voting power of the Voting Shares, and any Affiliate or Associate of any such person. For the purpose of determining whether a person is an Interested Person, the outstanding Voting Shares include unissued shares of voting stock of the Corporation of which the Interested Person is the Beneficial Owner, but shall not include any other shares of voting stock of the Corporation which may be issuable pursuant to any agreement, arrangement or understanding, or upon exercise or conversion of rights, warrants or options, or otherwise to any person who is not the Interested Person.

d. "Market Price" of shares of the class of equity security of the Corporation on any day shall mean the highest sale price (regular way) of shares of such class of such equity security on such day, or, if that day is not a trading day, on the trading day immediately preceding such day, on the largest principal national securities exchange on which such class of stock is then listed or admitted to trading, or if not listed or admitted to trading on any national securities exchange, then the highest reported sale price for such shares in the over-the-counter market as reported on the NASDAQ National Market System, or if such sale price shall not be reported thereon, the highest bid price so reported, or, of such price shall not be reported thereon, as the same shall be reported by the National Quotation Bureau, Incorporated, or if the price is not determinable as set forth above, as determined in good faith by the Board of Directors.

e. "Person" shall mean any individual, partnership, firm, corporation, association, trust, unincorporated organization or other entity, as well as any syndicate or group deemed to be a person pursuant to Section 13(d)(3) of the Exchange Act, as in effect on January 1, 1991.

f. "Subsidiary" shall mean any company or entity of which the Corporation owns, directly or indirectly, (i) a majority of the outstanding shares of equity securities, or (ii) shares having a majority of the voting power represented by all of the outstanding Voting Stock of such company entitled to vote generally in the election of directors. For the purpose of determining whether a company is a Subsidiary, the outstanding voting stock and shares of equity securities thereof shall include unissued shares of which The Corporation is the beneficial owner but, except for the purpose of determining whether a company is a Subsidiary for the purpose of Subsection 3(c) hereof shall not include any shares which may be issuable pursuant to any agreement, arrangement, or understanding, or upon the exercise of conversion rights, warrants or options, or otherwise to any Person who is not the Corporation.

g. "Voting shares" shall mean the outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors.

ARTICLE VIII

SUNDRY PROVISIONS

Section 8.01. FISCAL YEAR. The fiscal year of the Corporation shall end on the 31st day of December of each year.

Section 8.02. SEAL. The seal of the Corporation shall bear the name of the Corporation and the words "Delaware" and "Incorporated March 12, 1985."

Section 8.03. VOTING OF STOCK IN OTHER CORPORATIONS. Any shares of stock in other corporations or associations, which may from time to time be held by the Corporation, may be represented and voted at any of the stockholders' meetings thereof by the Chief Executive Officer or his designee. The Board of Directors, however, may by resolution appoint some other person or persons to vote such shares, in which case such person or persons shall be entitled to vote such shares upon the production of a certified copy of such resolution.

Section 8.04. AMENDMENTS. These Bylaws may be adopted, repealed, rescinded, altered or amended only as provided in Articles Fifth and Sixth of the Certificate.

January 27, 1997

NORTHROP GRUMMAN CORPORATION AMENDMENT NO. 1

Dated as of November 1, 1996

to

SECOND AMENDED AND RESTATED CREDIT AGREEMENT Dated as

of April 15, 1994

Amended and Restated as of March 1, 1996

CHASE SECURITIES INC.,
as Arranger

THE CHASE MANHATTAN BANK,
as Administrative Agent

BANK OF AMERICA NATIONAL TRUST AND SAVINGS ASSOCIATION,
as Syndication Agent

MORGAN GUARANTY TRUST COMPANY OF NEW YORK,
as Documentation Agent

AMENDMENT NO. 1

AMENDMENT NO. 1 dated as of November 1, 1996, between NORTHROP GRUMMAN CORPORATION, a corporation duly organized and validly existing under the laws of the State of Delaware (the "Company"); each of the lenders that is a signatory hereto (individually, a "Bank" and, collectively, the "Banks"); THE CHASE MANHATTAN BANK, as Swingline Bank; and THE CHASE MANHATTAN BANK, as agent for the Banks (in such capacity, together with its successors in such capacity, the "Administrative Agent").

The Company, the Banks, and certain other banks listed on Schedule II hereto (hereinafter the "Non-Continuing Banks") and the Administrative Agent are parties to a Second Amended and Restated Credit Agreement dated as of April 15, 1994 amended and restated as of March 1, 1996 (as heretofore modified and supplemented and in effect on the date hereof, the "Credit Agreement"), providing, subject to the terms and conditions thereof, for loans to be made by said Banks to the Company in an aggregate principal amount not exceeding \$3,800,000,000. The Company, the Banks and the Administrative Agent wish to amend the Credit Agreement in certain respects, and accordingly, the parties hereto hereby agree as follows:

Section 1. Definitions. Except as otherwise defined in this Amendment No. 1, terms defined in the Credit Agreement are used herein as defined therein.

Section 2. Amendments. Subject to the satisfaction of the conditions precedent specified in Section 4 below, but effective as of the date hereof, the Credit Agreement shall be amended as follows:

2.01. References in the Credit Agreement to "this Agreement" (and indirect references such as "hereunder", "hereby", "herein" and "hereof") shall be deemed to be references to the Credit Agreement as amended hereby.

2.02. Section 1.01 of the Credit Agreement is amended by amending and (to the extent not already included in said Section 1.01) adding the following definitions and inserting the same in the appropriate alphabetical locations: "'Amendment No. 1' shall mean the Amendment No. 1 dated as of November 1, 1996 to this Agreement among the Company, the Banks party thereto and the Administrative Agent.

"'Amendment No. 1 Effective Date' shall mean the date on which Amendment No. 1 became effective.

"'Applicable Facility Fee Rate' and 'Applicable Margin' shall mean, during any period when the Rating is in one of the Rating Groups specified below, the percentage set forth below opposite the reference to such fee or to the relevant Class and Type of Syndicated Loan:

REVOLVING CREDIT LOANS

	Rating	Rating	Rating	Rating
Group	Group	Group	Group	Group

Fee or Loan	I	II	III	IV
Applicable Facility Fee Rate	.10%	.125%	.15%	.25%
Applicable Margin for Eurodollar Loans	.20%	.25%	.30%	.50%
Applicable Margin for Base Rate Loans	0%	0%	0%	0%

TERM LOANS

Fee or Loan	I	Rating Group II	Rating Group III	Rating Group IV	Rating Group
Applicable Margin for Eurodollar Loans	.30%	.375%	.45%	.75%	
Applicable Margin for Base Rate Loans	0%	0%	0%	0%	

Any change in the Applicable Facility Fee Rate or in the Applicable Margin by reason of a change in the Moody's Rating or the S&P Rating shall become effective on the date of announcement or publication by the respective Rating Agency of a change in such Rating or, in the absence of such announcement or publication, on the effective date of such changed Rating."

"'Facility' shall mean the Revolving Credit Facility."

"'Majority Banks' shall mean Banks holding more than 50% of the aggregate amount of (a) the Revolving Credit Commitments or, if the Revolving Credit Commitments shall have terminated, the sum of (i) the aggregate unpaid principal amount of the Revolving Loans plus (ii) the aggregate unpaid principal amount of the Competitive Bid Loans plus (b) the aggregate principal amount of the Series II Term Loans." "Mandatory Prepayment Period" shall mean any period during which one or more of the following conditions is satisfied: (a) the Leverage Ratio is greater than 50%; or (b) an Investment Grade Rating Period does not exist.

"'Rating' shall mean a Moody's Rating or an S&P Rating."

"'Rating Agency' shall mean Moody's or S&P."

"'Rating Group' shall mean any of Rating Group I, Rating Group II, Rating Group III and Rating Group IV."

