



Winds of Change



AIAA Annual Report 2011-2012

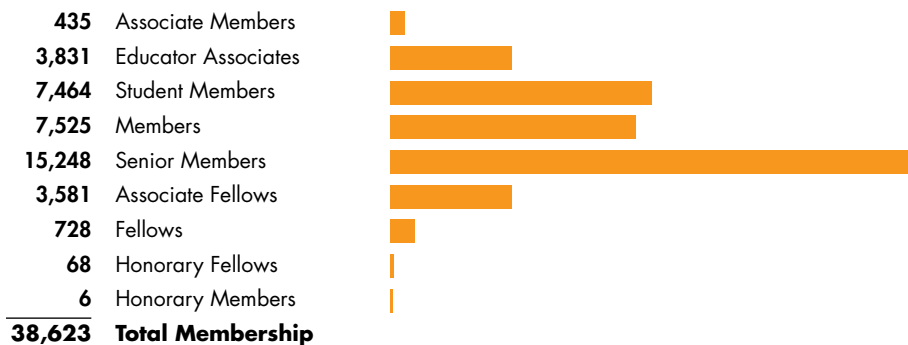


A Snapshot of AIAA

TABLE OF CONTENTS

- 2 A Snapshot of AIAA**
- 4 President's Report**
- 8 Serving the Profession: Our Members**
 - 8 AIAA Honors and Awards
 - 10 Public Policy
 - 15 Professional Development
 - 16 Workforce Development, Career Development
 - 17 Membership
 - 18 Corporate Sales and Market Development
- 20 Serving the Profession: The Future**
 - 20 STEM K–12 Outreach Programs
 - 22 University
 - 23 International
 - 26 AIAA Foundation
- 28 Publishing Essential Technical Information**
 - 28 Books and Journals
 - 32 Standards
- 34 Creating Value — Networks and Information Exchange**
 - 34 Technical Activities
 - 37 Regions and Sections
- 40 Expanding the Reach of the Profession**
 - 40 Communications
 - 42 Historic Aerospace
- 44 Financials**
- 49 Leadership**

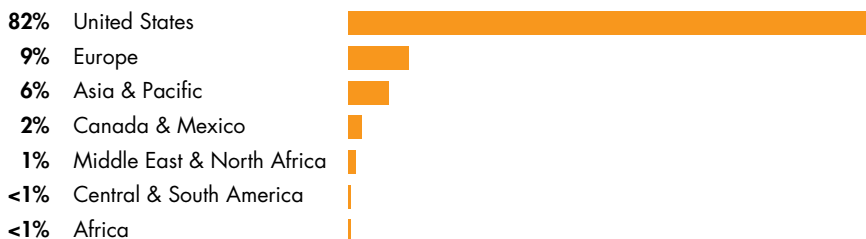
MEMBERSHIP STATUS



BY AIAA REGION



BY WORLD REGION



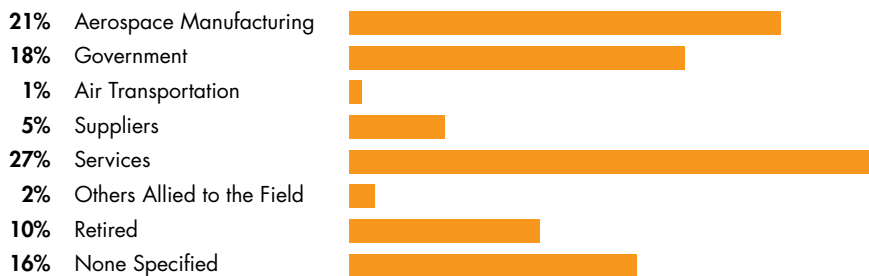
BY AGE



BY GENDER



BY PRIMARY BUSINESS



The World's Forum for Aerospace Leadership

The American Institute of Aeronautics and Astronautics is the world's leading professional society in the field of aerospace science, engineering, and operations.

We provide products, services, and events that stimulate creative technical exchange on emerging opportunities and critical problems in the aerospace profession; facilitate lifelong learning and career enhancement opportunities for aerospace professionals; pursue initiatives on aerospace workforce development, including a focus on early-career and next-generation professionals; and act as the public policy advocate and voice of the aerospace profession.

Our vision is to be the shaping, dynamic force in the aerospace profession – *the* forum for innovation, technical excellence, and global leadership.

Our mission is to address the professional needs and interests of the past, current, and future aerospace workforce and to advance the state of aerospace science, engineering, technology, operations, and policy to benefit the global society.

AIAA was formed in 1963 through the merger of the two primary professional societies for space and aviation – the American Rocket Society (ARS, founded in 1930 as the American Interplanetary Society) and the Institute of the Aerospace Sciences (IAS, founded in 1932 as the Institute of the Aeronautical Sciences). Over many decades, our members have been involved in every milestone in modern American flight.

FINANCIAL INFORMATION 2009–2011

(in thousands US \$)	Institute Total Assets	Institute Revenue	Institute Net Assets
2009	25,954	21,604	7,735
2010	27,622	24,596	9,271
2011	27,862	23,215	7,416

President's Report



Brian Dailey

A handwritten signature in black ink, appearing to read 'B. Dailey', written in a cursive style.

Operations have continued to meet our business goals and objectives, with a positive margin for the year.

As my presidential year draws to a close, I am pleased to provide my assessment of the state of AIAA at this critical juncture in our history. During the past year the Institute established or revised several key foundational elements to enhance our future while still achieving positive financial results – despite the continuing challenges of a struggling economy and a difficult government R&D environment. Because of the long-term impact of these changes we have adopted the theme “Winds of Change” for this annual report. Key initiatives during the year include the establishment of a two-year presidency beginning with my successor’s term, initiation of a major revision of our “events model” whereby we would host and manage fewer but larger and more relevant events, a renewed focus on relevance across all of our activities, and adoption of multiple online and social media initiatives.

As a backdrop, the current aerospace business climate is an interesting study in contrasts. The commercial aviation market seems to be healthy for now and the near term future, with backlogs at record levels and nagging multiyear developmental problems apparently overcome. The government aerospace sector is also holding its own, with the critical F-35 and replacement aircraft production programs supporting the market while the Air Force’s tanker and Intelligence, Surveillance, and Reconnaissance (ISR) programs are needed as core capabilities for 21st century engagements. But our corporate members are all players in the broader defense marketplace and thus feel the impact of cutbacks in ground and maritime forces. As a result, the investment and general business climate feels austere, even though revenues are generally stable. The same is true for our educational institutions. While aerospace enrollments are at high levels, there too the business climate is austere, since the universities rely on their endowments and the health of the overall economy. This situation emphasizes our increasing need for greater relevance in all that we do, assuring our value added throughout our professional community. Our standing among professional societies is strong and is reflected in our overall fiscal health. Today we are benefitting from prior years’ decisions to undertake expanded international cooperative agreements, to reach out to new, evolving constituencies in the aerospace community, and to demand better returns on our investments, whether pure financial returns or the results of investments in new events and new constituencies. Throughout these winds of change, we seek to continually strengthen the health of the Institute and the relevance of our activities, providing the foundation for success in the years ahead.

On the financial side, operations have continued to meet our business goals and objectives. Small but positive revenue gains (2.6%) combined with ongoing expense management to produce a positive margin from operations for the year. In sync with the world stock markets, our investment portfolio fell back somewhat from last year’s gains, but is still significantly improved from the dramatic lows of 2008 and 2009. Nevertheless, as a result of several years of below benchmark performance, the Finance Committee recommended a change in the management of our Investment Portfolio timed to be coincident with the change in our Fiscal Year. Therefore,

effective 1 October 2011 the Institute's Endowment and Foundation Portfolios are now managed by Vanguard Institutional Advisory Services.

