

Northrop Grumman

Northrop Grumman Corporation

NORTHROP GRUMMAN

Type	Public (NYSE: NOC)
Founded	1927 (in 1994, company took on current name), Denver, Colorado
Headquarters	Los Angeles, California
Key people	Ronald Sugar , Chairman and CEO
Industry	Aerospace and defense Aircraft carriers , military aircraft , satellites , missile defense systems , advanced electronic sensors and systems, Information Technology , ships, and systems
Products	systems , advanced electronic sensors and systems, Information Technology , ships, and systems
Revenue	▲\$30.15 Billion USD (2006)
Net income	▲\$1.59 Billion USD (2006)
Employees	123,600 (2007)
Website	NorthropGrumman.com

Northrop Grumman Corporation ([NYSE: NOC](#)) is an [aerospace](#) and [defense conglomerate](#) that is the result of the 1994 purchase of [Grumman](#) by [Northrop](#). The company is the third largest [defense contractor](#) for the [U.S. military](#)^[1], and the number-one builder of [naval vessels](#). Northrop Grumman employs over 122,000 people worldwide^[2]. Its 2006 annual revenue is reported at US\$30 billion. Northrop Grumman ranks #73 on the 2007 [Fortune 500](#) list of U.S. industrial companies.^[3]

Products and services



Some of the most expensive vehicles in the world, such as this [B-2 Spirit](#) strategic bomber, are made by Northrop Grumman and purchased by the United States government.

Naval

Northrop Grumman's many products are made by separate business units. [Newport News Shipbuilding](#) manufactures all U.S. [aircraft carriers](#), and is the only company capable of building [Nimitz-class supercarriers](#). It also produces a large percentage of U.S. [nuclear submarines](#). A separate sector, Northrop Grumman Ship Systems, produces [amphibious assault ships](#) and many other commercial and military craft, including [icebreakers](#), [tankers](#), and [cargo ships](#). In a partnership with [Science Applications International Corporation](#), Northrop Grumman provides naval engineering and architecture services as well as naval maintenance services

Aerospace



A [BQM-74 Chukar](#) unmanned aerial drone launches from a [U.S. Navy](#) vessel

Separate sectors, such as Integrated Systems, produce aircraft for the U.S. and other nations. The [B-2 Spirit](#) strategic bomber, the [E-8C Joint STARS surveillance aircraft](#), the [RQ-4 Global Hawk](#), and the [T-38 Talon](#) supersonic trainer, are used by the [U.S. Air Force](#). The US Navy uses Northrop Grumman-built aerial vehicles such as the [BQM-74 Chukar](#), [C-2 Greyhound](#), [E-2 Hawkeye](#), and the [EA-6B Prowler](#). Northrop Grumman provides major components for aircraft such as [F/A-18 Hornet](#). Many aircraft, such as the [F-5](#), [T-38 Talon](#), and [E-2 Hawkeye](#) are used by other nations.

The Space Technology sector builds a variety of military and [NASA satellites](#) and mission payloads, as well as various [Strategic Defense Initiative](#) ("Star Wars") defensive laser systems. Working with [Boeing](#), the sector provides the chemical [laser](#) for the [Boeing YAL-1](#) Airborne Laser system.

Mission Systems sector is engaged in supporting the U.S. ballistic missile program; integrating various command, control and intelligence systems; and providing technical and management services to governmental and military customers.

Northrop Grumman intends to bid for the U.S. Air Force's next-generation strategic bomber project. Though it has not built a large manned aircraft since wrapping up B-2 Spirit production in the 1990s, the company has "been working hard to turn that perception around, with the skills and capabilities that back it up."^[4]

Northrop Grumman is partnering with [EADS](#) in offering the [KC-30](#)^[5] for the U.S. Air Force's [KC-X](#) tanker competition.^[6] Should Northrop Grumman/EADS win the contract, it would be required to invest approximately [US\\$600 million](#) in a new assembly plant in the United States, which is currently planned for [Mobile, Alabama](#).

Radar and sensors

Northrop Grumman Electronic Systems creates military sensors and related products, including [C4I radar](#) systems for [air defense](#), Airspace Management radar systems such as [AMASS](#), and battlefield surveillance systems like the Airborne Reconnaissance Low (ARL). Tactical aircraft sensors produced by Northrop Grumman Electronic Systems include the AN/APG-68 radar and the AN/APG-80

advanced agile beam fire control radar for the [F-16 Fighting Falcon](#), the revolutionary AN/APG-77 Advanced Electronically Scanned Array (AESA) radar for the [F-22 Raptor](#), and the world's most advanced multi-function AESA radar, the AN/APG-81, and the AN/AAS-37 electro-optical Distributed Aperture System for the [F-35 Lightning II](#), and the highly reliable APQ-164 passive Electronically Scanned Array (AESA) radar for the [B-1 Lancer](#). Electronic Systems also produces and maintains the [AWACS](#) aerial surveillance systems for the U.S., the [United Kingdom](#), NATO, Japan, and other customers. Northrop Grumman is the prime contractor for the development and integration of the Air Force's \$2-billion [Multi-Platform Radar Technology Insertion Program](#). Many other smaller products are made by Northrop Grumman, such as [night-vision goggles](#) and secure communications equipment.