"'Rating Group I' shall mean (a) no Event of Default has occurred and is continuing and (b) the Moody's Rating is at or above Baa1 (or a Substitute Rating is at the corresponding rating level or higher) or the S&P Rating is at or above BBB+ (or a Substitute Rating is at the corresponding rating level or higher); "Rating Group II" shall mean (a) no Event of Default has occurred and is continuing, (b) the Moody's Rating is at or above Baa2 (or a Substitute Rating is at the corresponding rating level or higher) or the S&P Rating is at or above BBB (or a Substitute Rating is at the corresponding rating level or higher) and (c) Rating Group I is not in effect; "Rating Group III" shall mean (a) no Event of Default has occurred and is continuing, (b) the Moody's Rating is at or above Baa3 (or a Substitute Rating is at the corresponding rating level or higher) or the S&P Rating is at or above BBB- (or a Substitute Rating is at the corresponding rating level or higher) and (c) neither Rating Group I nor Rating Group II is in effect; and "Rating Group IV" shall mean none of Rating Group I, Rating Group II or Rating Group III is in effect; provided that, (A) if the Moody's Rating and the S&P Rating (or, in either case, a Substitute Rating) shall be at different Rating levels and one of such Ratings is no more than one Rating level lower than the other of such Ratings, then the applicable Rating Group shall be based upon the higher of such Ratings and (B) if the Moody's Rating and the S&P

Rating (or, in either case, a Substitute Rating) shall be at different Rating levels and one of such Ratings is two or more Rating levels lower than the other of such Ratings, then the applicable Rating Group shall be based upon a Rating that is one level lower than the higher of such Ratings."

"'Revolving Credit Banks' shall mean (a) on the Amendment No. 1 Effective Date, the Banks having Revolving Credit Commitments as set forth in Schedule I hereto and (b) thereafter, the Banks from time to time holding Revolving Loans and/or Revolving Credit Commitments after giving effect to any assignments thereof permitted by Section 11.06 hereof."

"'Series II Principal Payment Date' shall mean each Quarterly Date in each year, commencing with the second such Quarterly Date following the Amendment No. 1 Effective Date through and including the Series II Term Loan Final Maturity Date."

"'Series II Term Loan Banks' shall mean (a) on the Amendment No. 1 Effective Date, the Banks having Series II Term Loans as set forth in Schedule I hereto and (b) thereafter, the Banks from time to time holding Series II Term Loans after giving effect to any assignments thereof permitted by Section 11.06 hereof."

"'Term Loan Banks' shall mean the Series II Term Loan Banks."

"'Term Loans' shall mean the Series II Term Loans."

2.03. Clause (i) of the fourth sentence of the definition of "Interest Period" is amended to read in its entirety as follows:

"(i) no Interest Period for any Revolving Loan may end after the Revolving Commitment Termination Date;".

2.04. The definitions of "Equity Issuance", "Excess Cash Flow", "Principal Office", "Rating Level 1", "Rating Level 2", "Series I Term Loans", "Series I Term Loan Banks", "Series I Term Loan Commitment", "Series I Term Loan Facility", "Series I Term Loan Final Maturity Date", "Series II Term Loan Commitment", "Series II Term Loan Facility" and "Term Loan Commitments" in Section 1.01 of the Credit Agreement are deleted in their entirety.

2.05. The second sentence of Section 1.03 is amended to delete the following: "a Series I Term Loan,".

2.06. Section 2.01 is amended to read in its entirety as follows:

"2.01 Syndicated Loans. Subject to and upon the terms and conditions herein set forth, each Bank severally agrees (i) to make Revolving Loans (together with the Series II Term Loans, the "Syndicated Loans" and each a "Syndicated Loan") to the Company in Dollars up to such Bank's Commitment under the Revolving Credit Facility and (ii) to effect a prepayment and reallocation of, and thereafter to maintain, its Series II Term Loans, all as set forth below:

(a) [Intentionally omitted].

(b) Series II Term Loans. Subject to the terms and conditions of this Agreement and Amendment No. 1, Series II Term Loans shall be prepaid and reallocated pursuant to Section 4.03(a) of Amendment No. 1 and thereafter may, at the option of the Company, be maintained as, and/or Converted into, Base Rate Loans or Eurodollar Loans.

(c) Revolving Loans. Syndicated Loans under the Revolving Credit Facility shall be available at any time and from time to time from and after the Amendment Effective Date to and including the Revolving Commitment Termination Date. Subject to the terms and conditions of this Agreement, during such period, Revolving Loans may be borrowed, repaid and reborrowed and may, at the option of the Company, be borrowed and maintained as, and/or Converted into, Base Rate Loans or Eurodollar Loans. Notwithstanding the foregoing, no Revolving Loan shall be made if the sum of (i) such Revolving Loan (together with all other Revolving Loans and Competitive Bid Loans to be made on the same day as such Revolving Loan) plus (ii) the aggregate principal amount of all outstanding Competitive Bid Loans plus (iii) the aggregate principal amount of all outstanding Revolving Loans plus (iv) the aggregate principal amount of all outstanding Swingline Loans exceeds the aggregate amount of the Revolving Credit Commitments at such time."

2.07. The second sentence of Section 2.02(a) of the Credit Agreement is amended to read in its entirety as follows:

"Not later than 1:00 p.m. New York time on the date specified for each Syndicated Loan borrowing hereunder, each Bank shall make available the amount of the Syndicated Loan to be made by it on such date to the Administrative Agent, at an account in New York designated by the Administrative Agent, in immediately available funds, for account of the Company."

2.08. Subsection (f) of Section 2.03 of the Credit Agreement is amended to read in its entirety as follows:

"(f) Any Bank whose offer to make any Competitive Bid Loan has been accepted shall, not later than 1:00 p.m. New York time on the date specified for the making of such Loan, make the amount of such Loan available to the Administrative Agent at an account in New York designated by the Administrative Agent in immediately available funds. The amount so received by the Administrative Agent shall, subject to the terms and conditions of this Agreement, be made available to the Company on such date by depositing the same, in immediately available funds, in an account designated by the Company."

2.09. Subsection (b) of Section 2.04 is amended to read in its entirety as follows:

"(b) Termination of Commitments. The Revolving Credit Commitments and the Swingline Commitment shall terminate on the Revolving Commitment Termination Date."

2.10. Subsection (a) of Section 2.08 is amended to read in its entirety as follows:

(a) The Syndicated Loans made by each Bank shall be evidenced (i) if Series II Term Loans, by a single promissory note of the Company in substantially the form of Exhibit A-2 hereto, dated the Restatement Date, payable to such Bank in a principal amount equal to its Series II Term Loan and otherwise duly completed (each a "Series II Term Note", collectively the "Series II Term Notes" or the "Term Notes") and (ii) if Revolving Loans, by a single promissory note of the Company substantially in the form of Exhibit A-3 hereto, dated the Restatement Date, payable to such Bank in a principal amount equal to its Revolving Credit Commitment and otherwise duly completed (each a "Revolving Note" and collectively the "Revolving Notes"). The date, amount, Type and interest rate of each Series II Term Loan and each Revolving Loan made by each Bank, and all payments made on account of the principal thereof, shall be recorded by such Bank on its books and, prior to any transfer of the Note evidencing the same, endorsed by such Bank on the schedule attached to such Note or any continuation thereof; provided that the failure by such Bank to make such recordation or endorsement shall not relieve the Company of any of its obligations hereunder or under such Note.

2.11. Section 2.09 is amended to delete the word "first" and the following phrase: "and second to the aggregate outstanding principal amount of the Series I Term Loans".

2.12. Subsections (a), (b) and (e) of Section 2.10 of the Credit Agreement are each amended to read in their entirety as follows: "[Intentionally omitted]."

2.13. Subsection (c) of Section 2.10 of the Credit Agreement is amended to read in its entirety as follows:

"(c) Sale of Assets. Without limiting the obligation of the Company to obtain the consent of the Majority Banks pursuant to Section 8.09 hereof to any Disposition not otherwise permitted under Section 8.09 hereof, in the event that the Net Available Proceeds of any individual Disposition made after the Amendment Effective Date while a Mandatory Prepayment Period is in effect (or if, after giving effect to any such Disposition, a Mandatory Prepayment Period would exist) (herein, the "Current Disposition") exceeds \$5,000,000 and, together with the Net Available Proceeds that individually exceed \$5,000,000 of each prior Disposition as to which a prepayment has not yet been made under this Section 2.10(c), shall in the aggregate exceed \$50,000,000 then, (i) at the time the Company gives notice to the Administrative Agent pursuant to Section 4.07 of the prepayment to be made pursuant to this Section 2.10(c), the Company will deliver to the Administrative Agent a statement, certified by a senior financial officer of the Company, in form and detail satisfactory to the

Administrative Agent, of the aggregate amount of the Net Available Proceeds of such Current Disposition and prior Dispositions and (ii) the Company shall prepay the Term Loans in an aggregate amount equal to 100% of the Net Available Proceeds received for such Current Disposition and such prior Dispositions (except that Net Available Proceeds consisting of Permitted Buyer Indebtedness need not be applied to such prepayment until the earlier of any payment or Disposition of such Permitted Buyer Indebtedness and then only to the extent of such payment or the Net Available Proceeds of such Disposition), such prepayment to be effected as provided in paragraph (f) of this Section 2.10.