The primary metrics reflecting the state of our Institute continue to be membership, conference attendance, and publications. Unfortunately, in each of those areas, the indicators are trending in the wrong direction, although declines are only in single digits. These results are better than many of our counterpart societies have experienced during these long economic doldrums. While student membership is holding steady and corporate membership is experiencing modest growth, our professional membership declined by about 1.9% overall and event attendance declined 7.4%. This is not surprising in light of the multiyear global recession, but it nevertheless requires some hard assessments and more than a status quo response. The Board of Directors and the staff are taking these declines seriously, broadly evaluating and developing approaches to enhance our relevance to our membership at large, to industry, and to government. An early positive trend is a return to increases in new members, having bottomed out in 2010.

Despite declines in conference attendance, our legacy events still retain a strong position in the marketplace and the AIAA brand ensures a cachet of excellence. But even our historically well-established conferences have seen declines in attendance and in exhibits due to reduced budgets and travel restrictions put in place by NASA, DOD, and other government agencies. This trend has motivated us to re-evaluate our strategy and to develop and implement a new event model with a broader focus: to retain the quality of our information exchange, to strengthen the professional networking during these events, to infuse a systems level focus spanning multidisciplinary topics, and to add and integrate new activities and membership growth opportunities into the platform provided by the events. Some specifics of interest include educational and public-policy oriented activities. The net result is expected to be fewer but larger, more relevant events on an annual basis. I anticipate that, as our new event model matures and the economy returns to health, conference attendance will again be on a growth path, bolstered by the strength of these new events with our legacy constituencies as well as with the infusion of our emerging new technical and entrepreneurial constituencies. We are exploring new ideas for consolidating and integrating conferences, seeking partnership opportunities with other societies, and further increasing the effectiveness of our events.

The sea change in publications is more pronounced and more complicated than most of our other product areas. Publications are affected not only by short-term economic conditions, but also by accelerating technological changes. The book industry as a whole continues to see rapid growth in e-book revenues. While individual e-book title sales are slow to take off for AIAA, revenues from the sales of our e-book archive represented 17% of book revenue last year and continues to increase. The online only usage for journals is even stronger at 47% of journal subscription revenue, up 23% from last year. These trends will certainly continue. Print books generate

In 2011 we initiated a major upgrade to the e-library to enable significantly greater flexibility in providing access to content and creating additional member value.

Many of our events are now live streamed, expanding our reach to thousands of additional constituents.

Our public policy efforts continue to have an increasing impact, with greater attendance each year at AIAA Congressional Visits Day and at our policy forums on Capitol Hill.

more revenue than e-books, but also cost more to produce and distribute than their electronic counterparts. The ultimate success of our electronic ventures remains to be seen, since we are in the middle of that transition. In 2011 we approved and initiated a major upgrade to the e-library. These tool upgrades will enable significantly greater flexibility in providing access to content and creating additional member value. Since the technical publications market remains strong and the quality of our publications remains high, our publications are expected to retain their position as the standard throughout our community. Our Publications Committee takes an active role in the national debate on the Public Access challenge championed by elements in Congress and investigated by the Office of Science and Technology Policy, i.e., making the results of all federally-funded research available free of charge – a potentially serious negative financial impact to AIAA and other professional societies. Working with our Public Policy Committee in collaboration with other societies, our Publications Committee is endeavoring to educate policymakers of the value of the peer review process.

Our efforts to update our website and to generally conduct business in a “greener” operational environment (with a greater focus on online activities) are also bearing fruit, although most members will not see these results until future years. But these activities have already had significant payoffs: enhancing our efficiency, increasing our flexibility, and engaging more effectively in the public arena. Many of our highlighted events are now live streamed, expanding our reach to thousands of additional constituents. In addition we are developing apps for a variety of mobile devices, since many of our members spend increasing amounts of time online. Further, our investments in Association Management Software over the past few years have resulted in more mature online paper review and event management processes. Our online digital version of *Aerospace America* has been well accepted with an increasing number of members opting for “online only” subscriptions. We are further developing an *Aerospace America* app for targeted outreach, especially to younger demographics, which will also enable digital advertising that we are not taking advantage of now.

As many of these activities proceed, we are also integrating them into a greater seamless whole. For example, our cordial interactions with our Chinese and European aerospace counterparts are expanding into more concrete business agreements for translated publications and cosponsored events. The end of the Space Shuttle program and an increased focus on international collaboration has produced an environment where the multilateral events initiated and executed by AIAA and our international counterparts are seen by the State Department as important in getting to know one another and in developing and maintaining longer term relationships throughout this close-knit technology-based global community.

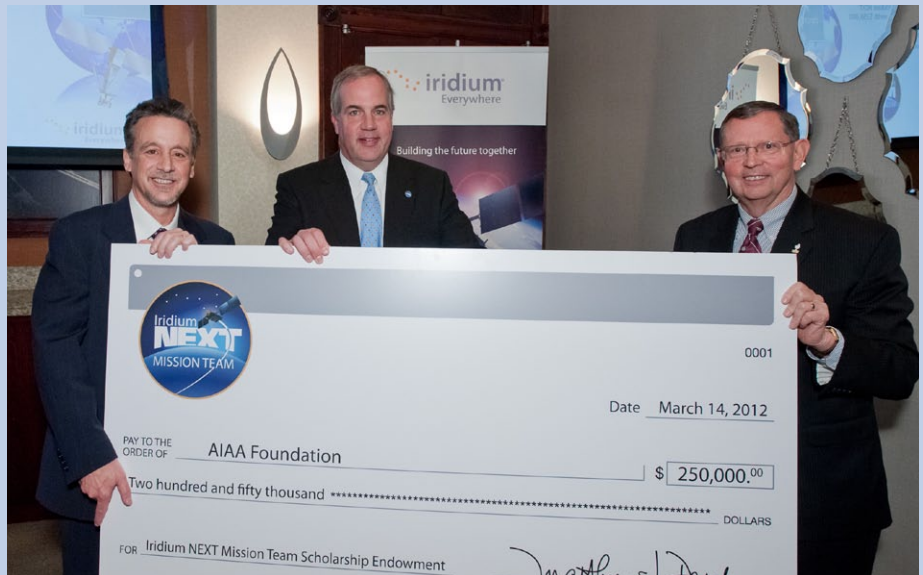
I am also pleased that our public policy efforts continue to have an increasing impact, with greater attendance each year at AIAA Congressional Visits Day and at our policy forums on Capitol Hill. With our renewed focus on policy effectiveness these efforts will play an increasing role at our technical events and will also be effective in communicating important economic and technological aspects of the nation’s role in world aerospace markets to our legislators and their senior staff. The fact that lunar exploration, access to space, and contributions of aerospace to the balance of payments are being debated in the presidential election campaign indicates a growing interest in our industry and its reflection of America’s stature in the world economy.

To sum up, AIAA is continually adjusting to the winds of change. We remain on a firm financial footing, not needing to draw on our reserves despite some serious business challenges over the past years. But we must continue to make adjustments to be more relevant and to more nimbly adapt to changing and increasingly global

AIAA Foundation Selected to Administer Iridium NEXT Scholarship

The AIAA Foundation has been selected to administer the Iridium NEXT Scholarship Fund, which will award scholarships of up to \$25,000, out of a pool initially funded at \$250,000, to students who have demonstrated high standards of academic excellence in the “STEM” fields of science, technology, engineering, and mathematics, with a focus on aerospace studies. This latest addition to our educational offerings is a result of the Invest in the Future fundraising campaign launched by the Foundation Board of Trustees in 2009.

