

# ARCHIVED REPORT

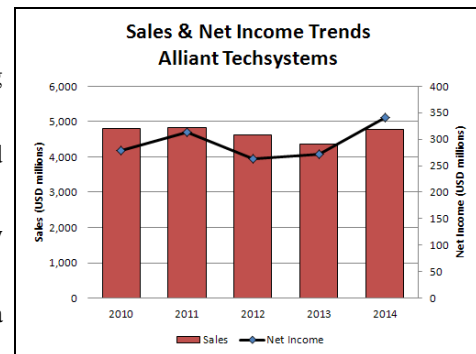
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## Alliant Techsystems Inc

### Outlook

- ATK and Orbital have agreed to a "merger of equals" combining their aero and defense operations into Orbital ATK
- The transaction is expected to create a solid mid-tier space and missile provider
- The new firm may have an opportunity to crack into the military launch sector, currently dominated by United Launch Alliance
- As part of the transaction, the Sporting unit will be spun off into a stand-alone company



### Headquarters

Alliant Techsystems Inc  
1300 Wilson Blvd, Suite 400  
Arlington, VA 22209  
Telephone: + 1 (703) 412-5960  
Website: <http://www.atk.com>

Alliant Techsystems (ATK) was incorporated as a Delaware company and a wholly owned subsidiary of Honeywell on May 2, 1990, in connection with a Honeywell plan to spin off to its shareholders the following Honeywell businesses: the Defense and Marine Systems Business, the Test and Instruments Division, and the Signal Analysis Center. On September 28, 1990, Honeywell declared a distribution to stockholders of one share of Alliant for every four shares of owned Honeywell stock. As a result,

100 percent of Alliant's stock was distributed to Honeywell shareholders.

In early 1995, Alliant completed its acquisition of Hercules Aerospace Company, which further enhanced the company's position in propellants, warheads, and demilitarization operations. In 2001, the company strengthened its presence in propulsion and composite structures with the acquisition of Thiokol Propulsion from Alcoa Inc.

In 2014, Orbital Sciences and ATK agreed to merge into a single space services company called Orbital ATK, while spinning off ATK's firearms-related sporting division.

Alliant employs approximately 16,000 personnel.

### Structure and Personnel

Mark W. DeYoung  
President and Chief Executive Officer

Neal Cohen  
Executive Vice President and  
Chief Financial Officer

Scott D. Chaplin  
Senior Vice President, General Counsel and  
Secretary

Wayde R. Heirigs  
Vice President, Interim Treasurer

Michael A. Kahn  
Senior Vice President,  
President, ATK Defense

## Alliant Techsystems Inc

Jeff D. Kubacki  
Senior Vice President and  
Chief Information Officer  
Blake E. Larson  
Senior Vice President  
President, ATK Aerospace Systems  
Stephen M. Nolan

Senior Vice President,  
Strategy and Business Development  
Jay Tibbets  
Senior Vice President and President,  
ATK Sporting Group  
Christine Wolf  
Senior Vice President, Human Resources

## Product Area

ATK is engaged in the engineering, research, development, and manufacturing of numerous defense-oriented products, especially ammunition. In addition, it provides associated services to the U.S. government, allied governments, and other customers. ATK is managed as detailed below:

1. Defense
  - 1.1 Armament Systems
  - 1.2 Defense Electronics Systems
  - 1.3 Missile Products
  - 1.4 Small Caliber Systems
2. Aerospace
  - 2.1 Aerospace Structures
  - 2.2 Space Systems Operations
  - 2.3 Space Components
3. Sporting
  - 3.1 Accessories
  - 3.2 Ammunition
  - 3.3 Firearms

**Defense.** This unit produces ammunition, precision and strike weapons, missile warning solutions, and tactical rocket motors across air-, sea-, and land-based systems. This group makes small- and medium-caliber military ammunition. This unit also operates the U.S. Army Lake City Army Ammunition Plant (small-caliber ammunition) through 2020. Some key programs include the Advanced Medium-Range Air-to-Air Missile (AMRAAM), Sidewinder, Precision Guided Mortar Munition (PGMM), Individual Semi-Automatic Airburst System (ISAAS), medium-caliber chain guns, 120mm training and tactical tank ammunition, fuzing and integrated ordnance, AAR-47 missile warning

system, and propulsion systems for tactical missiles and guided projectiles.

**Aerospace.** This segment produces solid rocket propulsion systems and military and commercial aircraft structures. It also specializes in small and micro satellites, satellite components and subsystems, lightweight space deployables and solar arrays, low-cost flares and decoys, and energetic materials and related technologies. The unit produces composite aircraft components for the F-35, RQ-4 Global Hawk, A400M, Airbus A350XWB, and Boeing 787 programs. Propulsion products include rocket motors for the Trident II Fleet Ballistic Missile, Propulsion Replacement program for the Minuteman intercontinental ballistic missile, Graphite Epoxy Motor (GEM) for Delta launch vehicles, CASTOR motors for the Atlas IIAS and H-IIA launch vehicles, Orion and CASTOR 120 motors for Antares and Taurus launch vehicles, and illumination devices. Space system products include structures for satellites and aircraft; thermal management systems; space systems, satellites, and buses; precision-stable optical structures; solar array systems and substrates; deployable telescoping booms for space launch and recovery; pressure tanks for satellites and launch vehicles; and advanced antennas and radomes for weapons and spacecraft.

**Sporting.** This division supplies ammunition for law enforcement, military, and sporting applications; manufactures optics, reloading gear, and sport shooting accessories, as well as tactical accessories. Brand names include Federal Premium, CCI, Speer, RCBS, Alliant Powder, Champion, Weaver, Eagle Industries, Savage, and Blackhawk Industries.

## Facilities

### Defense

ATK Defense, Group Headquarters Canton Crossing Tower, 11th Floor, 1501 S Clinton St, Baltimore, MD 21224. Telephone: + 1 (410) 864-4800.

Integrated Weapon Systems, 3309 N Reseda Circle, Mesa, AZ 85215. Telephone: + 1 (480) 324-8600. Fax: + 1 (480) 324-8758.

Small Caliber Systems, Lake City Army Ammunition Plant, PO Box 1000, Independence, MO 64051. This government-owned, company-operated plant produces 5.56mm, 7.62mm, .30-caliber, and .50-caliber ammunition. The operation is the largest supplier of small-caliber ammunition to the U.S. DoD.

Missile Defense and Controls, PO Box 241, Elkton, MD 21922. Telephone: + 1 (410) 392-1000.

## Alliant Techsystems Inc

Defense Electronics Systems, PO Box 4648, Clearwater, FL 33758-4648. Telephone: + 1 (727) 572-1900.

Defense Electronics Systems, 21301 Burbank Blvd, Suite 100, Woodland Hills, CA 91367. Telephone: + 1 (818) 887-0844.

Allegheny Ballistics Laboratory, 210 State Route 956, Rocket Center, WV 26726.

Lake City Army Ammunition Plant, Independence, MO 64056. Telephone: + 1 (816) 796-5236.

### Aerospace

ATK Aerospace Systems, Group Headquarters (Magna, Utah), 5000 South 8400 West, West Valley City, UT 84044. Telephone: + 1 (801) 251-5911.

Aerospace Structures, PO Box 990, Iuka, MS 38852-0990. Telephone: + 1 (662) 423-7774.

Aerospace Structures, Freeport Center, Building C14, Clearfield, UT 84016.

Aerospace Systems, 6033 East Bandini Blvd, Commerce, CA 90040. Telephone: + 1 (323) 722-0222.