2.14. Subsections (i) and (ii) of Section 2.10(f) shall be amended to read in their entirety as follows:

"(i) Prepayments of Term Loans described in paragraph (d) of this Section 2.10 shall be applied to the then remaining installments of the Series II Term Loans ratably.

(ii) Prepayments of Term Loans described in paragraph (c) of this Section 2.10 shall be applied (A) to the extent that any such prepayment, together with all such prepayments theretofore made in any fiscal year after the Amendment No. 1 Amendment Effective Date, does not exceed \$100,000,000, to the then remaining installments of the Series II Term Loans in direct order of their maturities and (B) thereafter to the then remaining installments of the Series II Term Loans ratably."

2.15. The second sentence of Section 2.11(b) of the Credit Agreement is amended to read in its entirety as follows:

"Not later than 3:00 p.m. New York time, on the date specified in each Swingline Borrowing Notice hereunder, the Swingline Bank shall, subject to the terms of this Agreement, make the amount of the Swingline Loan to be made by it on such date available to the Administrative Agent at an account in New York designated by the Administrative Agent in immediately available funds, for account of the Company."

2.16. Subsection (c) of Section 3.01 of the Credit Agreement is amended to read in its entirety as follows: "[Intentionally omitted]".

2.17. Subsection (d) of Section 3.01 of the Credit Agreement is amended to read in its entirety as follows:

"(d) The Company hereby promises to pay to the Administrative Agent for account of the Banks the aggregate principal amount of the Series II Term Loans outstanding on the Amendment No. 1 Effective Date in 21 equal consecutive quarterly installments payable on the Series II Principal Payment Dates."

2.18. The first sentence of Section 4.01 of the Credit Agreement is amended to read in its entirety as follows:

"Except to the extent otherwise provided herein, all payments of principal, interest and other amounts to be made by the Company under this Agreement and the Notes shall be made in Dollars, in immediately available funds, to the Administrative Agent at an account in New York designated by the Administrative Agent, not later than 1:00 p.m. New York time on the date on which such payment shall become due (each such payment made after such time on such due date to be deemed to have been made on the next succeeding Business Day)."

2.19. Subsection (b) of Section 4.02 is amended to read in its entirety as follows:

"(b) the making, Conversion and Continuation of Revolving Loans, and the Conversion and Continuation of Series II Term Loans, of a particular Type (other than Conversions provided for by Section 5.04 hereof) shall be made pro rata among the relevant Banks according to the amounts of their respective Revolving Credit Commitments (in the case of making of Loans) or their respective Revolving Credit and Series II Term Loans (in the case of Conversions and Continuations of Loans);

2.20. Subsection (c) of Section 8.01 of the Credit Agreement is amended to read in its entirety as follows:

"(c) with each of the financial statements required to be delivered under Section 8.01(a) or 8.01(b) hereof, a certificate of an authorized financial or accounting officer of the Company, in form and substance satisfactory to the Administrative Agent setting forth (i) the

Net Available Proceeds of each Disposition in excess of \$5,000,000 that has occurred in the fiscal period to which such financial statements relate and (ii) the aggregate amount of Net Available Proceeds for each other Disposition in excess of \$5,000,000 that has occurred in prior fiscal periods and for which no prepayment has been made pursuant to Section 2.10(c) hereof;".

2.21. Clause (i) of Section 8.09(d) of the Credit Agreement is amended to read in its entirety as follows: "[Intentionally omitted];".

2.22. Section 8.19 of the Credit Agreement is amended to read in its entirety as follows: "[Intentionally omitted]."

2.23. The first sentence of Section 10.09 of the Credit Agreement is amended to read in its entirety as follows:

"The Documentation Agent, the Syndication Agent and the Arranger identified on the cover page of this Agreement, or on the cover page of any amendment hereto, shall have no duties or responsibilities hereunder other than, in the case of the Documentation Agent and the Syndication Agent, as Banks hereunder."

2.24. Schedule I of the Credit Agreement is amended to read in its entirety as Schedule I hereto.

2.25. Exhibit A-1 is amended to read in its entirety as follows:
"[Intentionally omitted]."

Section 3. Representations and Warranties. The Company represents and warrants to the Banks that (i) the representations and warranties set forth in Section 7 of the Credit Agreement are true and complete on the date hereof as if made on and as of the date hereof (or, if any such representation or warranty is expressly stated to have been made as of a specific date, as of such specific date) and as if each reference in said Section 7 to "this Agreement" included reference to this Amendment No. 1, (ii) after giving effect to the amendments in Section 2 of this Amendment No. 1, no Default shall have occurred and be continuing, (iii) the making and performance by the Company of this Amendment No. 1, and the Revolving Notes and Series II Term Notes delivered pursuant to Section 4.04 hereof, have been duly authorized by all necessary corporate action and (iv) this Amendment No. 1, and the Credit Agreement as amended by Amendment No. 1, constitute, and each of such Notes (when executed and delivered for value) will constitute, legal, valid and binding obligations of the Company, enforceable in accordance with its terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or other similar laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 4. Conditions Precedent. As provided in Section 2 above, the amendments to the Credit Agreement set forth in said Section 2 shall become effective, as of the date hereof, upon the satisfaction of the following conditions precedent:

4.01. Execution by All Parties. This Amendment No. 1 shall have been executed and delivered by each of the parties hereto.

4.02. Payment of Interest and Fees. Each Bank and Non-Continuing Bank shall have been paid in full all interest and fees accrued under the Credit Agreement to the Amendment No. 1 Effective Date (as defined in the Credit Agreement as hereby amended).

4.03. Reallocation. The Series II Term Loans shall have been prepaid under Section 2.09 of the Credit Agreement on November 1, 1996, but prior to the effectiveness of the amendments to the Credit Agreement set forth in Section 2 above, in an aggregate principal amount of \$257,500,000; and immediately thereafter the Banks and the Non-Continuing Banks shall be deemed to have made and taken such assignments, as the case may be, of the remaining Series II Term Loans such that, after giving effect thereto, each Bank shall hold a Series II Term Loan in an aggregate principal amount set forth in opposite the name of such Bank in Schedule I hereto. In order to fund such assignments and thereby effect the reallocations of the Series II Term Loans, each Bank listed in Part A of Schedule III will pay on the Amendment No. 1 Effective Date to the Administrative Agent the amount set forth opposite such Bank's name in Part A of Schedule III, out of which aggregate amounts the Administrative Agent will pay on the Amendment No. 1 Effective Date to each Bank and Non-Continuing Bank listed in Part B of Schedule III the amount set

forth opposite its name in Part B of Schedule III.

4.04. Notes. The Administrative Agent shall have received Revolving Notes and Series II Term Notes, duly completed and executed by the Company in exchange for the Revolving Notes and Series II Term Notes of the Company previously delivered pursuant to the Credit Agreement.

4.05. Documents. The Administrative Agent shall have received such other documents as the Administrative Agent or any Bank or special New York counsel to Chase may reasonably request.

Section 5. Miscellaneous. Except as herein provided, the Credit Agreement shall remain unchanged and in full force and effect. This Amendment No. 1 may be executed in any number of counterparts, all of which taken together shall constitute one and the same amendatory instrument and any of the parties hereto may execute this Amendment No. 1 by signing any such counterpart. This Amendment No. 1 shall be governed by, and construed in accordance with, the law of the State of New York.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 1 to be duly executed and delivered as of the day and year first above written.

NORTHROP GRUMMAN CORPORATION

By

Title:

THE BANKS

THE CHASE MANHATTAN BANK

By

Title:

BANK OF AMERICA NATIONAL TRUST
AND SAVINGS ASSOCIATION

By

Title:

MORGAN GUARANTY TRUST COMPANY
OF NEW YORK

By

Title:

This amendment to the Northrop Supplemental Plan 2, as described below, is intended to include compensation deferred under the Northrop Grumman Corporation Executive Deferred Compensation Plan within the definition of compensation used to calculate Northrop Supplemental Retirement Income Program For Senior Executives benefits.