AIAA Executive Director Bob Dickman, who also serves as President of the AIAA Foundation, stated: “The Iridium NEXT Mission Team Scholarship program will be one of the most significant educational opportunities in the aerospace industry. The contributions of these leading innovators will help support students, and the program is a great complement to the AIAA Foundation’s commitment to investing in the future of aerospace. Together we will make a lasting impact on the future of our industry.” For more information, please visit www.aiaa.org/NEXT.



■ Iridium’s Scott Smith and Matt Desch present \$250,000 in scholarship funding to AIAA Foundation President Bob Dickman.

aerospace markets. By modifying our products and reassessing our services to the profession, we are seeking to create an environment with greater value to our member professionals and corporations. The two-year presidency will enable a greater long-term continuity. The changing events model will provide more opportunities for all our current and future constituencies. Our increasing use of technology for publications, events, and communications will speak to the next generations of aerospace professionals. And we continuously seek to identify and establish the firm foundations needed to reach our goals for growth, for outreach into the global aerospace community, and for expanded service to the aerospace profession.

My time as your president has been personally fulfilling and richly rewarding as I have led the dedicated efforts of the partnership between the Institute’s volunteers and staff. This Annual Report highlights many more activities than I can address in this short summary, so I encourage you to explore this report – and to share your comments and suggestions. I encourage you to engage more fully with AIAA, to participate in activities important to your career, and to find ways in which you can make a difference. Our profession needs your support. Your enthusiastic involvement in AIAA will enhance your professional life greatly, in ways beyond what you might imagine. And especially at this juncture in time, your involvement will surely influence AIAA’s core capabilities and its perceived identity for the foreseeable future.

Serving the Profession: Our Members

AIAA HONORS AND AWARDS

AIAA is proud to honor the very best in aerospace – individuals and teams who have pushed aerospace technology forward, who have advanced the quality and depth of the aerospace profession, and who have leveraged their aerospace knowledge for the benefit of society. The Honors and Awards program began recognizing achievements in aerospace even before the American Rocket Society and the Institute of the Aerospace Sciences merged in 1963 to become AIAA. There are now over 80 different awards. The oldest date back to the 1930s and 1940s, and today two awards—the Reed Award for Aeronautics and the Goddard Award for Astronautics—represent our very highest honors. For well over 75 years, thousands of the industry's best and brightest have been recognized for their outstanding achievements in and significant contributions to aerospace, in technical fields as well as in public service, publications, section participation, and sustained service to AIAA.

Among the Stars – Saluting the Best of Aerospace



■ The 2011 AIAA Fellows and AIAA Honorary Fellows at the AIAA Aerospace Spotlight Awards Gala.



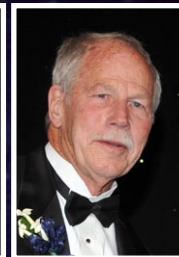
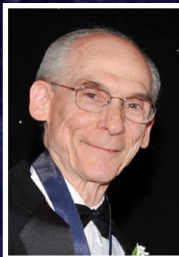
■ From left: At the 2011 AIAA Aerospace Sciences Meeting, Chung "Ed" Law, Robert H. Goddard Professor, Princeton University, delivered the Dryden Lectureship in Research, "Fuel Options for Next Generation Chemical Propulsion"; Michael Francis, Chief, Advanced Programs and Senior Fellow, United Technologies Research Center, delivered the Wright Brothers Lectureship in Aeronautics, "Unmanned Air Systems ... Challenge and Opportunity"; and Robert Braun, Chief Technologist, NASA, delivered the von Kármán Lectureship in Astronautics, "Mars Entry, Descent and Landing Technology Advancements."

More than five hundred guests gathered to salute honorees from academia, government, and industry on 11 May 2011 at the AIAA Aerospace Spotlight Awards Gala – a glittering event that showcased the 2011 AIAA Honorary Fellows, the 2011 AIAA Fellows, and the recipients of AIAA's top honors.

Bringing the aerospace community together, and encouraging and recognizing outstanding achievement, are among the primary goals of AIAA. Nominating worthy candidates for awards or membership upgrade is an important task for AIAA members. We urge AIAA members to consider which of their colleagues and peers are most deserving of nomination for special recognition of their achievements.



■ Accepting the AIAA Foundation Award for Excellence on behalf of the U.S. Air Force Scientific Advisory Board is John Betz, Chairman of the Scientific Advisory Board. With him are George Muellner, AIAA Foundation Board of Trustees (left), and AIAA President Brian Dailey (right).



■ From left: 2011 AIAA Goddard Astronautics Award recipient Edward C. Stone, Director Emeritus, Jet Propulsion Laboratory; 2011 AIAA Reed Aeronautics Award recipient David A. Peters, McDonnell Douglas Professor of Engineering, Washington University; 2011 Daniel Guggenheim Medalist Robert H. Liebeck, The Boeing Company; 2011 AIAA Public Service Award recipient Richard R. John, Director Emeritus, Volpe National Transportation Systems Center; and 2011 Distinguished Service Award recipient G. P. "Bud" Peterson, President, Georgia Institute of Technology.



■ Gen John Dailey, (center), Director, Smithsonian National Air and Space Museum, the 2011 recipient of the National Capital Section Barry M. Goldwater Educator Award, with AIAA National Capital Section Chair Rick Ohlemacher (left) and AIAA President Brian Dailey (right).

PUBLIC POLICY

Addressing Strategic Imperatives

The current AIAA Strategic Plan has two Strategic Imperatives:

- 1) Sustain a Robust Aerospace Workforce and Develop Next-Generation Professionals; and
- 2) Restore AIAA's Relevance and Credibility with the Nation's Government / Industrial Leadership.

Many of our public policy activities are aimed at addressing these imperatives.

In May 2011, the "Inside Aerospace" forum brought together leaders from the aerospace community to examine the impacts of cyber attacks and of the federal acquisitions process on the economy, our national security, and on the health of the aerospace industry. These panels included a robust discussion of national strategies to enable a seamless national cybersecurity policy and instill meaningful acquisitions reform. This one-day event was held in the Capitol Visitors Center at the U.S. Capitol in Washington, DC, and AIAA produced a written report summarizing the day's discussions.

Providing Expert Testimony on National Aerospace Policy

AIAA members are frequently sought out to provide technical expertise and acumen based on their professional experience through formal testimony before committees of Congress and to the Administration. This testimony helps lawmakers develop sound national policies that drive federal investments in our aerospace, STEM education, and workforce programs. This past year, Jim Maser, Chairman of the AIAA Corporate Membership Committee, testified before Congress on 30 March 2011 at a U.S. House Committee on Science & Technology hearing, "A Review of NASA's Exploration Program in Transition: Issues for Congress and Industry." Mr. Maser spoke about the need for a clear and consistent vision to sustain the industrial base needed for national policy objectives and national and economic security.

Making Public Policy Part of Our Technical Conferences

To be effective in public policy, AIAA members must be informed about the issues impacting aerospace, and must have opportunities to interact on these issues. To accomplish this, the number of dedicated public policy events at major AIAA technical conferences has been increased, with many of the events scheduled to maximize the opportunities for AIAA member participation. Such events, including policy panels, luncheon presentations by national aerospace policy leaders, and interactive briefings by government agencies regarding aerospace policy planning, were held at the Joint Propulsion Conference, SPACE 2011, the Aviation Technology, Integration, and Operations Conference, and the Aerospace Sciences Meeting. The goal is to build on and fully incorporate these policy events at major AIAA conferences, both to provide opportunities for the AIAA membership to become better informed on the issues, and to expose the local and national media to substantive discussion of the major policy issues impacting our profession.





