

U.S. Aerospace and Defense: Strategic Contributor to America's Strength, Prosperity, and Security.

Aerospace Orders, Shipments, Backlog Show Increases

Key economic indicators show that the aerospace and defense industry is on pace to have its best year in terms of orders and shipments in more than a decade.

New orders and shipments for aircraft and parts increased significantly in the first half of 2005, according to statistics compiled by AIA's Aerospace Research Center. The numbers also include search and navigation instruments and include both the civil and defense sides of the industry.

AIA President and CEO John Douglass said the statistics, coupled with employment increases in the same time period, promise a period of sustained growth.

"These numbers reflect a robust industry, and we are confident the good results will continue through the rest of the year," Douglass said.

The industry logged \$98.9 billion in net new orders through June, which would put it on pace for \$197.7 billion for the year. That compares to \$164.9 billion in 2004 and would be well ahead of 2000's \$166 billion — the best year for net new orders since 1992.

There were \$83.5 billion in shipments through June, which would result in \$167 billion by the end of 2005 if the

Aerospace Orders continued on pg. 4

Industry Employment Growth Continues Encouraging Trend

Aerospace industry employment through the first half of 2005 continued a positive trend that started last year, adding 11,100 jobs since the end of 2004.

Statistics compiled by AIA's Aerospace Research Center after the first two quarters of this year showed total aerospace employment of 618,400, compared to 607,300 in December 2004.

The growth is not unexpected after last year's job rebound, said AIA President and CEO John Douglass, adding that it underscores the industry's important place in the national economy.

"It's encouraging to see that last year's

Employment continued on pg. 4

Electronic Data MOU Signed

The Air Transport Association has joined with AIA and the Aerospace Defence Industries Association of Europe in a memorandum of understanding to harmonize a civil and military specification for exchanging electronic data.

For several years AIA has collaborated with the European defense industry organization, formerly known as AECMA, on S1000D technical publications specifications.

Electronic Data continued on pg. 6

AEROSPACE FOCUS



Hugh Quigley (far left), DynaBil Industries, briefs Senate staff members on supplier issues during SMC mid-summer lobbying campaign. Also at the meeting, clockwise from Quigley's left, are AIA Intern Bob Thelen, Bob Spole of Therm Inc., Ryan McConaghy of Sen. Charles Schumer's staff, Charles Perham of Sen. Hillary Rodham Clinton's staff, Skip Wright of SC Integration, and Cleo Brager of Fastener & Hose Technology.

INSIDE

Pg. 2 Washington Pipeline: NSS Programs Are a Critical Defense Asset in the War on Terrorism

Pg. 3 AIA Hails House Funding for NASA Space Vision

Pg. 3 Industry Engaged in Netcentric Design

Pg. 4 Aerospace & Defense Programs and Productivity Conference Set for Nov. 14-16 in Phoenix, Ariz.

Pg. 5 AIA Partners with Defense Department in Software Integrity and Security Assurance Effort

Special Insert:
The Suppliers' Voice



WASHINGTON PIPELINE

National Security Space Programs: Critical Defense Assets in the War on Terrorism

. . . military satellites form an electronic brain on which U.S. and allied warfighters rely to deter or defeat the foreign enemies of our time.

which U.S. and allied warfighters rely to deter or defeat the foreign enemies of our time.

The first commercial communications satellite, Early Bird, had a modest life cycle of 48 months, while today's satellites offer telecommunications and imaging services to millions of military users for an average period of 15 years.

In 2002 the Defense Department began deploying a new military satellite communications system — Milsatcom — that will have capacity to transmit several gigabytes of information every second up to 10 times faster than the existing network.

Milsatcom's ultimate effectiveness also will depend on another component of our NSS programs — a safe and reliable space launch infrastructure.

And that's why AIA strongly encourages ongoing efforts between industry and the Pentagon to develop more responsive spacelift vehicles and facilities. When new military satellites emerge, they can and should begin operating in orbit as efficiently as possible.