Aerospace Systems, 9617 Distribution Ave, San Diego, CA 92121. Telephone: + 1 (858) 621-5700.

Space Launch, 620 Discovery Dr, Suite 200, Huntsville, AL 35806. Telephone: + 1 (256) 428-5800.

Space Systems – KSC Operations, Launch Support Services, Building K6-1096, OSB, Room 3309M, M/S THIO-LSS, Kennedy Space Center, FL 32899. Telephone: + 1 (321) 861-3703.

### Sporting

ATK Sporting, Group Headquarters, 900 Ehlen Dr, Anoka, MN 5530. Telephone: + 1 (800) 322-2342.

ATK Tactical Systems – Eagle Industries, 1000 Biltmore Dr, Fenton, MO 63062. Telephone: + 1 (636) 343-7547.

ATK Tactical Systems – Blackhawk, 34368 East Frontage Rd, Bozeman, MT 59715.

ATK Commercial Products – Federal Cartridge Company, 900 Ehlen Dr, Anoka, MN 55303-1778. Telephone: + 1 (763) 323-2300.

## Corporate Overview

Alliant Techsystems' business strategy is to continue to expand its coverage in such niche areas as warheads, fuzes, unitary bombs, countermeasures, naval ammunition, mortar ammunition, and Special Forces ammunition.

### New Products and Services

**MegaFlex Solar Array.** In January 2014, ATK demonstrated full deployment of a large MegaFlex solar array under a NASA contract to further the development of a high-power system to be used for future robotic and manned exploration missions. ATK's Solar Electric Propulsion (SEP) MegaFlex solar array design, which has a 9.6-meter (32 ft) diameter, is capable of generating approximately 40kW of power with two wings when fully populated with solar cells. It has been considered for near-term mission concepts such as NASA's Asteroid Redirect Mission. ATK received a \$6.4 million contract for the MegaFlex development in October 2012.

**SeeMe.** In April 2013, ATK was awarded a contract to support the U.S. Defense Advanced Research Projects Agency (DARPA) in Arlington, Virginia, for the Space Enabled Effects for Military Engagements program. SeeMe seeks to develop enabling technologies to provide reliable surveillance data to the warfighter in the field, using small, low-cost satellites that are launched quickly to support the speed of military

operations. ATK has collaborated with Logos Technologies Inc and University of Southern California/Information Sciences Institute on the study contract.

**PERM.** In December 2012, ATK began execution of a \$14.3 million contract to develop a solution to meet the U.S. Marine Corps' requirement for a rifled, 120mm Precision Extended Range Munition (PERM). ATK's Armament Systems division will serve as the prime contractor to the Marine Corps for the 24-month PERM development program that will demonstrate a precision mortar cartridge capable of reliably providing accuracy within 20 meters circular error probable (CEP) and can then be quickly transitioned to production and, ultimately, fielding. ATK has teamed with General Dynamics Ordnance and Tactical Systems on the program. The ATK/GD-OTS PERM technical solution combines ATK's precision guidance fuze technology with the GD-OTS extended-range rifled mortar energetic subsystems developed during the PERM Technical Demonstration program.

**New GMLRS Warhead.** In February 2012, ATK was selected by the U.S. Army to develop an alternative warhead for the Guided Multiple Launch Rocket System (GMLRS). ATK was one of three companies competing to proceed into the Engineering and Manufacturing Design and Demonstration (EMDD)

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phase of the program. ATK will be a subcontractor to GMLRS prime contractor Lockheed Martin. The GMLRS alternative warhead eliminates the use of submunitions, but performs as a drop-in replacement for the currently fielded Dual-Purpose Improved Conventional Munition (DPICM) warhead. Warhead production work will be performed at ATK's Allegany Ballistics Laboratory.

**USMC Pack.** In October 2011, ATK's Eagle Industries business received a five-year, \$50 million indefinite delivery/indefinite quantity contract from Marine Corps Systems Command to produce the U.S. Marine Corps' new USMC Pack. The USMC Pack will take the place of the current fielded pack, known as the Improved Load Bearing Equipment (ILBE). The U.S. Marine Corps was seeking to replace and enhance this component of the Family of Improved Load Bearing Equipment (FILBE) made to better integrate with the fielded torso body armor systems.

**JATAS.** In July 2011, ATK and teammate BAE Systems were awarded a \$109 million contract by the U.S. Navy for the engineering and manufacturing development of the Joint and Allied Threat Awareness System (JATAS), a next-generation warning system designed to enhance aircraft survivability against man-portable air-defense systems, small-caliber weapons, and rocket-propelled grenades. Contract work will be performed in ATK's Clearwater, Florida, and Woodland Hills, California, facilities and BAE Systems' Nashua, New Hampshire, facility. Work is expected to be completed in September 2015. Other members of the JATAS industry team include DRS and Goodrich. The ATK and BAE Systems team was one of two industry teams (the other was Lockheed Martin) competing under a Technology Demonstration phase awarded in October 2009.

**Next-Gen Tank Round.** In July 2011, ATK received a \$77 million, three-year contract to develop and qualify the M829E4 120mm Advanced Kinetic Energy (AKE) tactical tank round for the U.S. Army. At the completion of this contract, ATK will have finished the second phase of the EMD work required to qualify the new round for use with the Army's M1A2 SEP Abrams main battle tank. The M829E4 is the Army's fifth-generation, 120mm kinetic energy cartridge.

### Plant Expansion/Organization Update

**ATK Realigns.** In February 2012, ATK announced it would begin operating in a three-group structure in FY13. The three operating units are the Aerospace Group, the Defense Group, and the Sporting Group. The Defense Group integrates the engineering, manufacturing, and management of the company's current Armament Systems and Missile Products

groups. The Aerospace and Sporting groups remain relatively the same. In conjunction with this realignment, ATK recognized realignment charges of \$9 million in the fourth quarter of FY12. The charges related primarily to termination benefits offered to employees, asset impairment charges, and costs associated with the closure of certain facilities.

**Corporate HQ Moved.** In October 2011, ATK completed the relocation of its corporate headquarters from Minneapolis, Minnesota, to Arlington, Virginia. The move gets the company's executives closer to Congress and to many of its peers that also have offices in the Washington, DC, area.

**ACCE Facility Opened.** In August 2011, ATK opened its new Aircraft Commercial Center of Excellence facility in Clearfield, Utah. The facility serves as the headquarters for ATK's commercial aircraft programs and supports the manufacturing of composite airframe and engine components for the Airbus A350 XWB and General Electric and Rolls-Royce engine programs. The building is 615,000 square feet and dedicated to high-rate composite manufacturing. The ACCE facility is strategically located adjacent to ATK's existing Utah composite facilities, which manufacture military aircraft composite structures.

**New Energy Research Facility.** In January 2010, Alliant Techsystems opened its new Center for Energy and Aerospace Innovation at its Ronkonkoma, New York, facility. CEAI will serve as an ATK focal point for applying the company's expertise into potential technologies for the energy industry. The CEAI is located within ATK's General Applied Science Laboratories, which is an ATK research and test facility.

**Goleta Facility Expanded.** In October 2009, ATK broke ground on a 25,000-square-foot expansion of the company's facility in Goleta, California. The expanded operations will support NASA's human space flight program as well as global weather satellites and possible future spacecraft missions. The facility currently has 70,000 square feet of production, engineering, and office space used primarily to design and build advanced solar arrays and lightweight space deployables.