Affiliated companies and partners

Remotec, a subsidiary, is the foremost manufacturer of [remote control vehicles](#) for explosive ordnance disposal and hazardous material handling. A UK-based subsidiary, Park Air Systems, makes navigation, traffic control, and communications equipment for international customers. They also have worked closely with [Antenna Associates, Inc.](#), a leading manufacturer of [IFF \(Identification Friend or Foe\)/SSR \(Secondary Surveillance Radar\)](#) Antennas located in Massachusetts.

Other services

In addition to providing the products created by Northrop Grumman, the company also provides many military and non-military services, usually to governments. It is among the largest suppliers of [IT services](#) to the U.S. federal government, for instance. And [Vinnell](#), a Northrop Grumman subsidiary within the Technical Services sector, provides training and communications services for the military.

Many smaller nations and individual states in the U.S. have contracted Northrop Grumman for various large-scale projects. In 2005, for instance, the company won a \$2 billion contract with [Virginia](#) to overhaul most of the state's IT operations.^[7] And later that year, [Great Britain](#) paid for a \$1.2 billion contract with the company to provide maintenance of many aspects of the country's defensive radar.^[8]

Northrop Grumman also performs various foreign functions in the [War on Drugs](#). The company sends planes to spray [herbicides](#) on suspected [cocaine](#) fields in [Colombia](#) and [opium poppy](#) fields in [Afghanistan](#).^{[9][10]}

History

Originally formed in California in 1939, Northrop Corporation was reincorporated in Delaware in 1985. In 1994, Northrop Aircraft merged with [Grumman Aerospace](#) to create the company Northrop Grumman. Both companies were previously established in the airplane manufacturing industry, and Grumman was famous for building the [Apollo Lunar Module](#). The new company acquired [Westinghouse Electronic Systems](#) in 1996, a major manufacturer of radar systems. Logicon, a defense computer contractor, was added in 1997. Previously, Logicon had acquired Geodynamics Corporation in March 1996 and Syscon Corporation in February 1995.

A merger between Northrop Grumman and competitor [Lockheed Martin](#) was not approved by the U.S. government in 1998, slowing the consolidation of the defense industry. But in 1999, the company acquired [Teledyne Ryan](#), which developed surveillance systems and unmanned aircraft. It also acquired California Microwave, Inc., and Data Procurement Corporation, in the same year. Other

entities acquired included Inter-National Research Institute Inc. (1998), Federal Data Corporation (2000), Navia Aviation As (2000), Comptek Research, Inc. (2000), and Sterling Software, Inc. (2000).

In 2001 the company acquired [Litton Industries](#), a shipbuilder and provider of defense electronics systems to the [U.S. Navy](#). During the acquisition process, a new Delaware holding company, [NNG, Inc.](#), was formed. It merged with Northrop Grumman through a one-for-one common shares exchange in April 2001. Both Northrop Grumman and Litton became subsidiaries of the new holding company. The original Northrop Grumman Corporation then changed its name to Northrop Grumman Systems Corporation; the holding company, NNG, Inc., changed its name to Northrop Grumman Corporation.

Later that year, [Newport News Shipbuilding](#) (one of only two producers of [nuclear submarines](#)) was added to the company. And in 2002, Northrop Grumman acquired [TRW](#), with their sole interest in their space systems and laser systems manufacturing. The Aeronautical division was sold to [Goodrich](#), and the automotive divisions were spun-off and retained the TRW name.

There have been many other smaller acquisitions throughout this period.^[11] On July 20, 2007, Northrop Grumman became the sole owner of [Burt Rutan's Scaled Composites](#).^[12]

Northrop Grumman and [Boeing](#) have also recently collaborated on a design concept for [NASA's](#) upcoming [Orion spacecraft](#) (previously the Crew Exploration Vehicle), but that contract went to rival [Lockheed Martin](#) on [August 31, 2006](#). Northrop Grumman announced formation of a new business unit (sector), effective [January 1, 2006](#) called Technical Services.