AIAA and the National Forensic League Focus on Space Policy

As part of its ongoing effort to stimulate public discussion of the risks and benefits of space exploration to the nation, AIAA partnered with the National Forensic League (NFL), the nation's oldest and largest sponsor of high school debating, to offer a series of four panels focusing on the military, political, and technological issues raised by the 2011–2012 national high school policy debate topic, which was: “Resolved: The United States federal government should substantially increase its exploration and/or development of space beyond the Earth’s mesosphere.” These briefings took place in Dallas, Texas, in the Bronx, New York, and in Deerfield, Illinois, between June and November of 2011, as part of the NFL’s national championship tournament.

AIAA’s Public Policy team joined in panel discussions covering the political and technical issues presented by the space exploration topic. Several hundred high school debaters and speakers from over 40 states attended the talks. The formal programs lasted 90 minutes, and participants spent additional time meeting with students and coaches individually, continuing discussion about the issues presented in the forum. In all, AIAA’s Space Policy and Technology Forums have reached thousands of students across the United States, and have helped students and coaches understand some of the more complex issues surrounding space policy, as well as making them aware of AIAA and the role we play in advancing space policy issues in the national and international arena.

■ Above, an AIAA public policy panel presented a discussion of Space Policy and Technology for student debaters and their advisors in Dallas, Texas, site of the 2011 National Forensic League National Championship. From left, Joseph T. Mayer, Lockheed Martin Corporation; Anita Gale, The Boeing Company; Ross Bell, AIAA; and Duane Hyland, AIAA.



**NATIONAL
FORENSIC
LEAGUE**

Speech and Debate Honor Society



Expanding Grass Root Activities

Congressional Visits Day Features Increased Student Participation

2011 marked continual growth of the Institute's grassroots public policy programming. On March 15–16, 210 members attended the annual AIAA Congressional Visits Day (CVD), making it one of the largest such events in the program's history. Members engaged congressional staffers in vibrant policy discussions on the topics presented by the 2011 Key Issues.

The 2011 Key Issues were the result of a new process that ensured that the Public Policy Committee and the Technical Activities Committee worked very closely in formulating the issues. The collaboration produced a diverse set of issues, encompassing traditional concerns such as the strength of the aerospace workforce and the need for a stronger space program, as well as relatively new concerns like heightened cybersecurity and expanding the use of biofuels within the U.S. aerospace industry.

Focusing on youth as the future of aerospace, 2011 brought increased student participation in CVD, with large groups from Penn State University, North Carolina State University, and Iowa State University attending the event. A student group from the Farnsworth Aerospace K–8 magnet school in St. Paul, Minn., also attended to call attention to the state of science, technology, engineering, and mathematics (STEM) education in grades K–12.

AIAA Delaware Section member Timothy Dominick took time to remind all AIAA members that “Congressional Visits Day is a great way to connect with your Members of Congress about the most important issues facing aerospace.” He added that “CVD is also a great way to meet and network with your fellow members.” When asked why students take part in the event, Whitney Lohmeyer, a student at North Carolina State University, said, “It is important for students to take part in CVD to remind legislators about workforce issues and other issues that will affect graduating seniors.”

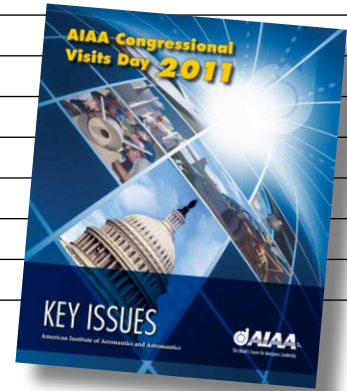
August is for Aerospace Brings Local Focus to Big Issues

The AIAA August is for Aerospace (A4A) program continued the discussions begun at CVD. During the summer and early fall, 21 sections staged 28 A4A events. The A4A program encourages sections to invite their representatives to events, to hold roundtable discussions on the importance of aerospace, or simply to give the representative a tour of a local aerospace facility – anything that encourages interaction and immerses the representative in the local aerospace scene. Events in 2011 ranged from formal presentations on the need for improved support of STEM education, to section dinners with congressional decision makers and other prominent government officials, to visits with elected officials or their staff in their local offices. A4A continues to grow, and the goal is to involve every AIAA section.



2011 AIAA Key Issues for Congressional Visits Day

1. Implementing a Strategy for Recovery of Business and General Aviation
2. Harnessing Aerospace Experience and Capabilities for Achieving Modern Earth and Climate Information Systems and Services
3. Enabling Development of Alternative Fuels and Energy Efficient Aviation Systems
4. Overcoming the Emerging Technology Acquisition “Valley of Death”
5. Establishing and Implementing a Viable National Cybersecurity Strategy
6. Improving Air Cargo Security and Scanning
7. Addressing the Growing Threat of Orbital Debris
8. Assuring a Strategic and Sustainable Direction for Space Policy
9. Increasing Emphasis and Funding for Technology and Engineering in STEM
10. Recruiting, Retaining, and Developing a World-Class Aerospace Workforce



■ Photos from the 2011 AIAA Congressional Visits Day: 1. AIAA Team Texas on the steps of the U.S. Capitol Building; 2. AIAA Team California with Congressman Dana Rohrabacher; 3. AIAA Team Ohio with Senator Sherrod Brown; 4. AIAA Team Virginia with Congressman Gerry Connolly; 5. AIAA Team Carolina with Congressman Howard Coble; 6. AIAA Team Minnesota; 7. Senator Al Franken (MN) poses with an AIAA member's son.



Providing Aerospace Policy Panels and Workshops for Our Nation's Leaders

A primary goal of AIAA public policy activities is to assure that national policies affecting our profession are formulated with wisdom and knowledge of the facts. While CVD and August is for Aerospace help serve this purpose, AIAA is proactive in addressing this challenge at additional venues. Panel discussions are presented on Capitol Hill to provide perspective on important aerospace issues. A 21 July panel, "Defining Commercial Space for Post-Shuttle Exploration," focused on commercial space in the nation's civil space policy and discussed how industry can work effectively with the government to ensure continued U.S. leadership in space technology, transportation, and exploration. On 22 September, in conjunction with the Life Sciences Technical Committee and the National Capital Section, AIAA held a forum to examine how federal investments in life sciences research support our nation's space exploration programs. The event, "Students Bringing Space Research Down to Earth," featured AIAA student members working on their graduate degrees, who discussed their research in life sciences fields, and related them to critical mission support needs, providing examples of how this research impacts daily life on earth. And on 14 February of this year, AIAA held a panel discussion on Capitol Hill, "Commercial Space – 21st Century Jobs and Out of This World Profits." Panelists discussed current U.S. space programs, such as biotech research on the International Space Station, nanosatellites and cubesats, civilian spaceflight and Commercial Reusable Suborbital Research, as well as other research projects improving our lives and creating economic opportunities. This panel was part of an ongoing series of AIAA forums examining the lifestyle and economic benefits we as a nation realize from our investment in space programs.



PROFESSIONAL DEVELOPMENT

A Year of Growth and Change

FY11 was a year of significant growth and change for the AIAA Professional Development Program. AIAA strives to offer the professional courses our membership and industry want, in a convenient format and at reasonable prices. Our success in that is directly attributable to our instructors, the subject matter experts who develop and present cutting-edge courses across a range of aerospace disciplines.

The Professional Member Education Committee (PMEC), under the leadership of Dr. Steve Gorrell, improved the evaluation and approval process for new courses and re-approved all AIAA courses. As a result, AIAA offered over 25 courses at our technical conferences and through our home study program, with almost 500 professionals attending.

The involvement of AIAA's Technical Committees (TCs) was instrumental in expanding the breadth and preserving the quality of our professional development offerings. The program now has over 70 approved courses to choose from.