**Composite Facilities Opened.** In October 2008, ATK opened two new high-tech composite manufacturing facilities at the Allegany Ballistics Laboratory (ABL) in Rocket Center, West Virginia. The West Virginia Advanced Filament Winding Facility is home to ATK's composite rotor tube manufacturing operations in support of United States Enrichment Corporation Inc. The facility is designed to support USEC's American Centrifuge Uranium Enrichment

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Technology program. The Mountain State Ceramic Matrix Composites Manufacturing Center expands ATK's capacity to produce lightweight composite aircraft parts for the F-35 Joint Strike Fighter and other high-performance military applications.

**Launch Systems and Space Systems Combined.** In June 2008, ATK combined its Launch Systems and Space Systems groups into a single business that retained the Space Systems name. The company described the new organization as a natural alignment of its space-related businesses to deliver increased operating efficiencies while creating a broader customer base for ATK's technology portfolio. ATK Space Systems includes the space operations of ATK's Mission Systems group. The group was to have been combined with the Information Systems and Geospatial businesses of MacDonald, Dettwiler & Associates upon completion of that acquisition; however, that purchase was scuttled in May 2008 when Canada halted the deal.

### Mergers/Acquisitions/Divestitures

**ATK and Orbital Merge.** In April 2014, Orbital Sciences and ATK announced the merger of their aerospace and defense groups to create a \$4.5 billion space, defense, and aviation systems developer and manufacturer employing approximately 13,000 people. The new company, to be called Orbital ATK Inc, will serve U.S. and international customers of spacecraft hardware, including launch vehicles and propulsion systems, tactical missiles and defense electronics, satellites and space systems, armament systems and ammunition, and commercial and military aircraft structures and related components, the company said.

As part of the transaction, ATK will spin off its Sporting Group, which focuses on commercial sporting equipment, to its shareholders. Orbital President and CEO David Thompson will lead the new company, with Blake Larson, president of ATK's Aerospace Group, serving as chief operating officer. The combined company will be headquartered at Orbital's existing Dulles, Virginia, campus, with major employee sites in Utah, Missouri, Virginia, Arizona, Maryland, West Virginia, California, and Minnesota. In the merger, ATK shareholders will own about 53.8 percent of the equity of the combined company, and Orbital shareholders will own about 46.2 percent. The transaction is expected to close by the end of 2014.

**Bushnell Group Acquired.** In November 2013, ATK completed the \$985 million acquisition of Bushnell Group Holdings Inc – a designer, marketer, and distributor of branded sports optics, outdoor accessories, and performance eyewear. Founded in 1948, Bushnell is headquartered in Overland Park, Kansas, and employs approximately 1,100 workers

worldwide. ATK integrated Bushnell into its Sporting Group.

**Caliber Acquisition.** In June 2013, ATK acquired Caliber Company, the parent company of Savage Sports Corporation. Savage is one of the world's largest manufacturers of hunting rifles and shotguns. The acquisition expands ATK's portfolio offering by adding long guns to its brands in commercial and security ammunition, shooting sports, and security-related accessories. Under the terms of the transaction, ATK paid \$315 million in cash. Savage is located in Westfield, Massachusetts, and Lakefield, Ontario, and employs approximately 600.

**Blackhawk Industries Acquired.** In April 2010, Alliant Techsystems acquired Blackhawk Industries Products Group Unlimited LLC, a provider of tactical gear. The acquisition of Blackhawk, combined with the prior acquisition of Eagle Industries, strengthens ATK's position in tactical accessories and equipment for domestic and international military, law enforcement, security, and sport enthusiast markets. Terms of the agreement were not disclosed.

**Eagle Industries Acquired.** In March 2009, Alliant Techsystems acquired Eagle Industries as part of an effort to expand its position in the domestic and international tactical accessories markets serving military and law enforcement customers. Eagle Industries is a manufacturer of high-quality individual operational nylon gear and equipment for military, homeland security, and law enforcement agencies. Terms of the agreement were not disclosed, but the company expected the acquisition to add more than \$80 million to FY10 revenues. Eagle Industries became part of ATK's Armament Systems group.

**MDA Acquisition Blocked.** In May 2008, Alliant Techsystems was informed that the Canadian minister of industry had disapproved the sale of the Information Systems and Geospatial Services businesses of Canadian-based MacDonald, Dettwiler & Associates to ATK. Canadian Investment Review officials informed ATK that the Canadian objection related to potential extraterritorial application of U.S. export law. As a result, ATK took an approximately \$6.6 million pre-tax charge (\$3.9 million after taxes) for transaction-related expenses to be applied to the company's FY08 fourth-quarter results. In January 2008, ATK first announced it would acquire the unit in a deal valued at \$1.3 billion.

**Swales Aerospace Acquisition.** In June 2007, Alliant Techsystems acquired Swales Aerospace, a provider of satellite components and subsystems, small spacecraft, and engineering services for NASA, Department of Defense, and commercial satellite customers. The Swales facility in Beltsville, Maryland,

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became the headquarters for the ATK Space Division within the Mission Systems Group. The new division inherited the space structures and subsystems operations of ATK's Space Systems and Sensors Division. The acquisition was first announced in April 2007.

**PSI Group Acquired.** In September 2004, Alliant Techsystems completed its acquisition of the PSI Group for \$165 million. The PSI Group is a leader in the design and manufacture of components for military and commercial space-based applications, including global positioning, navigation, and communications satellites, as well as satellite bus structures, struts, reflectors, and deployable mast booms. The company expects to increase its content on missions while expanding into new advanced space technology roles. The deal was first announced in July 2004.

**Mission Research Corporation Acquired.** In March 2004, ATK acquired Mission Research Corporation, a leader in the development of advanced technologies that address emerging homeland defense and national security requirements. Core technical competencies include directed energy, electro-optical and infrared sensors, aircraft sensor integration, high-performance antennas and radomes, advanced signal processing, and specialized composites. ATK Mission Research's charter is to apply its talent and vision across ATK to create next-generation technologies that will transition from prototype development to production and fielding. Terms of the deal were not announced.

**Hypersonic Units Acquired.** In November 2003, Alliant Techsystems acquired two hypersonic flight businesses – GASL and Micro Craft – from Allied Aerospace. The transaction adds to ATK's portfolio of leading-edge propulsion and airframe technologies for highly demanding aerospace and defense applications. GASL and Micro Craft are leaders in the development of hypervelocity and air-breathing systems for next-generation space vehicles, missiles, and projectiles. Terms of the deal were not disclosed. The two units had sales of about \$40 million in 2002, and the purchase price was reportedly close to that.

**ATK Acquires Composite Optics.** In January 2003, Alliant Techsystems acquired Composite Optics Inc, a supplier of advanced composite products for the space and aerospace markets. Terms of the transaction were not disclosed. Headquartered in San Diego, California, COI had annual sales of approximately \$70 million and approximately 450 employees. The business remained in San Diego and was integrated with ATK's existing composite structures operations. COI composite products include telescope structures, optical benches, mirrors, instrument housings, satellite structures, and antenna reflectors.

## Teaming/Competition/Joint Ventures

**Alenia.** In June 2012, Alenia Aermacchi and ATK joined forces to offer an MC-27J development of the former's Spartan twin-turboprop transport for applications ranging from flying as a dedicated gunship to carrying command and control elements in support of special forces operations. The main feature of the gunship version of the Spartan is a palletized ATK GAU-23 30mm precision weapon kit. The aircraft can also be fitted with a command and control pallet for intelligence, surveillance, and reconnaissance (ISR) missions. The kits can be mounted in less than four hours. In November 2013, the Italian Air Force selected the team for the integration of the roll-on/roll-off (RORO), palletized command and control, intelligence, surveillance, and reconnaissance (C2-ISR), and gun systems onto Italian Air Force MC-27J multimission aircraft.