Milsatcom, in concert with the Global Positioning System, has made information the most powerful weapon in the American arsenal. For example, space-enabled targeting means that one B-2 strategic bomber can leave

One word connects America's National Security Space (NSS) Programs with our 21st century imperatives to defeat global terrorism and protect the homeland against foreign aggression: information.

Just as we live in the age of an information economy, so, too, we now confront the age of information warfare. Intelligence on enemy force activities garnered from dozens of military satellites form an electronic brain on

an airfield in the United States with 80 precision-guided munitions that will fall within 10 feet of each of their 80 programmed targets.

By contrast, during the Vietnam era, entire squadrons of F-4 fighters often concentrated on just one target and could achieve a level of precision of only 400 feet.

Today, we face new adversaries concealed in mountain ranges, embedded among city-dwellers, or protected by rogue regimes — terrorists whom we can only confront through a combination of satellite-provided intelligence data and ground-based special operations.

America's adversaries no longer leave and return to one location or assemble in the open plains or the high seas. The nation's armed forces pursue a mobile enemy who uses low-cost yet lethal means of destruction, such as hidden roadside bombs, mortars, grenades, and, most tragically, suicide belts and car bombs.

This grim security environment underscores the enduring value of NSS Programs. Space-based communications allow the United States to deploy frontline soldiers and intelligence personnel with the most accurate knowledge available on the locations, movements, and intentions of enemies dispersed around the world.

As the ground war against terrorism continues, we will prevail — thanks, in a very significant way, to aerospace and defense technologies and a strengthened space launch infrastructure.



John W. Douglass

A stylized, handwritten signature in black ink.

AIA President and Chief Executive Officer

AEROSPACE INDUSTRIES ASSOCIATION

WASHINGTON WATCH

AIA Hails House Funding for NASA Space Vision

Full funding of the nation's Vision for Space Exploration by the House of Representatives is a huge boost for the future of space and aeronautics programs, AIA President and CEO John Douglass said.

House members endorsed the new vision, which will send astronauts back to the moon and on to Mars in the coming decades in passing the NASA Authorization Act of 2005 by an overwhelming vote of 383 to 15.

HR 3070 fully funds the nation's new exploration plan at \$6.4 billion for the coming fiscal year and provides \$962 million for basic aeronautics research.

"In adopting the NASA authorization, the House took significant steps to secure the leadership of the United States in peaceful space exploration," Douglass said. "The bill also advances the critical research conducted by NASA's Aeronautics Research Mission Directorate, including programs that support the modernization of the nation's air transportation system."

The bill directs NASA to execute the vision, first announced last year by President Bush, through a plan to return to the moon no later than 2020

Funding continued on pg. 5



Industry Engaged in Netcentric Design

In a Public-Private Partnership Tiger Team, AIA and the Defense Department are collaborating on a strategic Concept of Operations designed to develop a standard method of accessing, viewing, exchanging, and sharing data efficiently between industry and government within a netcentric operational environment.

The goal is to deliver an automated common data exchange for all programs and users with integrated data management roles and responsibilities. The project is in its initial concept/requirements phase with initial operating capability projected in 2009.

Included in the industry team for the project are AIA's Product Support and Electronic Enterprise Integration committees and the e-business Steering Group.

Netcentric continued on pg. 6

AIA Collaborates with DoD on PBL Awards

During the recent AIA Product Support Committee conference, the Defense Department announced plans to recognize government and industry teams with outstanding achievements in performance-based logistics (PBL).

The new awards program will focus on PBL development, implementation, and execution in three levels: systems, sub-systems, and components.

Officials said goals of the Defense Department's PBL awards program are to:

- Enhance PBL awareness throughout DoD.
- Improve mission success and reduce total ownership costs by encouraging teamwork and a common objective through government and industry partnering.
- Recognize exceptional performance for both government and industry excellence in developing, implementing, and executing exceptional PBL strategies.
- Foster development of competitive programs within DoD by providing a higher level of competition recognition.
- Encourage innovative management and effective use of

PBL Awards continued on pg. 5

AIA CONTACTS

AIA's staff will answer your questions and receive your comments on articles appearing in **AIA UPDATE**.