The AIAA Education Partner Program continues to be a success. Auburn University, NAFEMS, Practical Aeronautics, Stevens Institute of Technology, University of Colorado at Boulder, University of Illinois, and University of Tennessee Space Institute are members of this program, through which AIAA members may receive up to a 10% discount off their tuition rates.

The Professional Development Program can also attribute its success to the On-Site Course Program. Although many of our courses are held at AIAA technical conferences, many companies and government agencies opt to train their employees on-site, which saves time and money. Many NASA centers, Northrop Grumman, The Boeing Company, Lockheed Martin Corporation, and Raytheon Corporation are among those who have brought AIAA short courses to their facilities to train their employees in a closed, secure training session.

As we move forward, the Professional Development Program will continue to look for avenues and alliances with which to expand our traditional professional development courses.



■ The AIAA Education Partner Program continues to be a success, offering members discounted tuition at a wide range of institutions.

WORKFORCE DEVELOPMENT, CAREER DEVELOPMENT

Speed Networking

The 2012 Aerospace Sciences Meeting in Nashville featured a “speed networking” event. Open to all conference attendees, the networking event was facilitated by Dutch Driver, who has over 25 years of experience in organizational development and change management. Some 40 people participating in the event overwhelmingly responded that the structure of the event helped them meet and interact with people they might not otherwise have had the chance to meet.

Career Development Workshop

The AIAA Career and Workforce Development Committee held a successful full-day Career Development Workshop at the 2012 Aerospace Sciences Meeting. Attended by 65 people, this workshop featured various topics, including how to transition into the workforce after graduation, how to increase your net worth through networking, and how to understand generational differences in communication styles.

Connecting to the Next Generation of Young Professionals

At the 2011 AIAA Guidance, Navigation, and Control Conference, the AIAA Young Professional Committee, with sponsorship from Lockheed Martin Corporation, hosted a Next Gen speaker, Jason Ryan Dorsey, who delivered a keynote address, “Crossing the Generational Divide: Leveraging the Power of Generations™ for Your Strategic Advantage.” More than 200 conference attendees, of all ages, were entertained by his unique speaking style that combined practical how-to with real-world comedy. Jason has been featured as a generational expert on 60 Minutes, 20/20, The Today Show, The View, and in Fortune Magazine and The Wall Street Journal.

At the SPACE 2011 conference, Young Engineer of the Year Reece Lumsden presented a keynote followed by a discussion on topics pertinent to the early engineering career. Through a combination of personal accounts and researched facts, he provided guidance on navigating the early years of an engineering career. This event was attended by 35 young professionals and students.



■ At right: At the GNC conference, Jason Ryan Dorsey discussed “Crossing the Generational Divide.” Below: Young Engineer of the Year Reece Lumsden spoke at SPACE 2011 on how to “optimize your engineering career from the start.”



MEMBERSHIP

It has been a challenging year to acquire new members, retain existing members, and grow the overall membership. AIAA's professional membership declined 1.9% during FY11 (to 27,591). The economy and possibly lingering effects of the dues increase are still having an effect on the decision to join and renew.

AIAA and other professional associations are facing the issue of how to be an essential organization for our current working professionals and those about to begin their careers. To gain insight, AIAA held a series of focus groups in the Southern California area. Over the course of two days we met with student members, young professional members, and non-members from that same demographic, to understand what is of most value to them and how AIAA could best engage them. The focus group results were extremely helpful and identified several opportunities for AIAA to more clearly define its value proposition.

On the student front, membership declined 4% (to 7,464). Despite this decline, student participation in our design competitions and student conferences remains strong. Additionally, for the first time in seven years we saw an increase in our student to professional transition, as some 21% of our student members – 1,200 people – transitioned to professional AIAA membership in FY11, versus 9% (500 people) in FY10.

Regional Leadership Conference Polishes Skills

The 2011 AIAA Regional Leadership Conference introduced new Section Officers and Deputy Directors to the Institute's resources and programs, enabling them to share ideas among peers. Held 11–12 August 2011 in Portland, Oregon, immediately following the AIAA Guidance, Navigation, and Control Conference, the meeting was also attended by members of the AIAA Board of Directors. AIAA President Brian Dailey addressed all in attendance and discussed the AIAA Strategic Plan. Over the next day the 52 attendees brainstormed, networked, and heard presentations on volunteer recruitment, meeting and event organization, effective public policy advocacy, and more. In addition, the AIAA Technical Activities Committee allowed the RLC attendees to attend the final day of GNC and the co-located conferences at no charge.

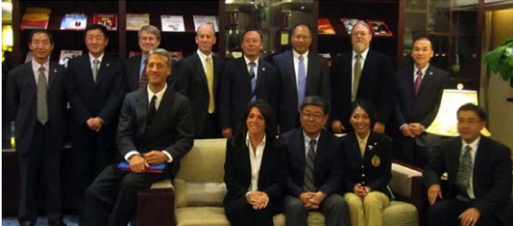


CORPORATE SALES AND MARKET DEVELOPMENT

Corporate Membership Remains Active and Strong

We are pleased to report continued growth to 97 corporate members. Highlights of networking programs with industry and government leaders include:

- At the NASA Future Programs Presentation, AIAA co-sponsored a full-day review of NASA's current and proposed programs, including a budget overview, Mission Directorate budget priorities, and a discussion on the future of NASA. Participants included NASA Administrator Charles Bolden, Deputy Administrator Lori Garver, Mission Directorate Associate Administrators, and other senior NASA officials.
- AIAA presented "Aerospace Today...and Tomorrow: An Executive Symposium." This annual full-day forum (complemented with a round of golf) brought together approximately 100 aerospace executives, in a casual, non-attribution environment (with no media) for candid discussions on aerospace industry progress, issues, and lessons learned, from the perspectives of corporate and government executives.
- AIAA hosted the National Reconnaissance Office 50th Anniversary Gala at the National Air and Space Museum's Udvar-Hazy Center to celebrate the pioneering and innovative efforts of the men and women of the NRO, whose "Vigilance from Above" has for a half century provided critical and timely information that has saved lives and preserved our national security. This event was absolutely unique in that many recently declassified space reconnaissance assets were on public display for the first time.
- For the second year in a row, AIAA led an executive delegation to China. Aviation representatives from nine corporate member organizations visited seven key aviation sites, in Beijing, Xi'an, and Shanghai (see map on page 25). This visit complemented our 2010 space executive visit exceptionally well as AIAA plays a growing leadership role in the community to strengthen relations with other aerospace nations.
- AIAA provided perspectives on DoD's renewed emphasis on IR&D through corporate member interaction and dialogue with Mr. Ron Kurjanowicz, the lead on IR&D for Ashton Carter (USD[AT&L]).



■ The AIAA Corporate Member delegation met with Dr. Xinguo Zhang, Executive Vice President of the Aviation Industry Corporation of China (middle forefront). From left to right, the front row: Dr. Kevin Kremeyer, Merrie Scott, Dr. Xinguo Zhang, Dr. Susan Ying, Patrick Liu. From left to right, the back row: Prof. Song Wu, Prof. Jun Hua, Dr. John Langford, Dr. Robert Yancey, Jun Zhou, Dr. Weinong Chen, Steve Legensky, and Jinzhong Wei.

■ Staff Sergeant Trevor Groves of the NRO Color Guard; Dr. Brian Dailey, AIAA President; The Honorable Michael Vickers, Under Secretary of Defense for Intelligence, Department of Defense; Stephanie O'Sullivan, Principal Deputy Director of National Intelligence; Singer Lee Ann Womack; Bruce Carlson, Director, National Reconnaissance Office; Dr. Peter Jakab, Associate Director for Collections and Curatorial Affairs, National Air and Space Museum; Robert Dickman, AIAA Executive Director; and Technical Sergeant Joanne Moniz, at the National Reconnaissance Office 50th Anniversary Gala, hosted by AIAA.