**BAE Systems.** In August 2008, ATK and BAE Systems teamed to compete for the upcoming U.S. Navy and Marine Corps Joint Allied Threat Awareness System program. JATAS is the next-generation missile warning system that will provide protection for rotary-wing aircraft from infrared guided missiles (see **New Products and Services**).

**FN Manufacturing.** In September 2008, ATK and FN Manufacturing received a \$53.4 million contract to produce Mk 19 Mod-3 Grenade Machine Guns. This is the first crew-served weapon system manufactured by ATK, marking a significant milestone in the company's strategy to broaden its armament systems business. The contract also expands ATK's existing portfolio of medium-caliber gun systems beyond its chain guns. ATK will operate as systems integrator and perform barrel manufacture, gun assembly, and test operations; FNMI provides gun subassemblies. Work on the Mk 19 is performed by ATK at its facility in Mesa, Arizona.

**General Dynamics.** In October 2011, ATK and General Dynamics Ordnance and Tactical Systems signed a teaming agreement to offer a full-up solution for the United States Marine Corps' requirements for the rifled, 120mm Precision Extended Range Mortar. Under the terms of the teaming agreement, ATK will be the prime contractor to the USMC for the PERM engineering and manufacturing development program, providing guidance fuze technology combined with General Dynamics' propulsion and warhead subsystems. The system is composed of a pair of Prime Mover vehicles, a 120mm M327 mortar weapon, the four-round family of munitions, and an ammunition trailer (see **New Products**).

**Liberty Launch System.** In February 2011, ATK and Astrium announced they would work together in

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response to NASA's Commercial Crew Development-2 (CCDev-2) procurement. The team offered NASA launch services with the Liberty launch vehicle. ATK would supply the human-rated first stage, which it developed under NASA's Space Exploration program. The five-segment solid rocket first stage was derived from the Space Shuttle's four-segment solid rocket boosters. Astrium, the developer and manufacturer of the Ariane 5 launcher – working with Snecma (Safran Group) – provided Liberty's second stage, which was based on the liquid-fueled cryogenic core of the Ariane 5 vehicle powered by the Vulcain 2 engine. Other Liberty team members included United Space Alliance for launch vehicle integration and ground operations support and L-3 Communications for first-stage avionics. In September 2011, NASA signed an unfunded Space Act Agreement with ATK to further develop the Liberty launch system. Although no funding was provided by NASA with this agreement, the agency was to share expertise and technology. In May 2012, ATK announced that it had developed Liberty into a complete commercial crew transportation system – including the spacecraft, abort system, launch vehicle, and ground and mission operations – designed from inception to meet NASA's human-rating requirements with a potential for the first test flight in 2014 and crewed flight in 2015. However, the Liberty lost out to competitors Boeing, SpaceX, and Sierra Nevada Corp in late 2012. Mark DeYoung, ATK's president and CEO, said the firm was "moving on" after it lost out on NASA funding.

**Mechanical Technology.** In November 2001, Alliant Techsystems and Mechanical Technology Inc signed a teaming agreement to explore military applications for direct methanol micro-fuel cells in the U.S. Army's Objective Individual Combat Weapon (OICW).

**Nitrochemie.** In August 2009, ATK and Rheinmetall Nitrochemie signed a strategic agreement for the

transfer of advanced propellant technologies from Nitrochemie to ATK. The technology transfer positions ATK as the exclusive North American provider of Extruded Impregnated, Extruded Composite Low-sensitivity, Surface Coated Double Base, and R-Type propellants. Previously, in September 2005, Alliant Techsystems and Swiss/German propellant manufacturer Nitrochemie entered into a strategic alliance to market Nitrochemie's advanced gun propellants in North America. Together, the companies will pursue opportunities in tactical and training tank ammunition, artillery rounds, mortars, and both medium-caliber and small-caliber ammunition. The agreement provides ATK exclusive rights to market, sell, and produce this technology in North America.

**Raufoss.** Alliant has an agreement with Raufoss covering medium-caliber ammunition using the fuzeless pyrotechnic ignition technology developed by the Norwegian company. The main potential application in the U.S. is the GAU-12 cannon in USMC AV-8B aircraft.

**Rheinmetall DeTec.** ATK and Rheinmetall have a long history of successful cooperation on munitions programs. In 1979, Rheinmetall transferred the technology for a family of 120mm smoothbore tank ammunition for production in the U.S. for ultimate use in the M1A1 tank.

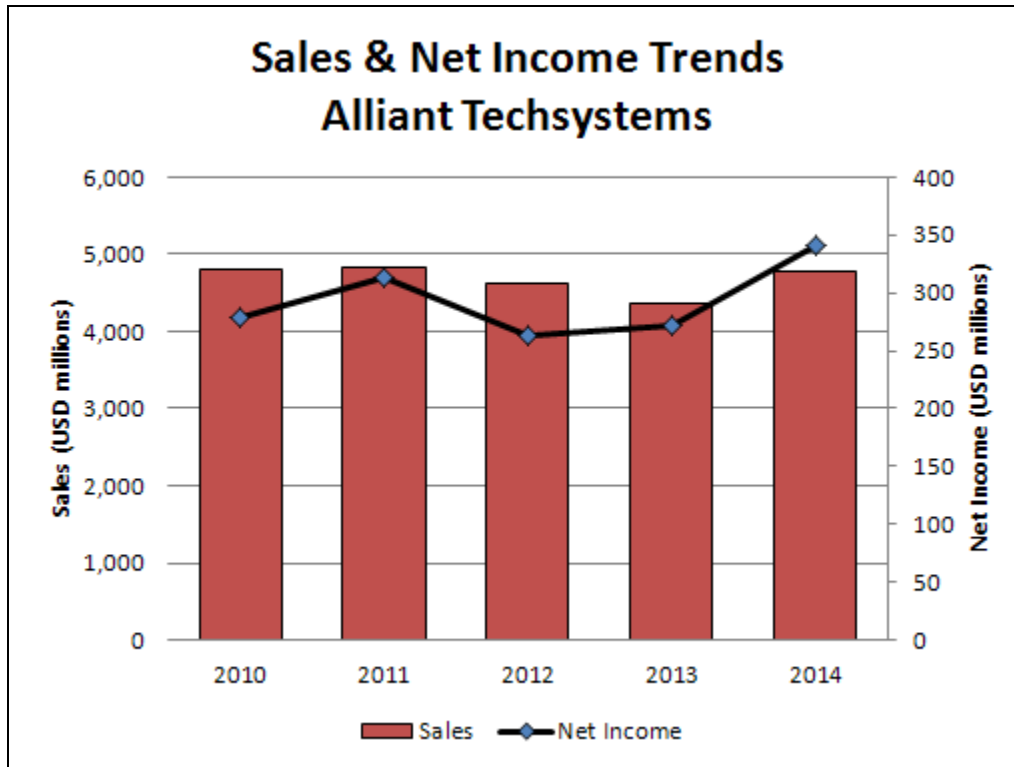
**Textron.** In June 2000, Alliant Techsystems and Textron Systems formed a joint venture to develop and produce a tactical munition system as an alternative to anti-personnel land mines. In October 2002, the joint venture was awarded a \$53.8 million contract to develop this system, dubbed Matrix. The Matrix remote munitions control system was deployed to Iraq in 2005. A follow-on system, the XM-7 Spider, was also developed and produced by the partners.