John W. Douglass
President and Chief
Executive Officer
703-358-1001

Alexis Allen
Director, Communications
703-358-1075

Ginette C. Colot
Secretary-Treasurer
703-358-1020

Jonathan L. Etherton
Vice President, Legislative Affairs
703-358-1060

Hoai B. Huynh
Director, Environment, Safety &
Health
703-358-1050

Bill Lewandowski
Vice President, Supplier
Management
703-358-1090

Bruce Mahone
Assistant Vice President, Technical
Operations
703-358-1095

R. Terry Marlow
Vice President, Government Division
703-358-1040

David H. Napier
Director, Aerospace Research Center
703-358-1015

Michelle Princi
Assistant Vice President,
Membership Services
703-358-1005

Michael Romanowski
Vice President, Civil Aviation
703-358-1082

Craig E. Steidle
Vice President, International
Affairs
703-358-1073

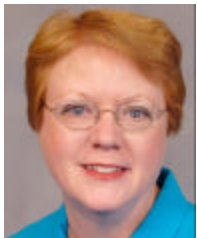
J.P. Stevens
Vice President, Space
Systems
703-358-1030



The Aerospace Industries Association represents the nation's leading manufacturers and suppliers of civil, military, and business aircraft, helicopters, unmanned aerial vehicles, space systems, aircraft engines, missiles, materiel and related components, equipment, services, and information technology. **AIA UPDATE** is published 9 times yearly. Statements of fact or opinion do not necessarily represent the views of the officers or member companies of AIA. All material in **AIA UPDATE** may be freely reproduced, provided credit is given to AIA and a copy is mailed to: **AIA UPDATE**, 1000 Wilson Blvd., Suite 1700, Arlington, VA 22209-3928; phone 703-358-1000, fax 703-358-1011, www.aia-aerospace.org.

Guth Joins Association's Procurement and Finance Team

Elaine Guth has joined AIA as assistant vice president of procurement and finance, responsible for issues related to government acquisition policies and practices.



She comes to AIA from the Manufacturers Alliance for Productivity and Innovation where she was an attorney and council director. She replaces Pat Sullivan who retired in May.

In her new position Guth focuses on issues that include civil-military integration, independent research and development, product liability, work measurement, material management, and accounting systems. She is the staff officer supporting AIA's committees covering property management and procurement techniques as well as the Legal Committee.

Guth previously worked as a trial attorney for the Commercial Litigation Division of the U.S. Justice Department and for the Naval Air Systems Command.

She earned a bachelor of arts degree in statistical psychology and a law degree from Wake Forest University.

Guth can be contacted at elaine.guth@aia-aerospace.org or 703-358-1045.

Employment continued from pg. 1

employment increases marked the beginning of what is hopefully a long-term trend," Douglass said.

Aerospace employment had been falling since the early 1990s as a result of the end of the Cold War and other factors. It hit a 50-year low of 579,700 in February 2004 but then started a sustained rebound that added 27,600 jobs by the end of the year.

Other economic indicators are looking good this year, including increases in orders, shipments, and backlog of complete aircraft and parts and search, detection, and navigation instruments. That suggests employment will continue to increase this year.

The employment figures, which come from the Bureau of Labor Statistics, include workers in aircraft, missiles, space vehicles, propulsion, and parts as well as search, detection, and navigation instruments sectors.

The aerospace and defense industry is the leading net exporter of manufactured goods, with a positive foreign trade balance of \$31 billion last year.

AIA Source: david.napier@aia-aerospace.org

U.S. Aerospace and Defense: Strategic Contributor to America's Strength, Prosperity, and Security.