■ STS-135 crew Commander Chris Ferguson engages the audience during the 2011 SPACE Conference in Long Beach, CA. The speech at the Presentation Stage in the AIAA exhibit hall captivated the attendees with information and personal experiences regarding the final space shuttle flight.

AIAA Exhibits Program Attracts Leading Companies and VIPs

At the AIAA SPACE 2011 Conference & Exposition, 27–29 September 2011, at the Long Beach Convention Center, we highlighted our new Presentation Stage. Among the presenters were STS-135 Commander Chris Ferguson, and Dr. Simonetta di Pippo, Director of Human Spaceflight at the European Space Agency. The Presentation Stage is a complimentary marketing opportunity for exhibitors to have a forum to highlight their technology, products, and services.

In total, AIAA hosted exhibits at six events in 2011: the Aerospace Sciences Meeting, the Missile Defense Conference, the Fluid Dynamics Conference, the Joint Propulsion Conference, the Ballistic Missile Defense Conference, and SPACE 2011. Exhibits included VIP tours within the exhibit hall and multiple networking opportunities throughout the conferences. AIAA also held two Exhibitor Advisory Committee meetings, where exhibitors were encouraged to share their input on ideas to improve hall traffic and attendance.

Focus on Industry Partners

AIAA recently created a focus area consolidating key functions in Corporate Membership, Sponsorships, Exhibits, and Advertising to integrate a cross functional team better able to serve our industry partners.



■ Acting FAA Administrator Michael P. Huerta stops by the Lockheed exhibit at 2012 ASM.



■ Dr. Simonetta di Pippo, Director of Human Spaceflight at the European Space Agency (ESA), tours the AIAA exhibit hall at 2012 ASM in Nashville. AIAA exhibitors welcomed Dr. di Pippo's visit and learned about ESA's human spaceflight vision for this decade.

Serving the Profession: The Future



■ Front row, from left: Jill Guisberg Wall, Farnsworth Aerospace PK–8 Magnet School; Christy Garvin, Vaughan Elementary School; Penny Glackman, Merion Elementary School; Benjamin McLuckie, Hoonah High School. Back row, from left: Carl Steven Rapp, Linwood Holton Governor’s School; Roger Kassebaum, Milken Community High School; Christopher Miko, Meadows Elementary School.

STEM K–12 OUTREACH PROGRAMS

AIAA Foundation Honors Seven Educator Achievement Award Winners

In 2011 the seventh class of educators was honored with the biennial Educator Achievement Award, presented for excellence in teaching K–12 students. Christy Garvin, Penny Glackman, Roger Kassebaum, Benjamin McLuckie, Christopher Miko, Carl Steven Rapp, and Jill Guisberg Wall were the recipients of this prestigious award and were honored at the Aerospace Spotlight Awards Gala. In addition to visiting with Lockheed Martin, Orbital Sciences, and the FAA, these teachers participated in the videotaping of “Engineers as Educators” materials, contributing real-world classroom experiences to this new online product.

Engineers as Educators Workshop Spreads to Local Sections

The Engineers as Educators Workshops have trained over 500 engineers and aerospace professionals on working with K–12 students to raise the awareness of STEM (Science, Technology, Engineering, and Math) education. Workshop participants are asked to take the information back to their local sections where they can train other members to work with K–12 students in classrooms, after school clubs, or other formal or informal settings. Sections are encouraged to use this program to interact with their Educator Associates to encourage more aerospace professionals to volunteer to help inspire K–12 students.

STEM K–12 Programs Have Wide Impact

STEM K–12 outreach programs have inspired teachers and students on an ongoing basis:

- AIAA Foundation Classroom Grants impacted almost 15,000 students
- The STEM Boot Camp at the U.S. Air Force Academy provided over 85 teachers with classroom resources to engage and excite their students.
- Local sections participated in hundreds of science fairs, competitions, conferences, and workshops to benefit teachers and students.

Our members are the strongest advocates and best resources in the community to demonstrate the relevance of STEM education to real-world applications.



Education Alley Explores New Ways to Interact with Students

Education Alley, held in conjunction with the AIAA SPACE 2011 Conference, had over 3,100 students in the Long Beach/Los Angeles area energized about space exploration. The highlight of the three-day program was a visit from the STS-135 crew. The crew spoke with Girl Scouts and Boy Scouts during an informal education session about the impact that scouting played in their lives. Exhibits focused on the future of space exploration with telescopes and scientific missions. Hands-on STEM activities included opportunities to build airplanes, view the sun, play math jeopardy, learn about space suits and what astronauts eat, examine cryogenics, and explore GPS.

Education Alley sponsors included The Aerospace Corporation, The Boeing Company, Northrop Grumman Corporation, Pratt & Whitney, Raytheon Company, and Wyle.

STEM Career Spotlight in Virginia Beach, VA

The First STEM Conference in Virginia Beach, VA was held after the 11th AIAA Aviation Technology, Integration, and Operations (ATIO) Conference. Presenters included members of the local Hampton Roads AIAA section, the Aircraft Technical Committees, and the STEM K-12 Outreach Committee. This event for local middle school students gave them insights into a multitude of STEM careers. Students attended sessions on Exotic, Weird, and Fun Aircraft; What's So Cool about Aviation?; From Trash to Flight; and Aircraft Design and Aerospace Careers.

AIAA's co-sponsors of the STEM Conference were the Virginia Beach Public Schools, the National Institute of Aerospace, NASA, and NOAA.



■ STS-135 astronauts who flew aboard Atlantis on the final Space Shuttle flight addressed students at Education Alley at the AIAA SPACE 2011 conference.



■ Former AIAA President Mark J. Lewis gives an enthusiastic “thumbs-up” to the outstanding engineering students from across the country and around the world who presented their work at ASM 2012.

AIAA Foundation Awards Over \$60,000 in Scholarships

The AIAA Foundation Scholarship Program once again awarded 30 undergraduate and nine graduate student scholarships, worth a combined total of over \$60,000. In the graduate category, nine students received \$5,000 scholarships, and four received \$10,000 scholarships.



■ Members of the “RFB” team from the University of Southern California celebrate at the 2011 Design/Build/Fly competition.

UNIVERSITY

AIAA Hosts Nine Student Conferences

The AIAA Regions hosted seven U.S. Regional Student Conferences and two International Regional Student Conferences. The Australian Regional Student Conference featured 19 students from around the Pacific Basin presenting their work in person and via videoconferencing, which allowed student participation from a wider geographic area. Some 26 students attended the conference. The European Regional Conference, held in Turin, Italy, presented in conjunction with PEGASUS (“Partnership of a European Group of Aeronautics and Space Universities”), featured the presentation of more than 25 graduate papers.

Winners from the regional conferences met at the AIAA ASM 2012 conference in Nashville to present their papers at the AIAA International Student Conference.

Design/Build/Fly Competition Reaches New Heights

The Student Design/Build/Fly Competition for 2011 was held 15–17 April at the Tucson International Modelplex Park Association (TIMPA) Airfield in Tucson, Ariz. In its fifteenth year, the competition drew a record high 71 teams from 68 colleges and universities, representing 25 states and eight foreign countries.

The winning team, “There Will Be Buzz,” was from the Georgia Institute of Technology, and received a \$2,500 first place award. “The RFB,” from the University of Southern California, took the \$1,500 second place prize, and the “Golfstream” team from Purdue University won the \$1,000 third place prize.