## Financial Results/Corporate Statistics

Alliant Techsystems posted sales of \$4.78 billion for the year ended March 31, 2014, up 9 percent from the \$4.36 billion reported in 2013. Net income rose to \$340.9 million for the fiscal year compared to \$271.8 million in 2013. Debt/equity ratio is calculated from the company's long-term debt divided by shareholder equity. The latest full-year statistics are reported below:

Y/E March 31	2009	2010	2011	2012	2013	2014
(USD millions)						
Net Sales	4,583.2	4,807.7	4,842.3	4,613.4	4,362.1	4,775.1
Net Income	155.1	278.9	313.7	262.6	271.8	340.9
Percent Gov't	76.0	69.0	68.0	65.0	67.0	65.0
R&D Expenditures	81.5	75.9	65.0	66.4	64.7	62.5
Backlog	6,500.0	6,700.0	6,500.0	6,100.0	7,800.0	7,300.0
Debt/Equity Ratio	1.62	1.70	1.10	1.02	1.02	1.09

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**Industry Segments**

A breakdown of the firm's sales by major business segment for the past two years is shown below:

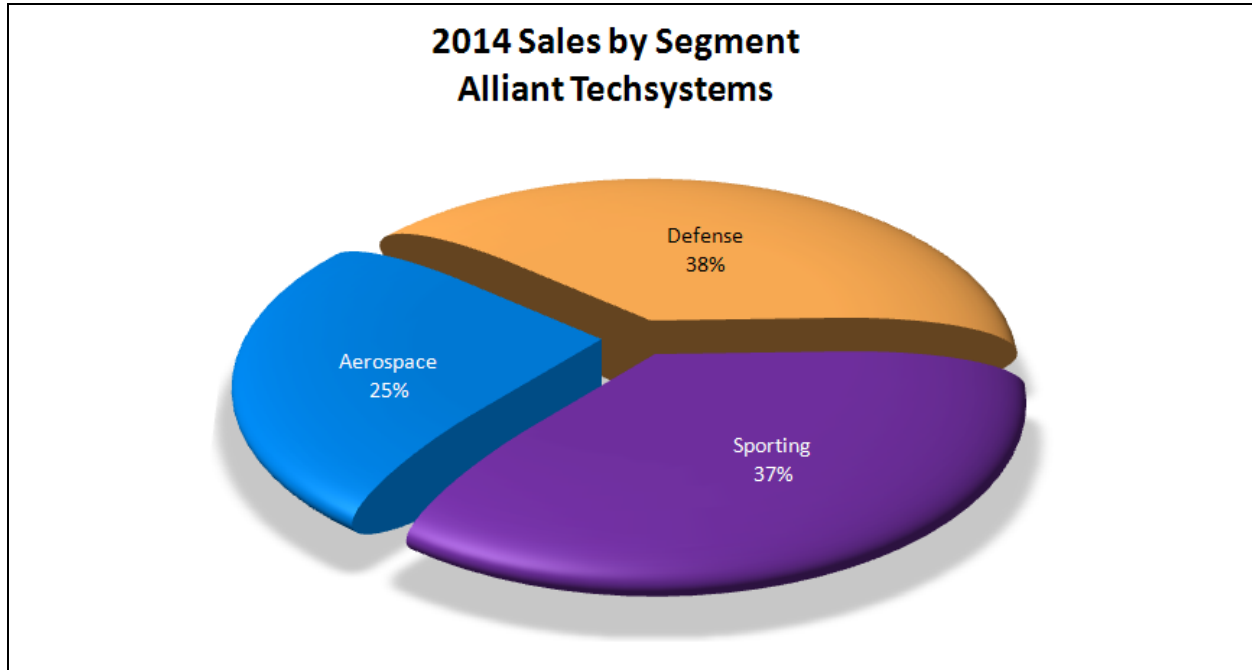
<b>SALES</b>	<b>2013</b>	<b>2014</b>
(USD millions)		
Aerospace	1,267.7	1,277.4
Defense	2,109.7	1,950.8
Sporting	1,183.2	1,862.3
Eliminations	-198.5	-315.4
<b>TOTAL</b>	<b>4,362.1</b>	<b>4,775.1</b>

<b>OPERATING INCOME</b>	<b>2013</b>	<b>2014</b>
(USD millions)		
Aerospace	144.4	141.7
Defense	270.5	210.7
Sporting	118.3	270.5
Corporate	-63.6	-32.6
<b>TOTAL</b>	<b>469.6</b>	<b>590.3</b>



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### Strategic Outlook

There's a new player in the space systems sector – Orbital ATK.

The new \$4.5 billion firm, created from the combination of ATK's and Orbital Sciences' aerospace and defense operations, will be a solid mid-tier space and missile systems provider. The merger-of-equals transaction will combine Orbital's small- and medium-class satellite and launch vehicle product lines with ATK's A&D rocket propulsion, composite structures, and space power systems to produce more capable and affordable space and missile defense products.

Overall, the deal will enhance ATK's strong production capabilities with Orbital's systems design, engineering, and integration acumen to provide greater value to current and future customers.

"The proposed merger will generate cost and revenue synergies and create a more streamlined and competitive operator," said ATK CEO Mark DeYoung. "We see opportunities to build on ATK's success in Aerospace and Defense through a combination with Orbital's proven track record in creating new launch vehicles, satellites, and other advanced space technologies. We are both focused on enhancing the capability of existing customer systems by developing solutions that can be more flexibly deployed to support their mission with enhanced cost-effectiveness. We also see significant opportunities for growth as new programs are initiated or begin to ramp up production."

The new Orbital ATK is expected to lower costs and risks through the combination, saving a forecasted \$70-100 million a year by the end of 2016. In turn, this will help the nascent firm increase its competitive edge in future procurements, especially with a cash-strapped NASA. Company officials believe an additional \$100-200 million in annual revenue could also be generated through increased federal contracting opportunities brought on by the combination and its increased synergy.

With its increased critical mass, the new firm may have an opportunity to crack into the military launch sector, currently dominated by the Boeing and Lockheed Martin joint venture, United Launch Alliance. Under the current procurement, rockets would be bought in bulk lots rather than individually in order to reduce costs and support the industrial base. Such a system would commit the government to buying between six and 10 rockets per year for up to five years.

ULA benefits strongly from such a system, as its Evolved Expendable Launch Vehicles (EELVs) are the most proven and low-risk. However, competitors including Orbital, SpaceX, and ATK would dearly love to have a chance to compete. SpaceX has been the most aggressive in this regard, filing a protest against the Air Force in 2014 for its decision to award a block-buy contract for 36 launches to ULA, a sole source deal that corporate officials derided as wasteful for taxpayers. Whether or not the protest stands, a middle ground

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might be found to allow the new players a better chance to gain a share of this narrow market.

The combination of the two was obvious in hindsight, as both firms have worked hand-in-glove for many years

on a variety of projects. Now, with budgets tight and a new economic reality upon us, the need for their consolidation has come.

## Prime Award Summary

The following chart and table show the dollar volume of federal prime contract awards and rank (if applicable) relative to the top 100 companies receiving the largest dollar volume of prime contract awards for 2009 through 2013. For more information, refer to Appendix I, "Recipients of Federal Contract Awards."

<b>Alliant Techsystems</b> (USD millions)	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Rank	28	32	36	42	42
<b>Total DoD Awards</b>	<b>2,550.2</b>	<b>2,308.5</b>	<b>2,164.8</b>	<b>1,839.4</b>	<b>1,518.9</b>



Source: [www.usaspending.gov](http://www.usaspending.gov)

## Program Activity

Some important aerospace and government programs currently underway at ATK are listed below. The following are the company's business interests:

- Defense Electronics
- Ordnance Systems
- Systems Integration
- Training Systems

### Electronics Programs

#### AAR-47(V)

The AAR-47(V) missile warning system is used on a variety of combat, transport, and utility aircraft. Initially configured for U.S. Navy and Marine Corps helicopters and slow-moving fixed-wing aircraft, it has been acquired for a number of U.S. Air Force and U.S. Army helicopters.