1. Section A.04 is modified to read as follows:

A.04 Amount of Retirement Benefit. A Participant entitled to a benefit under Section A.03 will receive a benefit equal in value to the excess of (a) over (b) as follows:

(a) is the greater of

- (1) the amount of the Participant's retirement income under the Retirement Plan on a straight life annuity basis, computed
 - (A) without regard to the limitations on benefits and the cap on counted compensation imposed by Code sections 415 and 401(a)(17), and
 - (B) by modifying Rate of Annual Salary under the Retirement Plan to include compensation deferred under the Northrop Grumman Corporation Executive Deferred Compensation Plan, or
- (2) the amount of a straight life annuity with annual payments equal to the Participant's Final Average Salary (as defined under the Retirement Plan except that Rate of Annual Salary is modified to include compensation deferred under the Northrop Grumman Corporation Executive Deferred Compensation Plan) in effect on the date of his or her Termination of Employment multiplied by the appropriate percentage shown in the following schedule:

Age at Termination Date*	Percentage of Final Average Salary at Termination Date**
55	30%
56	34%
57	38%
58	42%
59	46%
60	50%
61	52%
62	54%
63	56%
64	58%
65 and over	60%

(b) is the amount of the Participant's retirement income under the Retirement Plan on a straight life annuity basis, computed as of his or her Termination of Employment, taking into account the limitations on benefits and the cap on counted compensation imposed by Code sections 415 and 401(a)(17).

* Calculated to years and completed months on the Termination Date.

** The applicable percentage shall be straight line interpolation depending on the Participant's age on his termination date. The percentage thus determined shall be rounded to the nearest hundredth. For example, if a Participant terminates when he is 55 years and 8 months old, the applicable percentage is $30.00\% + 2.67\% = 32.67\%$.

NORTHROP GRUMMAN CORPORATION
SPECIAL AGREEMENT

THIS AGREEMENT is made and entered into as of this ____ day of ____, 1996, by and between Northrop Grumman Corporation, a Delaware corporation (hereinafter referred to as the "Company") and _____ (hereinafter referred to as the "Executive").

RECITALS

The Board of Directors of the Company has approved the Company entering into severance agreements with certain key executives of the Company.

The Executive is a key executive of the Company.

Should the possibility of a Change in Control of the Company arise, the Board believes it imperative that the Company and the Board should be able to rely upon the Executive to continue in his position, and that the Company should be able to receive and rely upon the Executive's advice, if requested, as to the best interests of the Company and its shareholders without concern that the Executive might be distracted by the personal uncertainties and risks created by the possibility of a Change in Control.

Should the possibility of a Change in Control arise, in addition to his regular duties, the Executive may be called upon to assist in the assessment of such possible Change in Control, advise management and the Board as to whether such Change in Control would be in the best interests of the Company and its shareholders, and to take such other actions as the Board.

The Executive and the Company desire that, with respect to those Executives who have previously entered an Amended and Restated Special Severance Pay Agreement, might determine to be appropriate, the terms of this Agreement shall completely replace and supersede the provisions set forth in the Amended and Restated Special Severance Pay Agreement, entered into by and between the Company and the Executive prior to the date hereof (setting forth terms and provisions with respect to the Executive's entitlement to payments and benefits following a Change in Control of the Company);

NOW THEREFORE, to assure the Company that it will have the continued dedication of the Executive and the availability of his advice and counsel notwithstanding the possibility, threat, or occurrence of a Change in Control of the Company, and to induce the Executive to remain in the employ of the Company in the face of these circumstances and for other good and valuable consideration, the Company and the Executive agree as follows:

Article 1. Certain Definitions

Whenever used in this Agreement, the following terms shall have the meanings set forth below and, when the meaning is intended, the initial letter of the word is capitalized:

- (a) "Agreement" means this Special Agreement.
- (b) "Base Salary" means the salary of record paid to the Executive as annual salary, excluding amounts received under incentive or other bonus plans, whether or not deferred.
- (c) "Beneficial Owner" shall have the meaning ascribed to such term in Rule 13d-3 of the General Rules and Regulations under the Exchange Act.
- (d) "Beneficiary" means the persons or entities designated or deemed designated by the Executive pursuant to Section 9.2 herein.
- (e) "Board" means the Board of Directors of the Company.
- (f) "Cause" shall mean the occurrence of either or both of the following:
 - (i) The Executive's conviction for committing an act of fraud, embezzlement, theft, or other act constituting a felony; or

- (ii) The willful engaging by the Executive in gross misconduct materially and demonstrably injurious to the Company. However, no act or failure to act, on the Executive's part shall be considered "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that his action or omission was in the best interest of the Company.
- (g) "Change in Control" of the Company shall be deemed to have occurred as of the first day that any one or more of the following conditions shall have been satisfied:
 - (i) Any Person (other than those Persons in control of the Company as of the Effective Date, or other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company), becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing fifteen percent (15%) or more of the combined voting power of the Company's then outstanding securities, and for purposes of this subsection (i) "Person" or "group" shall not include underwriters acquiring newly-issued voting securities (or securities convertible into voting securities) directly from the Company with a view towards distribution; or
 - (ii) During any period of two (2) consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board (and any new Director, whose election by the Company's stockholders was approved by a vote of at least two-thirds (2/3) of the Directors then still in office who either were Directors at the beginning of the period or whose election or nomination for election was so approved), cease for any reason to constitute a majority thereof; or
 - (iii) The stockholders of the Company approve: (A) a plan of complete liquidation of the Company; or (B) an agreement for the sale or disposition of all or substantially all the Company's assets in one or a series of related transactions; or (C) a merger, consolidation, or reorganization of the Company with or involving any other corporation, other than a merger, consolidation, or reorganization that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity), more than seventy-five percent (75%) of the combined voting power of the voting securities of the Company (or such surviving entity) outstanding immediately after such merger, consolidation, or reorganization.
- (h) "Code" means the United States Internal Revenue Code of 1986, as amended.
- (i) "Committee" means the Compensation and Management Development Committee of the Board, or any other committee appointed by the Board to perform the functions of the Compensation and Management Development Committee.
- (j) "Company" means Northrop Grumman Corporation, a Delaware corporation (including any and all subsidiaries), or any successor thereto as provided in Article 8 herein.
- (k) "Disability" means permanent and total disability, within the meaning of Code Section 22(e)(3), as determined by the Committee in the exercise of good faith and reasonable judgment, upon receipt of and in reliance on sufficient competent medical advice from one or more individuals licensed and qualified to give professional medical advice.
- (l) "Effective Date" means the date this Agreement is approved by the Board or its delagatee, or such other date as the Board or its delagatee shall determine.

- (m) "Effective Date of Termination" means the date on which a Qualifying Termination occurs.
- (n) "Exchange Act" means the United States Securities Exchange Act of 1934, as amended.
- (o) "Executive" means the individual identified in the first sentence and on the signature page of this Agreement.
- (p) "Good Reason" means, without the Executive's express written consent, the occurrence after a Change in Control of the Company of any one or more of the following:
 - (i) The assignment of the Executive to duties materially inconsistent with the Executive's authorities, duties, responsibilities, and status (including titles and reporting requirements) as an officer of the Company, or a material reduction or alteration in the nature or status of the Executive's authorities, duties, or responsibilities, from their highest level during the ninety (90) days prior to the Change in Control, other than an insubstantial and inadvertent act that is remedied by the Company promptly after receipt of notice thereof given by the Executive;
 - (ii) A reduction by the Company of the Executive's Base Salary as in effect on the Effective Date, or as the same shall be increased from time to time;
 - (iii) A significant reduction by the Company of the Executive's aggregate incentive opportunities under the Company's short- and long-term incentive programs, as such opportunities exist on the Effective Date, or as such opportunities may be increased after the Effective Date. For this purpose, a significant reduction in the Executive's incentive opportunities shall be deemed to have occurred in the event his targeted annualized award opportunities and/or the degree of probability of attainment of such annualized award opportunities are diminished from the levels and probability of attainment that existed as of the Effective Date;
 - (iv) The failure of the Company to maintain the Executive's relative level of coverage and accruals under the Company's employee benefit and/or retirement plans, policies, practices, or arrangements in which the Executive participates as of the Effective Date, both in terms of the amount of benefits provided, amounts accrued and the relative level of the Executive's participation on a basis at least as beneficial as, or substantially equivalent to that on which the Executive participated in such plans immediately prior to the Effective Date. For this purpose, the Company may eliminate and/or modify existing programs and coverage levels; provided, however, that the Executive's level of coverage under all such programs must be at least as great as is such coverage provided to executives who have the same or lesser levels of reporting responsibilities within the Company's organization;
 - (v) The failure of the Company to obtain a satisfactory agreement from any successor to the Company to assume and agree to perform the Company's obligations under this Agreement, as contemplated in Article 8 herein; and
 - (vi) Any purported termination by the Company of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2.8 herein, and for purposes of this Agreement, no such purported termination shall be effective.