The 2011 event featured over 200 flights, with over 30 teams successfully completing all three mission profiles comprising the event. The competition also saw its first community college participant, a team from Monroe Community College, in Rochester, N.Y.

The Design/Build/Fly Competition challenges teams of undergraduate and graduate students to design and fabricate a radio-controlled aircraft conforming to strict guidelines, fly it over a defined course while carrying a payload, and land it without damage. For more information, visit www.aiaadbf.org.

INTERNATIONAL

Partnering with International Organizations

Over the last year, AIAA has been working with the International Astronautical Federation (IAF) to co-organize the Global Space Exploration (GLEX) conference, 22–24 May 2012 at the L'Enfant Plaza Hotel in Washington, DC. The event will bring together the global space exploration stakeholder community, including senior administrators and senior exploration managers from the major space agencies, industry, governments, academia, and non-governmental organizations. Leaders in the field will converge in Washington to present results, exchange ideas, debate roadmaps, and discuss the future opportunities provided by human and robotic space exploration. The comprehensive program will include high-level plenary and technical sessions that address plans for space exploration and explore how industry, politics, and law will help shape the future environment for this exciting domain of astronautics.

On 27 April 2011, at the South African Embassy in Washington, DC, AIAA promoted the International Astronautical Congress (IAC), held 3–7 October 2011 in Cape Town, South Africa. Former IAF President and AIAA Vice President-International James Zimmerman spoke on behalf of AIAA at the event. AIAA co-sponsored the reception in its role as a member of the IAF and to continue its tradition of organizing an event to help promote U.S. participation in the upcoming IAC. The AIAA National Capital Section and International Activities Committee were involved in planning for the event. The event celebrated South Africa's Freedom Day, which commemorates the first post-apartheid elections, held on 27 April 1994.

Helping U.S. Programs Gain International Recognition

In October 2011, the Global Positioning System (GPS) received the IAF 60th Anniversary Award. This one-time award, recognizing an outstanding achievement in the area of space applications for human benefit, was presented during a ceremony at the 62nd International Astronautical Congress, held in Cape Town, South Africa. AIAA, as an IAF member organization, nominated GPS for this award. General William L. Shelton, Commander, United States Air Force Space Command, accepted the award on behalf of the GPS Program. The award was presented by IAF President Prof. Dr. Berndt Feuerbacher. As part of the ceremony, Dr. Bradford W. Parkinson, GPS Chief Architect and First Program Director and Professor (Emeritus), Aeronautics and Astronautics, Stanford University, gave a lecture about the history and benefits for humanity of the GPS program.



■ The Global Positioning System received the IAF 60th Anniversary Award during the 62nd International Astronautical Congress. From left to right are Lynn Dugle, President, Intelligence and Information Systems, Raytheon; Dr. Bradford W. Parkinson, GPS Chief Architect and First Program Director and Professor (Emeritus), Aeronautics and Astronautics, Stanford University; Prof. Dr. Berndt Feuerbacher, IAF President; General William Shelton, Commander, United States Air Force Space Command; Ken Torok, Vice President, Navigation & Communication Systems, Boeing; Joanne Maguire, Executive Vice President, Space Systems Company, Lockheed Martin; and Bob Dickman, AIAA Executive Director.



Expanding Collaboration into New Areas

The AIAA International Strategic Plan emphasizes partnering with other international associations. AIAA strives to be the primary society representing U.S. aerospace professional and technical interests in a collaborative global and technical forum. Consequently, AIAA is leveraging and enhancing activities with both established and emerging aerospace societies worldwide for the common benefit to the profession. Over the last half of FY2011, AIAA has been in discussions with the Aeronautical Society of India about possible collaboration; we expect to sign a Memorandum of Understanding with AeSI in 2012.

Growing Collaboration with China

Building on a strong foundation of collaboration established during 2009–2010, this past year has seen AIAA's collaboration with China grow. While continuing our established partnerships in publications and interactions with the Chinese Society of Astronautics, most of the collaboration this past year has focused on initiating interactions and establishing new partnerships with an aviation emphasis. AIAA recently signed a memorandum of understanding with the Chinese Society of Aeronautics and Astronautics (CSAA) in Beijing, China, during the visit of the AIAA delegation of aviation executives. The agreement was signed by AIAA Vice President-Elect, International, Dr. Susan Ying, and CSAA Secretary General, Professor Wu Song. In their remarks, both Dr. Ying and Professor Song heralded the historic nature of the signing, and expressed confidence that the memorandum would “strengthen the contact and friendships between both societies,” while creating many opportunities for technical and scientific exchanges between Chinese and American engineers and scientists working in the aerospace field. Established in 1964, CSAA is an academic, non-profit membership organization serving scientists and engineers working in aeronautics in China. CSAA's objectives are to promote the development and dissemination of aeronautic and astronautic science and technology, to promote the development of talents in this field, and to serve its members and other professionals working in scientific and technological fields. The activities of CSAA include organizing technical symposia and other events, publishing scientific periodicals, providing training programs, and conducting activities to increase scientific knowledge in the young.



■ AIAA Vice President-Elect, International, Dr. Susan Ying (left forefront), and CSAA Secretary General, Professor Song Wu (right forefront) celebrate the MOU signing between their organizations. From left to right in the back row: Jeffrey Nadaner, Dr. Robert Yancey, Patrick Liu, Merrie Scott, Dr. Kevin Kremeyer, Dr. John Langford, Dr. Weinong Chen, Prof. Jun Hua, Dr. Song Fu, Prof. Yongling Fu, Xue Zhang, and Ce Yu.





Sites Visited

Beijing –

- Tiananmen Square
- The Forbidden City
- The Great Wall
- U.S. Embassy
- AVIC Headquarters
- Temple of Heaven
- AVIC Beijing Institute of Aeronautical Material
- CSAA Headquarters, to sign Memorandum of Understanding

Xi'an –

- The Terracotta Warriors Museum
- AVIC Xi'an Aircraft Industry Group
- AVIC Aircraft Design & Research Institute
- AVIC Aircraft Strength Research Institute
- Tang Dynasty Dinner
- AVIC Xi'an Flight Automation Control Research Institute
- AVIC Xi'an Aero-Engine Group
- The Ancient City Wall of Xi'an
- Big Wild Goose Pagoda

Shanghai –

- The Water Village, Zhouzhuang
- The Yu Garden
- A Silk Worm Factory
- The Bund (both sides of the river)
- China National Aeronautical Radio Electronics Research Institute

AIAA FOUNDATION

AIAA Foundation Focuses on the Future

Founded in 1996, the AIAA Foundation is a tax-exempt nonprofit organization that seeks to enhance and support the viability of the future aerospace professional, practicing aerospace professionals, and organizations and institutions involved in aerospace.

To help shape the future of aerospace, the Foundation's primary focus is on education in the "STEM" subjects of science, technology, engineering, and mathematics, driven by a simple philosophy: *Make it exciting, make it empowering, and make it fun.*

At the K-12 and university level, and beyond, Foundation underwriting of scholarships, classroom grants, design competitions, student conferences, and professional recognition for outstanding achievement enhances scientific literacy and advances the arts and sciences of aerospace.

To build upon existing programs and expand them to meet growing needs, the Foundation has set itself the goal of permanently endowing these programs, through tax-deductible gifts to its endowment fund.