Environmental record

Researchers at the [University of Massachusetts](#) have identified Northrop Grumman as the 17th-largest corporate producer of [air pollution](#) in the [United States](#); according to their study, Northrop Grumman facilities release more than 520,000 pounds of toxic chemicals per year into the air.^[13] The corporation has also been linked to 52 [superfund toxic waste](#) sites.^[14] In [2003](#), the company was among 84 parties with which the [United States Environmental Protection Agency](#), the U.S. [Department of Justice](#), and the state of [New York](#) reached an estimated US\$ 15 million settlement for the rehabilitation of the Mattiace Petrochemical Company Superfund site in [Glen Cove, Long Island](#)^[15]; in the same year, Northrop Grumman agreed to pay \$33,214 after EPA inspectors found [hazardous waste](#) violations at the Capistrano test site.^[16]

Political contributions and governmental ties

From 1990-2002, Northrop Grumman contributed \$8.5 million to federal campaigns.^[17] According to [PAC](#) summary data compiled by [Source Watch](#), the company gave 1,011,260 to federal candidates in 2005-2006 election cycle. The majority of the contributions--63%--went to Republicans.^[18] Former Northrop Grumman Electronics Systems chief [James Roche](#) served for two years as Secretary of the Air Force for George Bush. As reported by the [Los Angeles Times](#), Roche would eventually be nominated to head the Army, but would be forced to withdraw his nomination among accusations of mismanaging a contract with [Boeing](#) and of failing to properly handle the Air Force sexual assault scandals of 2003.^[19] According to [Corp Watch](#), "at least seven former officials, consultants, or shareholders of Northrop Grumman" have held posts "in the Bush administration...including Deputy Secretary of Defense [Paul Wolfowitz](#), Vice-Presidential Chief of Staff I. [Lewis Libby](#), Pentagon Comptroller Dov Zakheim, and Sean O'Keefe, director of NASA." Wolfowitz and Libby have both since left the government amid scandals.

Accolades

Northrop Grumman was named [Forbes's](#) Company of the Year in 2002. Forbes's announcement credited the company with "master[ing] the art of innovation."^[20] Northrop Grumman no longer appears on their list of America's 400 Best Big Companies, however.^[21] Northrop Grumman is credited with sponsoring educational programs^[22] and donating thousands of dollars to various charities.^{[23][24]} Many members of the U.S. government have attended company events and spoken highly of the company and its contributions.^[25]

Scandals

Northrop Grumman has had to deal with multiple scandals during its history. The company was sued in 1999 for knowingly giving the Navy defective aircraft. This suit seeks \$210 million in damages and is ongoing.^[26] Then in 2003, the company was sued for allegedly overcharging the U.S. government for space projects in the 1990s. Northrop Grumman paid \$111.2 million to settle that suit out of court.^[27] Northrop Grumman also landed a \$48 million contract to train the [Iraqi Army](#),^[28] a job that many have complained has been poorly managed.^[citation needed]

Corporate governance

[Kent Kresa](#) was the [CEO](#) of the company until he was required to retire in 2003 due to age restrictions. At this point, [Ronald Sugar](#), formerly the [chief operating officer](#), took over as CEO.^[29] He also serves as the company [chairman](#).

Besides Sugar, current members of the [board of directors](#) of Northrop Grumman are: [John Chain](#), [Lewis Coleman](#), [Vic Fazio](#), [Stephen Frank](#), [Phillip Frost](#), [Charles R. Larson](#), [Richard B. Myers](#), [Philip Odeen](#), [Aulana Peters](#), [Kevin Sharer](#), [John Brooks Slaughter](#).

Business units (sectors)

The company is split into several business units, each of which operates fairly independently. These business units have generally been created through acquisitions.

- [Northrop Grumman Electronic Systems](#) was created by Northrop Grumman's acquisition of Westinghouse Electronic Systems Group in 1996. The Electronic Systems sector is a leading designer, developer, and manufacturer of a wide variety of advanced defense electronics and systems. The division has 120 locations worldwide, including 72 international offices, and approximately 24,000 employees. It accounted for 20% of company sales in 2004.^[30] Electronic Systems is headquartered in the Baltimore metropolitan area.^[31]
- Information Technology is the sector charged with providing information systems and services to clients. It also handles training and simulation contracts.
- Mission Systems deals with missile systems, command, control and intelligence, as well as technical and management services.^[32]
- Integrated Systems support the aerospace and defense industries, providing the U.S. military with intelligence, surveillance, reconnaissance, and integrated strike warfare.
- [Northrop Grumman Newport News](#) is the largest privately owned [shipyard](#) in the [United States](#) and the only one that can build [Nimitz-class supercarriers](#). It is located in [Newport News, Virginia](#), and often participates in projects with the [Norfolk Naval Shipyard](#) in [Portsmouth, Virginia](#).
- [Northrop Grumman Ship Systems](#) is responsible for building small and medium shipping products. It consists of the former [Ingalls Shipbuilding](#) and [Avondale Shipyard](#) companies.

- Space Technology deals primarily with satellites, and [SDI](#) systems.
- Technical Services is a new business unit formed [January 1, 2006](#). Northrop Grumman describes the sector as working in "the logistics support, sustainment, and technical services marketplace."

[\[edit\]](#) References

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[edit] External links

- [Northrop Grumman web site](#)
- [Northrop Grumman product list](#)
- [A summary of the company from Oligopoly Watch](#)
- [Interview with Northrop Grumman CEO, Feb. 12, 2006.](#)
- [Patents owned by Northrop Grumman.](#) *US Patent & Trademark Office*. Retrieved on December 6, 2005.