The Executive's right to terminate employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute a consent to, or a waiver of rights with respect to, any circumstance constituting Good Reason herein.

- (q) "Person" shall have the meaning ascribed to such term in Section 3(a)(9) of the Exchange Act and used in Sections 13(d) and 14(d) thereof, including a "group" as defined in Section 13(d).
- (r) "Qualifying Termination" means any of the events described in Section 2.3 herein.
- (s) "Severance Benefits" means the payments provided in Section 2.4 herein.

Article 2. Severance Benefits

2.1. Right to Severance Benefits. The Executive shall be entitled to receive from the Company Severance Benefits as described in Section 2.4 herein, if there has been a Change in Control of the Company and if, within the six (6) full calendar month period prior to the effective date of a Change in Control, or within twenty-four (24) calendar months thereafter, the Executive's employment with the Company shall end for any reason specified in Section 2.3 herein.

The Executive shall not be entitled to receive Severance Benefits if he is terminated for Cause, or if his employment with the Company ends due to death or voluntary termination of employment by the Executive without Good Reason.

2.2. Services During Certain Events. In the event a Person begins a tender or exchange offer, circulates a proxy to shareholders of the Company, or takes other steps seeking to effect a Change in Control, the Executive agrees that he will not voluntarily leave the employ of the Company and will render services until such Person has abandoned or terminated his or its efforts to effect a Change in Control, or until six (6) months after a Change in Control has occurred; provided, however, that the Company may terminate the Executive for Cause at any time, and the Executive may terminate his employment any time after the Change in Control for Good Reason.

2.3. Qualifying Termination. The occurrence of any one or more of the following events within twenty-four (24) calendar months after a Change in Control of the Company shall cause the Company or any successor to pay immediately the Severance Benefits to the Executive under this Agreement:

- (a) An involuntary termination of the Executive's employment by the Company for reasons other than Cause;
- (b) A voluntary termination of employment by the Executive for Good Reason;
- (c) A successor company fails or refuses to assume by written instrument the Company's obligations under this Agreement, as required by Article 8 herein; or
- (d) The Company or any successor company repudiates or breaches any of the provisions of this Agreement.

2.4. Description of Severance Benefits. In the event that the Executive becomes entitled to receive Severance Benefits, as provided in Sections 2.1 and 2.3 herein, the Company shall pay to the Executive and provide him with the following:

- (a) An amount equal to three (3) times the highest rate of the Executive's annual Base Salary in effect at any time up to and including the Effective Date of Termination.
- (b) An amount equal to three (3) times the greater of: (i) the Executive's average annual bonus earned over the three (3) full fiscal years prior to the Effective Date of Termination; or (ii) the Executive's target annual bonus established for the bonus plan year in which the Executive's Effective Date of Termination occurs.
- (c) An amount equal to the Executive's unpaid Base Salary and accrued vacation pay through the Effective Date of Termination, together with a portion of the Executive's target bonus under the bonus plan in which he participates for that year, calculated by multiplying the target bonus by a fraction the numerator of which is the number of days from January 1 through the Effective Date of Termination and the

denominator of which is 365.

- (d) A continuation of all benefits pursuant to any and all welfare benefit plans under which the Executive and/or the Executive's family is eligible to receive benefits and/or coverage as of the effective date of the Change in Control, including, but not limited to, group life insurance, hospitalization, disability, medical, dental, and thrift plans. Such benefits shall be provided to the Executive at the same premium cost, and at the same coverage level, as in effect as of the Executive's Effective Date of Termination.

The welfare benefits described in this Subsection 2.4(d) shall continue following the Effective Date of Termination for three (3) years; provided, however, that such benefits shall be discontinued prior to the end of such period in the event the Executive receives substantially similar benefits from a subsequent employer, as determined by the Committee.

- (e) A lump sum cash payment of the actuarial present value equivalent of the aggregate benefits accrued by the Executive as of the Effective Date of Termination under the terms of the Northrop Grumman Corporation ERISA Supplemental Plan 1 and ERISA Supplemental Plan 2, and if applicable, the Grumman Corporation Supplemental Retirement Plan and all similar excess benefit plans applicable to the Executive. For this purpose, such benefits shall be calculated under the assumption that the Executive's employment continued following the Effective Date of Termination for three (3) years (i.e., three (3) additional years of service credits shall be added to the Executive's record of service with the Company and three (3) additional years to his chronological age for status and actuarial purposes); provided, however, that for purposes of determining "final average pay" under the benefit calculation, the Executive's actual pay history as of the Effective Date of Termination shall be used, including for this purpose the higher of (x) the average of the last three bonuses received by the Executive or (y) the Executive's target bonus for the year in which the Effective Date of Termination occurs.
- (f) A lump sum cash payment of the entire balance of the Executive's compensation which has been deferred under any plan or program of the Company together with all interest that has been credited with respect to such deferred compensation balance.
- (g) For purposes of this Agreement, any acceleration of vesting, lapse of restrictions and/or payout occasioned by the Change in Control pursuant to the provisions of long-term incentive plans and/or individual award agreements under such long-term incentive plans shall be deemed a benefit within the meaning of this Section 2.4. Any amounts paid either directly to, or for the benefit of the Executive pursuant to Article 7 of this Agreement shall also be deemed a benefit within the meaning of this Section 2.4.

2.5. Termination for Total and Permanent Disability. Following a Change in Control of the Company, if the Executive's employment is terminated due to Disability, the Executive shall receive his Base Salary through the Effective Date of Termination, at which point in time the Executive's benefits shall be determined in accordance with the Company's retirement, insurance, and other applicable plans and programs then in effect, provided, however, that if immediately prior to the condition or event leading to, or the commencement of, the Disability of the Executive, the Executive would have been entitled to invoke any of the subsections of Section 2.3 of this Special Agreement if he had terminated at that time, then upon termination of his employment for Disability he shall be entitled to collect immediately his full Severance Benefits hereunder.

2.6. Termination on Executive's Death. Following a Change in Control of the Company, if the Executive's employment is terminated by reason of his death, the Executive's benefits shall be determined in accordance with the Company's retirement, survivor's benefits, insurance, and other applicable programs of the Company then in effect.

2.7. Termination for Cause or by the Executive Other Than for Good Reason. Following a Change in Control of the Company, if the Executive's employment is terminated either: (i) by the Company for Cause; or (ii) by the Executive other than for Good Reason, the Company shall pay the Executive his full Base Salary and accrued vacation through the Effective Date of

Termination, at the rate then in effect, plus all other amounts to which the Executive is entitled under any compensation plans of the Company, at the time such payments are due, and the Company shall have no further obligations to the Executive under this Agreement.

2.8. Notice of Termination. Any termination by the Company for Cause or by the Executive for Good Reason shall be communicated by Notice of Termination to the other party. For purposes of this Agreement, a "Notice of Termination" shall mean a written notice which shall indicate the specific termination provision in this Agreement relied upon, and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. If the Executive is terminating for Good Reason hereunder, the Notice of Termination shall be effective on the date specified in Section 9.7 of this Agreement.

Article 3. Form and Timing of Severance Benefits

3.1. Form and Timing of Severance Benefits. The Severance Benefits described in Sections 2.4(a), 2.4(b), 2.4(c), 2.4(e), and 2.4(f) herein shall be paid in cash to the Executive in a single lump sum as soon as practicable following the Effective Date of Termination, but in no event beyond thirty (30) days from such date.

3.2. Withholding of Taxes. The Company shall be entitled to withhold from any amounts payable under this Agreement all taxes as legally shall be required (including, without limitation, any United States Federal taxes, and any other state, city, or local taxes).

Article 4. Excise Tax Gross-Up

4.1. Equalization Payment. If upon or following a Change in Control, the tax imposed by Section 4999 of the Code or any similar or successor tax (the "Excise Tax") applies, solely because of the Change in Control, to any payments, benefits and/or amounts received by the Executive as Severance Benefits or otherwise, including, without limitation, any fees, costs and expenses paid under Article 7 of this Agreement and/or any amounts received or deemed received, within the meaning of any provision of the Code, by the Executive as a result of (and not by way of limitation) any automatic vesting, lapse of restrictions and/or accelerated target or performance achievement provisions, or otherwise, applicable to outstanding grants or awards to the Executive under any of the Company's incentive plans, including without limitation, the 1993 Long Term Incentive Stock Plan, the 1987 Long Term Incentive Plan and the 1981 Long-Term Incentive Plan, the Company shall pay to the Executive in cash an additional amount or amounts (the "Gross-Up Payment(s)") such that the net amount retained by the Executive after the deduction of any Excise Tax on such payments, benefits and/or amounts so received and any Federal, state and local income tax and Excise Tax upon the Gross-Up Payment(s) provided for by this Section 4.1 shall be equal to such payments, benefits and/or amounts so received had they not been subject to the Excise Tax. Such payment(s) shall be made by the Company to the Executive as soon as practicable following the receipt or deemed receipt of any such payments, benefits and/or amounts so received, and may be satisfied by the Company making a payment or payments on Executive's account in lieu of withholding for tax purposes but in all events shall be made within thirty (30) days of the receipt or deemed receipt by the Executive of any such payment, benefit and/or amount.