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## Night Vision Advanced Technology Combat Vehicles

The U.S. Army's Night Vision Advanced Technology Combat Vehicles effort develops target acquisition sensor technology to meet the stringent fire-control requirements of combat vehicles. The primary objective of the Night Vision Combat Vehicles project is to improve the range and sensitivity necessary to support the target engagement capabilities of fire-control systems in ground vehicles, as well as improve infrared search and track technology for air-defense applications.

## Missile Programs

### AARGM

In June 2003, Alliant Techsystems received a \$222.6 million system development and demonstration contract from the U.S. Navy to develop the precision-strike AGM-88E Advanced Anti-Radiation Guided Missile. ATK is the prime contractor for the AARGM, a follow-on retrofit program to the Navy's High-Speed Anti-Radiation Missile (HARM). AARGM is classified as a major defense acquisition program – accordingly, the SD&D award marked a significant milestone for ATK. For the first time, the company operated as the prime contractor on a major missile system program. AARGM is a high-speed air-to-surface missile with a new multimode seeker that includes an integrated GPS/inertial navigation system, an advanced passive radar seeker, and an active millimeter wave radar terminal seeker. In 2009, the company was awarded a \$55 million low-rate initial production contract from the U.S. Navy for the AARGM.

### Propulsion Systems

Alliant Techsystems (formerly Hercules and Thiokol) has produced propulsion systems for NASA and all branches of Department of Defense services for 50 years. Programs that used, or are using, ATK propulsion systems and fuels include the following: Polaris, Poseidon, Trident, Pershing, Scout, Nike, Shrike, Sparrow, Phoenix, Honest John, Sidewinder, Pioneer, Telstar, Explorer, Vanguard, Tiros, Alto, Echo, and the Space Shuttle. In addition to propellant fuels and solid rocket engines, ATK was a pioneer in the development of materials and structures for large strategic rocket motors.

ATK produces rocket motors and rocket motor components for the following tactical missiles:

AGM-88A/B/C HARM  
AGM-114A/B HELLFIRE  
AIM-7 Sparrow  
AIM-9 Sidewinder  
AIM-9X Sidewinder  
AIM-54A/C/C+ Phoenix

AIM-120A AMRAAM  
BGM-71 TOW  
FGM-77 DRAGON  
FGM-148 Javelin  
MIM-72 Chaparral  
MIM-104 Patriot  
Predator  
RIM-66/67 Standard

ATK was also involved in the manufacture of motors for the following strategic missile programs:

LGM-30F/LGM-30G Minuteman  
MGM-118A Peacekeeper  
UGM-133A Trident II

## Ordnance & Munitions Programs

### Government-Owned, Contractor-Operated (GOCO) Facilities

Before World War II, the government recognized three important factors. First, private industry could not realistically support the massive production capabilities needed for potential armed conflict. Second, facilities built for consumer and industrial products could not, for the most part, be transitioned into ammunition plants. Third, the expertise to operate and manage high-production plants resided in the private sector. The answer in 1940 was GOCO, in which government plants were designed, constructed, and operated with American industry providing the expertise and operating capabilities. Since that time, GOCO plants were supposed to alternate between production and standby, depending upon national needs. Most GOCO plants are installations under the U.S. Army Armament, Munitions and Chemical Command or are Department of Energy nuclear fuel plants.

Today, GOCO plants are competitive enterprises. They can enter into direct contracts with domestic and foreign military services and with approved contractors. The products manufactured at GOCO facilities establish stability and provide offsets to plant maintenance costs through rental fees. Entrenched GOCO operators usually win follow-on service contracts for periods of three to five years unless a major catastrophe occurs. The Company Operator (CO) profits are incentive-related, ranging from 5 percent to perhaps 10 percent for outstanding results such as meeting schedules, maintaining quality, and improving safety records.

Alliant's Armament Systems operates the following GOCO facilities: Lake City Army Ammunition Plant (Independence, Missouri) and Allegany Ballistics Laboratory (Rocket Center, West Virginia). The company was unseated as the incumbent operator of the Radford Army Ammunition Plant in southwest Virginia by BAE Systems in 2011.

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Website: <http://www.atk.com/products-services/facility-management>

### 25mm Ammunition

Procurement of this caliber continues to increase as various new weapons are introduced into service use. The primary driver in this program has been the M242 Bushmaster cannon, which arms the Army's M2/M3 Bradley fighting vehicle, but the Marines use this weapon both for the Light Armored Vehicle-25 and in podded form for the AV-8B aircraft.

### 30mm Ammunition

The two main uses for 30mm ammunition are for the GAU-8 on the A-10 attack aircraft and the related GPU-5 podded aircraft cannon and for the 30mm M230 helicopter cannon on the AH-1S Cobra and the AH-64 Apache.

### 120mm Tank Cannon Ammunition

Alliant Techsystems produces the following 120mm tank cannon ammunition rounds:

**M829.** The M829 Armor Piercing Fin Stabilized Discarding Sabot-Tracer cartridge is a U.S.-designed round intended to be the primary armor-defeating round for the M256 tank cannon that arms the M1A1/A2 Abrams tank.

**M830.** The M830 High Explosive Anti-Tank-Multipurpose-Tracer (HEAT-MP-T) round evolved directly from the German DM12A1 design that is utilized by the Rh 120 cannon on the Leopard 2 tank. It is a fixed, fin-stabilized, chemical energy, multipurpose round with an anti-armor and anti-personnel capability.

**M831.** The M831 round is a practice HEAT-MP-T type. It has been designed to match the characteristics of the M830 round, but is intended for use in training. The projectile is completely inert.

**M865.** The M865 Target Practice Cone Stabilized Discarding Sabot-Tracer is a target practice round. Under the correct circumstances, it will approximate the ballistic characteristics of the M829 round out to 3 kilometers.

**Smart Target Activated Fire and Forget (STAFF).** This program is to develop a top-attack projectile using a tandem-shaped charge or flat cone-shaped charge warhead.

**Tank Extended Range Munition.** This effort is to develop a round that will enable the M1A1/A2 to engage targets up to a distance of 8 kilometers.

### AT-4/M136

This is a man-portable anti-armor weapon. Alliant Techsystems is the licensed agent for the AT-4 for the

Western Hemisphere. This weapon was originally developed by Saab-Bofors Dynamics, Sweden. Licensed production of this weapon is ongoing in Sweden.

### CBU-87/B Combined Effects Munitions

The CBU-87/B is an anti-tank/anti-materiel/anti-personnel cluster bomb. Alliant Techsystems is the second source for the complete CBU-87/B.

### CBU-97/B Sensor Fuzed Weapon

This is an air-delivered submunitions dispenser and anti-tank submunition. The SUU-64/B Tactical Munitions Dispenser portion of this weapon is supplied by Alliant Techsystems.

### CBU-98/B Direct Airfield Attack

The CBU-98/B is an airfield demolition/area denial weapon. The SUU-64/B Tactical Munitions Dispenser portion of the weapon is produced by the Marquardt Company and Alliant Techsystems.

### Gator BLU-91/B

The Gator is an air-delivered anti-tank and anti-personnel submunition.

### Land Mines

ATK works on numerous land mine programs, including the following:

**Ground Emplaced Mine Scattering System.** The Ground Emplaced Mine Scattering System is now fully fielded in European- and U.S.-based units.