AIA Supporting Aviation Week's Aerospace and Defense Conference

Several association leaders are scheduled to participate in Aviation Week Group's Aerospace & Defense Programs and Productivity Conference Nov. 14-16 in Phoenix, Ariz.

Board of Governors Chairman Bob Johnson, chairman of Honeywell Aerospace, and Executive Committee Member Dave Calhoun, president and chief executive officer of General Electric Transportation, will be joined by AIA President John Douglass at the conference.

Briefings will cover more than \$500 billion in current and future defense and aerospace programs, and discussions will look at issues faced by aerospace, defense, and space industries as well as supply chain opportunities and challenges.

The conference will open with a special one-day workshop focusing on program excellence and culminating in Aviation Week Group's Program Excellence Awards.

The awards will identify best practices in risk management, managing technical complexity, and establishing organizational processes that launch and maintain program peak performance.

Program leaders will share how best practices were developed, lessons learned, and next steps to assuring continued excellence.

In addition, executive-level panel discussions will focus on the Boeing 787, the Next-Generation NASA Crew Exploration Vehicle, Future Combat Systems, the F-35 Joint Strike Fighter, the Eurofighter, unmanned combat and reconnaissance vehicles, missile defense, and other programs and issues.

For more information and registration information, visit www.aviationweek.com.

AIA Source: alexis.allen@aia-aerospace.org



Aerospace Orders continued from pg. 1

trend continues. That outpaces the \$158 billion in 2004, which is the best year on record since 1992.

The backlog of unfilled orders also showed an increase, sitting at \$228.7 billion at the end of June. In 2004 it ended at \$213.3 billion, and the previous high was \$221.2 billion in 1997.

Full statistics are available at www.aia-aerospace.org/stats/aerostats/aerostats.cfm.

AIA Source: david.napier@aia-aerospace.org

Get the Jump on Aerospace Facts & Figures



For more information, see http://www.aia-aerospace.org/stats/facts_figures/ff_subscription.cfm.

Now available on AIA's password-protected Web site are newly compiled data tables from the upcoming edition of *Aerospace Facts and Figures, 2005/2006*, due to be published in print in January.

Employees of AIA's member companies can register for free access to the site and others can purchase access on a prepaid subscription basis.

AIA Partners with Defense Department in Software Integrity and Security Assurance Effort

As the use of computers grows, software is becoming a greater and greater part of America's critical infrastructure. In this light, the Defense Department is taking steps to ensure the integrity and security of the software it uses throughout its systems. AIA, through its Technical Operations Council, Engineering Management Committee, and Electronic Business Steering Group, is an active partner with DoD in this endeavor.

Software is fundamental to the Global Information Grid and critical to all weapons, business, and support systems. As a result, all aspects of software development are being reviewed to consider threat agents, vulnerabilities, and consequences of software failures.

AIA has partnered with DoD to focus development efforts on improving assured software development tools and techniques, strengthen standards for software partitioning and modularity, and enhancing vulnerability discovery.

As the partnership progresses, it will aim to build software assurance into the early stages of acquisition programs at the system, subsystem, and component levels, followed by test metrics to evaluate the level of software assurance achieved. The strategy is designed to prevent software failures and vulnerabilities before they occur.

AIA Source: [bruce.mahone @aia-aerospace.org](mailto:bruce.mahone@aia-aerospace.org)

Funding and to deploy a new Crew Exploration Vehicle early in the next decade. It also instructs the agency to formulate a national aeronautics policy for the allocation of resources through 2020.

During the spring and summer AIA worked closely with members of the House Science Committee, the panel that has jurisdiction over NASA's budget, to keep the exploration plan on schedule and to urge administration support for a comprehensive, long-term plan on aeronautics investments.

AIA Source: [patrick.mccartan @aia-aerospace.org](mailto:patrick.mccartan@aia-aerospace.org)

PBL Awards resources. The annual awards will be maintained by the undersecretary of defense for acquisition, technology and logistics. Winners in each category will also receive a plaque acknowledging their achievement.