4.2. Tax Computation. For purposes of determining whether any payments, benefits and/or amounts, including amounts paid as Severance Benefits, will be subject to Excise Tax, and the amount of any such Excise Tax:

- (a) Any other payments, benefits and/or amounts received or to be received by the Executive in connection with or contingent upon a Change in Control of the Company or the Executive's termination of employment (whether pursuant to the terms of this Agreement or any other plan, arrangement or agreement with the Company, or with any Person whose actions result in a Change in Control of the Company or any Person affiliated with the Company or such Persons) shall be combined to determine whether the Executive has received any "parachute payment" within the meaning of Section 280G(b)(2) of the Code, and if so, the amount of any "excess parachute payments" within the meaning of Section 280G(b)(1) that shall be treated as subject to the Excise Tax, unless in the opinion of tax counsel selected by the Company's independent auditors and acceptable to the Executive, such other payments, benefits and/or amounts (in whole or in part) do not constitute

parachute payments, or unless such excess parachute payments represent reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code in excess of the base amount within the meaning of Section 280G(b)(3) of the Code, or are otherwise not subject to the Excise Tax;

- (b) The value of any noncash benefits or any deferred payment or benefit shall be determined by the Company's independent auditors in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

For purposes of determining the amount of the Gross-Up Payment, the Executive shall be deemed to pay Federal income taxes at the highest marginal rate of Federal income taxation in the calendar year in which the Gross-Up Payment is to be made and such highest marginal rate shall take into account the loss of itemized deductions by the Executive and shall also include the Executive's share of the hospital insurance portion of FICA and state and local income taxes at the highest marginal rate of taxation in the state and locality of the Executive's residence on the Effective Date of Termination, net of the maximum reduction in Federal income taxes that could be obtained from the deduction of such state and local taxes.

4.3. Subsequent Recalculation. In the event the Internal Revenue Service adjusts the computation of the Company under Section 4.2 herein, so that the Executive did not receive the greatest net benefit, the Company shall reimburse the Executive as provided herein for the full amount necessary to place the Executive in the same after-tax position as he would have been in had no Excise Tax applied.

Article 5. The Company's Payment Obligation

5.1. Payment Obligations Absolute. The Company's obligation to make the payments and the arrangements provided for herein shall be absolute and unconditional, and shall not be affected by any circumstances, including, without limitation, any offset, counterclaim, recoupment, defense, or other right which the Company may have against the Executive or anyone else. All amounts payable by the Company hereunder shall be paid without notice or demand. Each and every payment made hereunder by the Company shall be final, and the Company shall not seek to recover all or any part of such payment from the Executive or from whomsoever may be entitled thereto, for any reasons whatsoever, except as otherwise provided in Article 7 hereof.

The Executive shall not be obligated to seek other employment in mitigation of the amounts payable or arrangements made under any provision of this Agreement, and the obtaining of any such other employment shall in no event effect any reduction of the Company's obligations to make the payments and arrangements required to be made under this Agreement, except to the extent provided in Section 2.4(d) herein.

5.2. Contractual Rights to Benefits. This Agreement establishes and vests in the Executive a contractual right to the benefits to which he is entitled hereunder and the Company expressly waives any ability, if possible, to deny liability for any breach of its contractual commitment hereunder upon the grounds of lack of consideration, accord and satisfaction or any other defense. In any dispute arising after a Change in Control as to whether Executive is entitled to benefits under this Agreement, there shall be a presumption that Executive is entitled to such benefits and the burden of proving otherwise shall be on the Company. However, nothing herein contained shall require or be deemed to require, or prohibit or be deemed to prohibit, the Company to segregate, earmark, or otherwise set aside any funds or other assets, in trust or otherwise, to provide for any payments to be made or required hereunder.

5.3. All payments, benefits and amounts provided under this Agreement shall be in addition to and not in substitution for any pension rights under the Company's tax-qualified pension plan, and any disability, workers' compensation or other Company benefit plan distribution that Executive is entitled to at his Effective Date of Termination.

Article 6. Term of Agreement

This Agreement will commence on the Effective Date and shall continue in effect for three (3) full calendar years. However, at the end of such three-year (3) period and, if extended, at the end of each additional year thereafter, the term of this Agreement shall be extended automatically for one (1) additional year, unless the Committee delivers written notice six (6) months prior to the end of such term, or extended term, to the

Executive, that the Agreement will not be extended. In such case, the Agreement will terminate at the end of the term, or extended term, then in progress.

However, in the event a Change in Control occurs during the original or any extended term, this Agreement will remain in effect for the longer of: (i) twenty-four (24) months beyond the month in which such Change in Control occurred; or (ii) until all obligations of the Company hereunder have been fulfilled, and until all benefits required hereunder have been paid to the Executive.

Article 7. Legal Remedies

7.1. Payment of Legal Fees. To the extent permitted by law, the Company shall pay in advance all legal fees, costs of litigation, prejudgment interest, and other expenses incurred in good faith by the Executive as a result of the Company's refusal to provide the Severance Benefits to which the Executive becomes entitled under this Agreement, or as a result of the Company's contesting the validity, enforceability, or interpretation of this Agreement, or as a result of any conflict between the parties pertaining to this Agreement; provided, however, that if it is finally adjudicated that the Participant did not commence the litigation in good faith and had no reasonable basis therefor, the Participant shall repay all advanced fees and expenses and reimburse the Company for its reasonable legal fees and expenses in connection therewith.

7.2. Arbitration. The Executive shall have the right and option to elect (in lieu of litigation) to have any dispute or controversy arising under or in connection with this Agreement settled by arbitration, conducted before a panel of three (3) arbitrators sitting in a location selected by the Executive within fifty (50) miles from the location of his job with the Company, in accordance with the rules of the American Arbitration Association then in effect.

Judgment may be entered on the award of the arbitrator in any court having proper jurisdiction. All expenses of such arbitrations, including the fees and expenses of the counsel for the Executive, shall be advanced and borne by the Company; provided however, that if it is finally adjudicated that the Participant did not commence the arbitration in good faith and had no reasonable basis therefor, the Participant shall repay all advanced fees and expenses and reimburse the Company for its reasonable legal fees and expenses in connection therewith.

Article 8. Successors

The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation, or otherwise) of all or substantially all of the business and/or assets of the Company or of any division or subsidiary thereof (the business and/or assets of which constitute at least fifty percent (50%) of the total business and/or assets of the Company) to expressly assume and agree to perform the Company's obligations under this Agreement in the same manner and to the same extent that the Company would be required to perform them if no such succession had taken place but a Change in Control had occurred. Failure of the Company to obtain such assumption and agreement in a written instrument prior to the effective date of any such succession shall be a breach of this Agreement and shall entitle the Executive to compensation from the Company in the same amount and on the same terms as he would be entitled to hereunder if he had terminated his employment with the Company voluntarily for Good Reason and in such case, the date on which any such succession becomes effective shall be deemed the Effective Date of Termination if the Executive so elects, but any delay or failure by the Executive to so elect shall not be a waiver or release of any rights hereunder which may be asserted at any time.

This Agreement shall inure to the benefit of and be enforceable by the Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees, and legatees. If the Executive should die while any amount would still be payable to him hereunder had he continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement, to the Executive's Beneficiary. If the Executive has not named a Beneficiary, then such amounts shall be paid to the Executive's devisee, legatee, or other designee, or if there is no such designee, to the Executive's estate.

Article 9. Miscellaneous

9.1. Employment Status. The Executive and the Company acknowledge that, except as may be provided under any other agreement between the Executive and the Company, the employment of the Executive by the Company is

"at will," and, prior to the effective date of a Change in Control, may be terminated by either the Executive or the Company at any time, subject to applicable law.

9.2. Beneficiaries. The Executive may designate one or more persons or entities as the primary and/or contingent Beneficiaries of any Severance Benefits owing to the Executive under this Agreement. Such designation must be in the form of a signed writing acceptable to the Committee. The Executive may make or change such designation at any time.