**Volcano.** The Volcano is a derivative of the Gator system developed by Alliant Techsystems.

**Modular Pack Mine System.** The Modular Pack Mine System is intended for infantry protection. It was developed by Aerojet, with Alliant Techsystems responsible for systems integration and Hughes for the command electronics.

**M86 Pursuit Deterrent Munitions.** The M86 Pursuit Deterrent Munitions is a derivative of the Area Denial Artillery Munitions (ADAM) anti-personnel mine. Alliant Techsystems is the prime contractor.

**Selectable Lightweight Attack Munitions (SLAM).** This new lightweight mine is designed for use by U.S. Army Special Forces, Rangers, and similar units. It can be used as an anti-armor mine or as a demolition charge.

### M109 155mm Self-Propelled Howitzer

The M109 is a tracked 155mm self-propelled artillery system. Alliant Techsystems produces the M109A6 Paladin's automatic fire control system and Modular Azimuth Positioning System.

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## Space System Programs

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### Antares

Antares is a medium-class space launch vehicle developed by Orbital Sciences. The vehicle's second stage, the Castor 30, is a solid fuel motor developed by ATK. Antares' primary mission will be to launch Cygnus transfer vehicles to the International Space Station. Orbital will also market the launch vehicle to carry remote sensing satellites to low-Earth orbit. First launch occurred in April 2013. Flights will ramp up to a level of two to three per year beginning in 2014.

### Atlas Launch Vehicles

Atlas is a family of medium-lift expendable launch vehicles. Atlas ELVs are designed primarily to carry large communications satellites to geosynchronous transfer orbit. The Atlas IIAS features four Castor IVA solid-propellant strap-on rocket boosters.

### Black Brant Sounding Rockets

Black Brant suborbital vehicles are used to conduct upper-atmospheric research, microgravity research, and training and testing as a ballistic missile target. Produced by Bristol Aerospace, ATK provides the rocket's Castor 4B and Star 27 motors.

### EELV

The evolved expendable launch vehicle is a new class of rocket for medium and heavy payloads. Boeing and Lockheed Martin Astronautics are involved in EELV pre-engineering and manufacturing development. Additional Boeing EELV contractors include Alliant Techsystems.

### Orion Crew Exploration Vehicle

Formerly known as the Crew Exploration Vehicle (CEV), the Orion Multipurpose Crew Vehicle (MPCV) is being designed to act as an emergency escape vehicle and to provide crew transportation into low-Earth orbit and deep space. NASA chose Lockheed Martin as the prime contractor in August 2006. Orion will consist of four functional modules: the Launch Abort System for emergency crew escape during launch; the Crew Module (CM) for crew and cargo transport; the Service Module (SM) for fluids storage, propulsion, and electrical power; and finally, the Spacecraft Adapter, which will serve as the structural transition to the launch vehicle. ATK is providing Launch Abort System support on this program.

### Pegasus XL

Jointly produced by Orbital Sciences Corp and ATK, Pegasus is a winged space booster designed for launch from any large transport aircraft. ATK performed structural development of Pegasus, developing the two-piece composite payload fairing. In designing the

aluminum saddle that attaches the wing to the booster body, ATK borrowed the design used for the SRAM II short-range attack missile. With the launch of NASA's IRIS spacecraft in June 2013, there are no more missions on the Pegasus launch manifest.

### Satellite Components

ATK provides a variety of propellant tanks, composite reflectors, and antennae for satellite programs such as the 1300, A2100, and Boeing-702.

### Space Launch System

The Space Launch System (SLS) is a result of a compromise between NASA and Congress after the Constellation program (under which the Ares I and Ares V launch vehicles were being developed) was terminated in 2009. The heavy-lift SLS is an effort at NASA to develop a launch vehicle that can leave low-Earth orbit. The basic design of the SLS calls for a two-stage launch vehicle with side-mounted strap-on boosters. The SLS is being designed to lift crew and cargo into orbit. In particular, it will carry the MPCV. Initially, NASA expects the launch vehicle to carry 70 to 100 metric tons into orbit, with capacity eventually being raised to 130 metric tons. The SLS will be the center of NASA's efforts to expand human exploration beyond low-Earth orbit. Even as NASA moves forward with the SLS program, the controversy continues. However, funding will continue to be allocated for development work, and a launch is expected within 10 years.

### Taurus

Taurus is a four-stage, solid propellant, expendable launch vehicle. It is a hybrid booster, combining the Castor 120 solid rocket first stage with the three stages of the OSC Pegasus air-launched winged booster produced by ATK. Orbital Sciences Corp launched its first Taurus vehicle in 1994. To date, the Taurus has launched nine times, with three failures. Because of these setbacks, NASA has decided not to use the Taurus XL for its launch needs until Orbital Sciences creates an acceptable return-to-flight plan. NASA is one of the primary customers of the Taurus XL, so a reduction in use by the space agency will hurt the launch vehicle's sales prospects. Taurus faces competition from the likes of the Falcon 9 and the Antares.

## Unmanned Vehicles Programs

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### Model 324 Scarab

The Scarab is a high-speed, long-range, remotely piloted vehicle. The Model 324 uses a Teledyne 373-8C with 970 pounds of sea-level static thrust. The engine is aided on takeoff by a modified AGM-84 Harpoon booster produced by ATK Launch Systems.

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**MSST**

In September 2008, ATK was awarded a \$97 million contract for the design, development, integration, and test of the Multi-Stage Supersonic Target (MSST). With incentives, the value of the contract could reach \$103 million. The MSST will simulate a two-stage anti-ship cruise missile threat. It consists of a two-stage unmanned aerial target, a launcher, and associated support equipment. The U.S. Navy will use MSST to

evaluate the operational effectiveness of weapons / combat systems against next-generation surface-to-surface anti-ship missiles that cruise at subsonic speeds, initiate a separation event, and then make a supersonic dash to the intended target. Work will be performed in Sacramento and Woodland Hills, California; Plymouth, Minnesota; Elkton, Maryland; and Wichita, Kansas. The MSST is to enter service in 2015-2016.

## U.S. Contract Awards

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Below is a listing of major contracts awarded to ATK from the U.S. government in the past three years. Note that the "Description" section is excerpted directly from U.S. DoD listings. For full details on individual contracts and their associated modifications, visit: <http://www.defense.gov> contracts and enter the contract number in the "Search Contracts" box.