Development of the awards was achieved through collaboration between DoD and AIA's Product Support Committee.

For more information and applications, e-mail [rusty.rentsch @aia-aerospace.org](mailto:rusty.rentsch@aia-aerospace.org).

Next Regional Meeting in October

The next AIA regional meeting is scheduled for Oct. 12 and 13 in Cincinnati, Ohio.

The event will be hosted by GE Aircraft Engines. Representatives of any AIA member and associate member companies are welcome to attend.

For more information, contact Trish Ward at trish.ward@aia-aerospace.org or 703-358-1061.

Meeting Summary

Some 40 member company representatives attended the mid-summer meeting hosted by Celestica in Arden Hills, Minn.

Speakers at that event included Terry J. Pudas, deputy director of the Defense Department's Force Transformation Office who outlined recommendations for linking the transformation to strategic functions and steps to integrate ongoing transformation activities.

Rear Adm. Richard Porterfield, USN (Ret.), who was director of naval intelligence until his recent retirement, also spoke.

Presentations are on AIA's Web site in the members-only section.

AIA Source: [trish.ward @aia-aerospace.org](mailto:trish.ward@aia-aerospace.org)



An e-briefing of news developed specifically for executives in the aerospace industry.

Delivered directly to a user's inbox, the summaries contain the latest news and information that aerospace professionals need to be more effective.

To subscribe, visit AIA's Web site: www.aia-aerospace.org

Rocket Challenge Tightens the Test

Student rocketeers will have a doubly difficult test in the next Team America Rocketry Challenge now that officials have revamped the rules to include both height and time aloft targets for the first time.



Middle and high school students will have to launch handmade rockets to an altitude as close as possible to 800 feet and stay airborne as close as possible to 45 seconds. As in past years, each rocket will carry

a raw egg payload that must return to the ground unbroken. Co-sponsored by AIA and the National Association of

AIA Source: allison.harvey@aia-aerospace.org

Rocketry, the event is the world's largest rocket contest. An estimated 10,000 students took part in the 2004-05 Challenge, with a team from the Dakota County 4-H Federation in Minnesota winning top honors.

In other news, the Defense Department has joined NASA as government partners in the Challenge. In addition, 39 AIA member companies have already given the contest financial support.

The first 750 teams to submit an application postmarked by Nov. 15 will be allowed to compete in the 2005-06 Challenge. Complete rules and additional information are available at www.rocketcontest.org.

The 2006 national finals are scheduled for May 20 at Great Meadow in The Plains, Virginia.

Electronic Data
continued from
pg. 1

The extended collaboration will allow manufacturers of land, sea, and air equipment to use the same global technical publication standard, which will also benefit end users of electronic publications.

The S1000D specification, established to develop standards for the electronic documentation of any civil or military system, is based on standard generalized markup language, extensible markup language, and computer graphics metafile standards.

The memorandum will be effective for approximately one year and gives all three organizations the opportunity to enter a more formal agreement.

For more information, contact
rusty.rentsch@aia-aerospace.org
or visit www.s1000d.org **or**
www.ataebiz.org.

Netcentric
continued
from pg. 3

The government team is headed by the Defense Logistics Agency and the Business Systems Response office for the undersecretary of defense for acquisition, technology, and logistics.

AIA Source: rusty.rentsch@aia-aerospace.org

National Aerospace Standards Available on AIA Web Site

All of AIA's national aerospace standards, the largest body of trade association standards in the United States, are available for purchase through AIA's Web site.

Available to AIA members and non-members, the store offers association members the benefit of a 40 percent discount in pricing.

To access the Standards Store, go to www.aia-aerospace.org and click on Library in the menu bar.



1000 Wilson Blvd.
Suite 1700
Arlington, VA
22209-3901

**PRESORTED STANDARD
U.S. POSTAGE PAID
PERMIT No. 1112
MERRIFIELD, VA**