9.3. Entire Agreement. This Agreement contains the entire understanding of the Company and the Executive with respect to the subject matter hereof. In particular, this Agreement completely replaces and supersedes the terms of the Amended and Restated Special Severance Pay Agreement, entered into by and between the Company and the Executive, setting forth the terms and provisions with respect to the Executive's entitlement to payments and benefits following a Change in Control of the Company. [to be used for Executives with prior agreement]

9.4. Gender and Number. Except where otherwise indicated by the context, any masculine term used herein also shall include the feminine; the plural shall include the singular, and the singular shall include the plural.

9.5. Severability. In the event any provision of this Agreement shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Agreement, and the Agreement shall be construed and enforced as if the illegal or invalid provision had not been included. Further, the captions of this Agreement are not part of the provisions hereof and shall have no force and effect.

9.6. Modification. No provision of this Agreement may be modified, waived, or discharged unless such modification, waiver, or discharge is agreed to in writing and signed by the Executive and by an authorized member of the Committee, or by the respective parties' legal representatives and successors.

9.7. Notice. For purposes of this Agreement, notices including Notice of Termination for Good Reason and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when delivered or on the date stamped as received by the U.S. Postal Service for delivery by certified or registered mail, postage prepaid, address: (i) if to Executive, to his latest address as reflected on the records of the Company, and if to Company: Northrop Grumman Corporation, 1840 Century Park East, Los Angeles, California 90067, Attn: President, or to such other address as Company may furnish to Executive in writing with specific reference to this Agreement and the importance of the notice, except that notice of change of address shall be effective only upon receipt.

9.8. Applicable Law. To the extent not preempted by the laws of the United States, the laws of the State of California shall be the controlling law in all matters relating to this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement on this ____ day of _____, 1996.

Northrop Grumman Corporation

Executive

By: _____

_____ Attest: _____

Memorandum

To W.C. Solberg

From K. Kresa

Subject Memorandum of Agreement

February 22, 1997

This memorandum confirms your recent discussions with Marv Elkin regarding your retirement arrangements.

You have agreed to retire from employment and resign from the Board of Directors effective February 28, 1997. The Company has agreed to provide you with the following benefits:

1. Upon retirement, you will be provided with a total pension benefit payable from all sources (excluding the Northrop Grumman Savings and Investment Plan) equivalent to a single life annuity of \$342,664.91 per year. This amount is calculated to equal 50% of your pensionable earnings averaged over the highest three of your last ten years of employment. Of course, if you elect to receive this benefit in a joint annuity form under the qualified defined benefit plans, and/or take lump sum equivalents from one or more of the Company's non-qualified benefit plans, the dollar amount that you (and your spouse) actually receive will be adjusted according to the normal actuarial factors that apply under the plans with respect to such benefit forms.

2. On or before February 28, 1997, you will receive a bonus under the Incentive Compensation Plan for your work in 1996. You will also receive a pro-rata Incentive Compensation Plan bonus for your work from January 1 through February 28, 1997, paid in February 1998. These bonuses will be calculated in accordance with the normal ICP factors, including my judgment as to the performance of the Company.

You will receive the following portion of your unvested outstanding grants (as of February 28, 1997) of stock and stock options:

RPSR granted 11/93: 3,600 shares if the performance of Northrop Grumman stock results in a 100% performance factor being applied.

Options granted 11/92: 5,600

Options granted 11/93: 3,000

Options granted 12/94: 3,000

Options granted 11/95: 2,500

You will be responsible for paying all taxes which may be due as a result of your receipt of shares of stock or stock options.

3. You will be reimbursed for eligible expenses you incur in 1997 for income tax preparation fees and for financial counseling in accordance with the terms of the Company's executive perquisite program.

4. You will have an option to purchase your Company-provided automobile at 25% of the wholesale Blue Book value, if you make a written election to do so not later than February 14, 1997. If you elect this option, you will be fully responsible for all tax consequences, including taxes on imputed income, and will be required to pay the Company applicable withholding taxes at the time you exercise this option.

5. If the Company undergoes a Change of Control (as that term is defined in your Special Agreement dated August 1, 1996) prior to February 28, 1997, you will receive the benefits set forth in the Special Agreement, and you will not receive any of the benefits in this Memorandum of Agreement except for the pension benefits described in paragraph 1.

6. If the Company undergoes a Change of Control (as that term is defined in your Special Agreement dated August 1, 1996) between March 1 and December 31, 1997, you will receive the benefits provided by your Special Agreement, and the benefit of the Change of Control provisions in the Long Term Incentive Plans governing the unvested stock and stock options you forfeited upon retirement as if you were an employee at the time of the Change of Control, except that:

The stock or stock options you receive as a result of the Change of Control will be offset by the options you receive at retirement.

Any benefits you receive from ERISA Supplemental Plan I and ERISA Supplemental Plan II as a result of the Change of Control will be offset by any ERISA Supplemental Plan I and ERISA Supplemental Plan II benefits you receive following your retirement.

Your right to Severance Benefits under the Special Agreement shall be determined by whether or not, as of the date of the Change of Control, the employee incumbent in the position you now hold terminates from employment after the Change of Control and before December 31, 1997, under circumstances which would entitle that employee to such Severance Benefits if he had a Special Agreement identical to yours at the time of the Change of Control.

Your receipt of these benefits upon your retirement is conditioned upon your signing this Memorandum of Agreement and the attached Release Agreement, which is incorporated herein by reference.

If you are in agreement with these terms, please sign and date where indicated below.

Kent Kresa
Chairman, President and
Chief Executive Officer

AGREED TO:

Wallace C. Solberg

Date

RELEASE AGREEMENT

1. PARTIES: The parties to this Release Agreement (referred to hereafter as "Agreement") are Wallace C. Solberg (referred to hereafter as "Mr. Solberg") and Northrop Grumman Corporation (referred to hereafter as "Northrop Grumman" or "the Company").

2. COMPLETE RELEASE: In consideration of the promises contained herein and in the attached Memorandum of Agreement which is incorporated herein by reference, and for other good and valuable consideration the receipt of which is hereby acknowledged, Mr. Solberg does hereby acknowledge full and complete satisfaction of and does hereby agree to release, absolve and discharge Northrop Grumman, its subsidiaries, affiliated and related companies, past, present and future, and each of them, as well as its and their employees, officers, directors, and agents (collectively referred to hereafter as "Releases"), past and present, and each of them, from all claims, causes of action, demands, damages or costs he may have against Releasees on behalf of himself or others arising out of or relating to his employment with Northrop Grumman or the termination of such employment.

2.1 This waiver and release includes, but is not limited to, any rights, claims, causes of action, demands, damages or costs arising under the Age Discrimination in Employment Act, which prohibits discrimination in employment based on age; Title VII of the Civil Rights Act of 1964, which prohibits discrimination in employment based on race, color, religion, sex or national origin; the California Fair Employment and Housing Act, which prohibits discrimination in employment based on race, color, religion, sex, national origin, ancestry, physical handicap, medical condition, marital status or age; the Americans with Disabilities Act, which prohibits discrimination in employment based on disability; or any other federal, state or local laws or regulations prohibiting employment discrimination or retaliation whether such claim be based upon an action filed by Mr. Solberg or by a governmental agency.

2.2 This waiver and release also includes, but is not limited to, any rights, claims, causes of action, demands, damages or costs arising under or in relation to Northrop Grumman's employee handbook and personnel policies, or any oral or written representations or statements made by officers, directors, lawyers, employees or agents of Northrop Grumman, past and present, and each of them, or under any state or federal law regulating wage, hours, compensation or employment, or any claim for severance benefits under any Company severance plan, or any claim for retaliation, wrongful discharge, breach of contract, breach of the implied covenant of good faith and fair dealing, intentional or negligent infliction of emotional distress, intentional or negligent misrepresentation, or defamation.

2.3 This waiver and release also includes, but is not limited to, any rights, claims, causes of action, demands or costs arising under the federal False Claims Act.

2.4 This release covers both claims that Mr. Solberg knows about and those he may not know about. Mr. Solberg hereby specifically waives and relinquishes all rights and benefits provided by Section 1542 of the Civil Code of the State of California, and does so understanding and acknowledging the significance of this specific waiver of Section 1542. Section 1542 of the Civil Code of the State of California states as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

2.5 Notwithstanding the provisions of Section 1542 and for the purpose of implementing a full and complete release, Mr. Solberg expressly acknowledges that this Agreement is intended to include all claims which he does not know or suspect to exist in his favor at the time of his signature of the Agreement, and that this Agreement will extinguish any such claims.