Date	Award (USD millions)	Contract #	Description
<b>2011</b>			
2/3/11	50.0	W15QKN-10-C-0059	Material release production of 120mm high explosive, guided, Xm395 cartridge or accelerated precision mortar initiative.
2/28/11	53.6	W52P1J-08-C-0011	30,000 M865 120mm cartridges, 15,000 M1002 120mm cartridges, and containers for handling the M865 cartridge.
3/21/11	34.0	W15QKN-11-C-0126	44 LRIP Spider XM-7 networked munitions systems.
3/21/11	32.5	N00019-10-D-0006	Option for up to 1,700 AAR-47 missile warning system weapons replaceable assemblies.
3/29/11	65.8	W91CRB-11-C-0024	Engineering & manufacturing development of the counter defilade target engagement system.
3/29/11	35.8	FA8681-11-C-0039	Provide the hard target sensing fuze, an advanced fuze system for use with BLU-109, BLU-113, and BLU-122 warheads and their associated guidance systems.
4/4/11	11.7	DAAA09-03-E-0001	Operation of a GOCO facility (Radford).
4/7/11	29.0	N00024-11-E-4310	Restoration projects in support of the Navy's continuing restoration program at Allegany Ballistics Laboratory.
6/17/11	45.7	W15QKN-11-D-0153	Renovation of M4 Selectable Lightweight Attack Munitions (SLAM) to the NEW M4A1 configuration and production of the M320A1 SLAM improved functional trainer kits.
6/30/11	77.3	W15QKN-10-C-0050	Manufacture & develop the M829E4 120mm armor piercing, fin stabilized, discarding sabot tracer cartridges.
7/20/11	109.2	N00019-11-C-0071	Engineering & manufacturing development for the joint and allied threat awareness system for Navy and Marine Corps rotary aircraft.
7/28/11	8.9	W52H09-10-D-0095	Spare components for the M230 gun in support of the Apache helicopter for Saudi Arabia and Egypt.
8/1/11	7.9	DAAA09-99-E-0002	Production base support projects at Lake City Army Ammunition Plant.
9/16/11	16.0	W52P1J-10-C-0058	Procurement of 7,400 LUU-2D/B illumination flares & 6,760 LUU-19B/B infrared flares for FMS.
9/30/11	8.3	HQ0147-11-C-0100	Rocket motor technical services to include the processing, shipping, storage, operation, and disposal of propulsion assets & components.
10/3/11	12.0	W52P1J-10-C-0058	7,272 LUU-19B/B infrared flares.
10/3/11	9.6	HQ0147-11-C-0014	Develop and test specific third-stage rocket motor technologies of interest to the MDA.
10/5/11	8.0	DAAA09-03-E-0001	Operation of a GOCO facility (Radford).

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Date	Award (USD millions)	Contract #	Description
10/31/11	54.4	N00019-12-C-2005	LRIP III of the AARGM.
11/10/11	7.2	W15QKN-11-C-0126	Procure 357 munitions control units.
<b>2012</b>			
1/19/12	13.5	HQOI47-11-C-0003	Develop & test Solid Divert & Attitude Control Systems (SDACS) technologies of interest to the Missile Defense Agency.
3/16/12	24.1	W52P1J-12-C-0028	Projectile gun units, 13D/B cartridges, in support of the Air Force.
4/2/12	68.4	W52P1J-09-C-0016	Procure lightweight 30mm M789 high-explosive dual-purpose ammunition cartridges.
4/2/12	2541.0	W52P1J-09-D-0027	Procurement of 5.56mm small caliber ammunition. Work will be performed in Independence, MO.
4/4/12	10.6	N00019-11-G-0014	AARGM Block I upgrade.
4/9/12	36.5	W52P1J-12-C-0027	Procurement & refurbishment of 120mm tank training ammunition.
4/13/12	7.9	W15QKN-12-C-0058	Spider software Block-4 updates in support of the Spider joint venture.
5/1/12	8.8	N00019-08-C-0058	Services & supplies in support of the Multi-Stage Supersonic Target program.
5/4/12	49.0	W15QKN-12-D-0035	Engineering & technology development, manufacturing & component testing services in support of large & medium caliber systems.
5/16/12	58.3	W15QKN-11-C-0126	Procure Spider XM-7 networked munitions systems.
5/29/12	16.1	W52P1J-12-C-0037	600,000 lightweight 30mm M788 target-practice cartridges, 300,000 25mm M793 target-practice traced cartridges & 11,000 30mm M883 high-pressure test cartridges.
5/29/12	20.6	W15QKN-06-C-0130	Procure precision-guided kits.
5/29/12	84.8	W52P1J-12-D-0046	Procurement of 1,469 FMU-143R/B bomb fuzes; 2,705 FMU-143S/B bomb fuzes; & 789 FMU-143T/B bomb fuzes.
7/16/12	6.6	W15QKN-06-C-0130	Engineering & manufacturing development phase of the precision guidance kit.
8/17/12	125.0	FA8818-08-D-0037	Modification for the sounding rocket program.
8/27/12	84.1	W15QKN-12-D-0089	Procurement of the Mk 437 multi-option fuze, Navy.
8/30/12	14.3	M67854-12-C-6014	Precision Extended Range Munition (PERM) EMD effort.
9/10/12	70.6	N00019-12-C-0113	Full-rate production 1 of the AARGM. Conversion of U.S. government furnished AGM-88B high-speed anti-radiation missiles into 53 AGM-88E AARGM.
9/17/12	10.6	FA8213-12-C-0034	Procure 415 units of rocket-assisted takeoff motor.
9/24/12	237.0	W52P1J-12-D-0083	Procurement of various non-standard ammunition in support of FMS.
9/24/12	7.9	N00019-11-G-0014	AARGM Block I upgrade.
9/25/12	27.9	W52P1J-12-C-0075	Procurement of 30mm PGU-13D/B cartridges in support of the U.S. Air Force.
9/27/12	52.7	HQO147-12-C-0016	Develop & test solid divert & attitude control systems technologies of interest to the Missile Defense Agency (MDA).
9/27/12	52.8	HQO147-12-C-0016	Develop & test solid divert & attitude control systems technologies of interest to the MDA.
10/4/12	8480.0	W52P1J-12-D-0078	Procurement of small caliber rifle ammunition & for the operation, maintenance & modernization of Lake City Army Ammunition Plant.
11/8/12	31.3	N00019-13-C-0009	Procure various AAR-47 missile warning system weapons replaceable assemblies.
11/16/12	14.5	W15QKN-06-C-0130	Produce the precision guidance kit.
12/3/12	7.1	FA8213-13-C-0001	500 AIM 9P rocket motors for the AIM-9 guided missile.

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Date	Award (USD millions)	Contract #	Description
12/13/12	6.5	N00019-09-G-0013	Upgrades of 40 micro-processor hardware boards in support of Navy, Air Force, and other U.S. services, military helicopters, rotorcraft, and low/slow fixed-wing aircraft.
<b>2013</b>			
1/7/13	7.6	W15QKN-06-C-0130	Procure precision guidance kits.
1/12/13	41.0	W52P1J-13-D-0021	High explosive incendiary with trace linked cartridges.
2/8/13	19.9	W15QKN-11-C-0126	Spider munitions control units.
2/27/13	19.7	W52P1J-12-C-0027	120mm tank training ammunition.
2/27/13	9.9	FA 13-C0-0-02	Rocket motor warm line smart transition efforts, relating to the Minuteman III.
3/5/13	9.2	W15QKN-06-C-0154	Refurbish Spider munitions control units' TS-04 system to the TS-09 version.
4/24/13	31.4	FA8106-10-C-0010	Contractor logistic support services for the Air Force's Cessna 208S.
5/17/13	48.5	FA8650-13-D-2333	Enhanced operability scramjet technology.
5/24/13	30.2	W52P1J-12-C-0027	Procurement of 120mm tank training ammunition.
6/20/13	20.0	N00019-13-C-0009	Procure various AAR-47 missile warning system weapons replaceable assemblies.
8/2/13	45.0	N00164-13-D-JN07	30mm automatic weapons, spare parts, special tools/equipment & engineering support
8/15/13	84.8	W52P1J-13-D-0087	Proximity sensor & sensor dummy equipment.
8/30/13	57.8	W15QKN-13-C-0074	LRIP of the XM Precision Guidance kit. FMS to Australia.
9/25/13	102.4	N00019-13-C-0162	FRP Lot II of the Advanced Anti-Radiation Guided Missile (AARGM).
11/18/13	9.0	W912QR-14-D-0001	Environmental services for the Army Corps of Engineers, Louisville Mission Boundaries.
11/19/13	?	N00178-14-D-7623	Seaport enhanced (SEAPORT-E) acquisition program for services procurements.

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