2.6 Notwithstanding anything to the contrary herein, this Agreement does not waive or release: (i) any rights or claims which Mr. Solberg may have under the Age Discrimination in Employment Act which arise after the date he signs this Agreement; (ii) any rights or claims which Mr. Solberg may have for employee benefits pursuant to the terms of any of Northrop Grumman's retirement plans, the Northrop Grumman Savings Plan, or any Northrop Grumman employee welfare benefit plan providing medical, surgical or hospital benefits; or (iii) any rights or claims Mr. Solberg may have for breach of this Agreement.

3. COVENANT NOT TO SUE: Mr. Solberg agrees and promises that he will not file any suit or action against Releasees with any court of law based upon the matters released in this Agreement. Mr. Solberg represents and warrants that he has not filed any suit or action relating to the matters herein as of the date he executes this Agreement. If Mr. Solberg violates this Agreement by filing such a lawsuit based on claims that he has released, Mr. Solberg agrees (1) to immediately return to Northrop Grumman all consideration provided to him pursuant to this Agreement, and (2) to pay all costs incurred by Releasees, including reasonable attorney's fees, in defending against Mr. Solberg's claims.

4. CONFIDENTIALITY: Mr. Solberg represents and agrees that he will keep the terms, amount and fact of this Agreement completely confidential, and that he will not hereafter disclose any information concerning this Agreement to anyone other than his immediate family, attorney(s) or accountant(s). Should Mr. Solberg choose to disclose any information concerning this Agreement to his immediate family, attorney(s) or accountant(s), Mr. Solberg represents and agrees that he will advise them that they will also be under an obligation to keep the terms, amount and fact of this Agreement completely confidential. Nothing in this Section shall prohibit Mr. Solberg or his legal counsel or accountants from disclosing the facts, terms or amounts of this Agreement when required to do so by any court or administrative agency (including state or federal taxing authorities) or tribunal of appropriate jurisdiction.

5. INDEMNIFICATION: If Mr. Solberg, his estate, or his current spouse (hereinafter referred to as "indemnitees") is made a party, or is threatened to be made a party, to any actual or threatened action, suit, or proceeding, whether civil, criminal, administrative, or investigative, by reason of the fact that Mr. Solberg was a Northrop Grumman officer and employee or by his action or inaction within the general scope of his employment, indemnitees (and each of them) shall be indemnified and held harmless by Northrop Grumman to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended, or by other applicable law as then in effect, against all expense, liability, and loss (including attorneys fees, judgments, fines, ERISA excise taxes or penalties, and amounts paid in settlement) actually and reasonably incurred by indemnitees in connection therewith.

6. PERIOD FOR REVIEW AND CONSIDERATION OF AGREEMENT; ADVICE OF COUNSEL: Mr. Solberg agrees and understands that he has been given a period of twenty-one (21) calendar days from his receipt of this Agreement to review and consider this Agreement before signing it. Mr. Solberg further understands that he may use as much of this review

period as he wishes prior to signing; he can sign this Agreement at any time prior to the expiration of the twenty-one calendar day period. Mr. Solberg is advised and encouraged to consult with his own legal counsel prior to signing this agreement.

7. RIGHT TO REVOKE AGREEMENT: Mr. Solberg may revoke this Agreement within seven (7) calendar days of signing it. Revocation can be made by delivering a written notice of revocation to Mr. Marv Elkin, Corporate Vice President and Chief Human Resources, Communications and Administrative Officer, Northrop Grumman Corporation, 1840 Century Park East, Los Angeles, CA 9067. For this revocation to be effective, written notice must be received by Mr. Elkin no later than 5:00 p.m. PST on the seventh calendar day after Mr. Solberg signs this Agreement. If Mr. Solberg revokes this Agreement, it shall not be effective or enforceable, and Mr. Solberg will not receive the benefits described in the attached Memorandum of Agreement.

8. SEVERABILITY: The provisions of the Agreement and the attached Memorandum of Agreement are severable, and if any part of either document is found to be illegal or invalid and thereby unenforceable, the validity of the remaining parts, terms or provisions shall not be affected and shall remain fully enforceable. The unenforceable part, terms or provision, shall be deemed not to be a part of this Agreement or the Memorandum of Agreement.

9. SOLE AND ENTIRE AGREEMENT: This Agreement and the attached Memorandum of agreement which is incorporated herein by reference set forth the entire agreement between the parties hereto, and fully supersede any and all discussions, prior agreements or understandings between the parties hereto pertaining to the subject matter of this Agreement and the attached Memorandum of Agreement.

10. GOVERNING LAW: This Agreement and the attached Memorandum of Agreement shall be interpreted and enforced in accordance with the law of the State of California without regard to rules regarding conflicts of laws.

MR. SOLBERG ACKNOWLEDGES THAT HE HAS HAD AN OPPORTUNITY TO ASK QUESTIONS, CONFER WITH COUNSEL, AND TO CAREFULLY CONSIDER ALL OF THE PROVISIONS OF THIS AGREEMENT BEFORE SIGNING IT. HE FURTHER AGREES THAT HE HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND IS VOLUNTARILY ENTERING INTO IT.

PLEASE READ THIS AGREEMENT CAREFULLY. IT CONTAINS A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS.

DATED: BY:

NORTHROP GRUMMAN

CORPORATION

DATED: BY:

TITLE:

POWER OF ATTORNEY IN CONNECTION WITH THE
1996 ANNUAL REPORT ON FORM 10-K

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned directors and officers of NORTHROP GRUMMAN CORPORATION, a Delaware corporation, does hereby appoint RICHARD R. MOLLEUR and JAMES C. JOHNSON, and each of them as his agents and attorneys-in-fact (the "Agents"), in his respective name and in the capacity or capacities indicated below to execute and/or file the Annual Report on Form 10-K for the fiscal year ended December 31, 1996 (the "Report") under the Securities Exchange Act of 1934, as amended (the "Act"), and any one or more amendments to any part of the Report that may be required to be filed under the Act (including the financial statements, schedules and all exhibits and other documents filed therewith or constituting a part thereof) and to any part or all of any amendment(s) to the Report, whether executed and filed by the undersigned or by any of the Agents. Further, each of the undersigned does hereby authorize and direct the Agents to take any and all actions and execute and file any and all documents with the Securities and Exchange Commission (the "Commission"), which they deem necessary or advisable to comply with the act and the rules and regulations or orders of the Commission adopted or issued pursuant thereto, to the end that the Report shall be properly filed under the Act. Finally, each of the undersigned does hereby ratify each and every act and documents which the Agents may take, execute or file pursuant thereto with the same force and effect as though such action had been taken or such document had been executed or filed by the undersigned, respectively.

This Power of Attorney shall remain in full force and effect until revoked or superseded by written notice filed with the Commission.

IN WITNESS THEREOF, each of the undersigned has subscribed these presents this 19th day of February, 1997.

\s\ Kent Kresa Executive Kent Kresa Executive Officer)	Chairman of the Board, President and Chief Officer and Director (Principal
\s\ Jack R. Borsting Jack R. Borsting	Director
\s\ John T. Chain, Jr. John T. Chain, Jr.	Director
\s\ Jack Edwards Jack Edwards	Director
\s\ Phillip Frost Phillip Frost	Director
\s\ Aulana L. Peters Aulana L. Peters	Director
\s\ John E. Robson John E. Robson	Director
\s\ Richard M. Rosenberg Richard M. Rosenberg	Director
\s\ Brent Scowcroft Brent Scowcroft	Director
\s\ John Brooks Slaughter John Brooks Slaughter	Director
\s\ Wallace C. Solberg Wallace C. Solberg	Director
\s\ Richard J. Stegemeier Richard J. Stegemeier	Director
\s\ Richard B. Waugh, Jr. Richard B. Waugh, Jr.	Corporate Vice President and Chief Financial Officer

(Principal Financial Officer)

\s\ Nelson F. Gibbs
Nelson F. Gibbs

Corporate Vice President
and Controller
(Principal Accounting Officer)

YEAR	Dec-31-96	Dec-31-96
		44
	4,312	
	73	
	1,053	
	2,597	3,154
	1,752	
	9,422	
2,600		3,150
0		0
		784
		1,344
9,422		8,071
	8,071	
		7,413
	7,413	
	4	
	0	
	270	
	384	
	150	
234		
	0	
	0	0
	234	
	4.33	
	4.33	