A Growing List of Donors Helps the AIAA Foundation Invest in the Future

Titanium Society

(\$100,000–\$499,000)
Iridium NEXT Mission Team
Vicki and George Muellner
Catherine and David Thompson

Platinum Society

(\$50,000–\$99,999)
Brian and Paula Dailey
Kent Kresa

Gold Society

(\$25,000–\$49,999)
Barb, Tad, and Bob Dickman+

Silver Society

(\$10,000–\$24,999)
Jane and Bill Ballhaus Jr.
Klaus D. Dannenberg
Lois and Harry H. Hilton
Dotty and Paul D. Nielsen
Darlene and Roger Simpson

Bronze Society

(\$7,500–\$9,999)
Sivaram P. Gogineni
Laura and James McGill
Suzanne Musgrave+
Merri J. Sanchez
Peter B. Teets
Sheila and William Widnall

Patron Gift

(\$3,500–\$7,499)
Anonymous
Diana and Neal N Barlow
Carol A. Cash*
Michele Dominiak
Aubrey E. Sanderson Jr.

Benefactor Gift

(\$1,000–\$3,499)
Lawrence O. Brase
Pandora and Robert Crippen
Catherine Duthie
Wilson Felder and Laura Stottlemeyer
Mireille M. Gerard
Urmila and Karman Ghia
Ferdinand W. Grosveld
Basil Hassan
Philip D. Hattis
Jill and Mark J. Lewis
G. Alan Lowrey
Jonathan T. Malay
Lourdes and Mark S. Maurice
Dennis Picard
Joseph F. Pirola Jr.
Alan Powell
Donald W. Richardson
Robert J. Schwingamer
William C. Seymore
Mary and Thomas Snitch
Roxylana and Mike Yarmovych

Contributor Gift

(\$500–\$999)
Anonymous
Aviation Week
Arete Associates*
Malcolm R. Currie
Rebecca and Michael Griffin
Albert C. Lee*
Anthony M. Mitchell*
Earl M. Murman
Masataka Nishi
Shamim Rahman
David R. Riley*
Chris M. Tavares

Friend Gift

(\$25–\$499)
Anwar Abdelsalam
H.N. Abramson
Brij N. Agrawal
Juan H. Agui
Adolfo Aguilar
Mohanad M. Al-Hossieny
Gerald P. Alldredge
Duleep S. Amarasinghe
Ann Ames
John K. Anderson
John D. Anderson
William J. Anderson
Eugene F. Arnold
Allen Arrington
David S. Aswad
Kendrick T. Aung
Mihaiela Avram
Casey A Backes
Lisa Bacon
Balakumar Balachandran
Joe Baldwin
Douglas Ball

Albert Ball
Clyde P. Bankston
Harry R. Barnard
Catherine Barre
Andrew H. Bass
Robert D. Bauer
Harold G. Behl
Rettig P. Benedict
Karen L. Bibb
John C. Blanton*
Jaroslaw R. Blaszczyk
Harry E. Bloomer
David B. Bonorden
J.R. Bowen
John W. Boyd
Marty K. Bradley*
Michael B. Bragg
Morrissa Brenner
Shelly K. Brimmeier
Alan C. Brown
Michael L. Brychcy
Bobby M. Budde III
Ivor J. Bulathsinghala
Douglas E. Burkes
Donna E. Cain
Cynthia Calhoun
Clifton J. Callahan
James S. Canova
Jeffrey Caplin
John E. Cashman
Pedro M. Castineira
Nicholas P. Cernansky
Michael Chapman
Donald J. Chappell
Sue Chung
Brandon C. Clarke
Randall J. Clendening
John Clewett
Malcolm M. Cohen
Melvin E. Coleman
Michael P. Connolly

Bruce A. Conway
Timothy M. Cooper
In Honor of Karen Copper's Sustained Service Award
Gary R. Coulter
Eugene Covert
William A. Crossley
Suzanne R. Cunningham
Andrew W. Curtis
Fabio Alonso Da Silva
John H. Dalton
Peter W. D'Anna
Donald J. Davis
Edwin W. Davis
Jason G. Davis
Justin Davis
Juliett Davitian
Brett J. Deblonk
Mike Delaney
Edward J. Deutsch
Shelly Dezevallos
Mark C. Dickerson
Merlin Dorfman
In Memory of Dr. Joseph Reagan
James S. Draper
Adam T. Drobot
Thomas Duerr
John Dugundji
Leslie L. Dunning
John F. Egan
Kenny B. Elliott
Bruce A. Emson
Lawrence M. Enomoto
Steven Paul Ericson
Lewis V. Evans
Stephen Fairbairn
John M. Falker
Jerry W. Faust
Marc G. Felice

John F. Finlay
David C. Fleming
Hubert I. Flomenhoft
Michael C. Fong
Jeffrey M. Forbes
Wallace T. Fowler
Robert B. Friend
Michael J. Frostad
John R. Fulmer
Thomas R. Gagnier
Thomas V. Garceau
Lawrence Garrett
Paul Gelhausen
Philippe H. Geubelle
Robert J. Glaser
Michael Gluck
Herbert L. Goda
Judith A. Goldish
Aga M. Goodsell
Sharon Grace
Louis B. Gratzner
Michael Gregory
Peter S. Gumulak
Ashwani K. Gupta
L. Jane Hansen
John W. Hardtla
Richard J. Harms
James W. Harrill
Charles E. Harris
Andrew E. Hart
Edwin L. Harvey
Jake J. Hecla
Joseph Helsing
Richard J. Hill
Sandra M. Hoff
Christopher W. Horton
Jung-Han Hsieh
Duane J. Hyland
Anthony C. Iannetti
Angelo M. Iasiello
Michel D. Ingham

AIAA Foundation Sharpening Its Focus

Over the past year, the AIAA Foundation's Board of Trustees has undertaken a review of Foundation programs and policies, with the goals of a tighter focus, greater transparency, and improved programs.

"There are many organizations that work toward better education and workforce development," says Foundation Chairman David Thompson. "We want the AIAA Foundation to focus on our strengths to offer outstanding programs that meet the needs of our membership."

AIAA Foundation Approved by the Combined Federal Campaign

The AIAA Foundation joined the Combined Federal Campaign for the first time in 2011, as a National Independent Organization. Any military or government employee making a donation to the CFC may choose to support the AIAA Foundation, CFC #53057.

"Approval by the CFC, with a very good 19% administrative ratio, is an important step in building our fundraising base," according to Foundation President Bob Dickman. "In addition to donations from members, the CFC gives us access to many federal employees who may not be familiar with the AIAA Foundation."

In 2011, the AIAA Foundation

Awarded scholarships to 43 outstanding undergraduate and graduate students

Presented 134 exceptional achievement awards to aerospace professionals and students

Hosted eight design competitions and 12 student conferences worldwide

Provided 100 educator grants to promote STEM K-12 education to over 12,000 students across the nation

John Ingramcotton
Nancy R. Insprucker
Nick Itsines
William A. Jacques
John G. Jerakis
James W. Johnson
Alexander La Jones
Teresa M. Jordan-Culler
Robert P. Kappler
Sebastian Kauertz
Andrew W. Kirk
Reuben G. Klammer
James M. Knauf
Susumu Kobayashi
William E. Koop
Richard E. Kreeger
Atsushi Kuraishi
Shinji Kuze
Corwin H. Lakin
Chad Larson
Susan Laver
Phillips C. Lemos
Walter E. Leser
Annie and George Lesieutre
Barry L. Leslie
Zigmond V. Leszczynski
Norman N. Lewin
Dietrich K. Lezius
Yunqian Li
Hersheng Lin
Tony C. Lin
Robert E. Lindberg Jr.
Patrick Liu
Steve Long
Susan Byrd Lubert
H.H. Luetjen
Julius Lukasiewicz
Glenn R. Luke
Kent H. Lyle
Robert A. Mabli

Jeffrey J. Mach
Donald Majcher
Prabhakar Mandakolluthur
Stephen A. Mango
Hans Mark
Tammy Marko
Colin M. Mason
Sean McCourt
Jim McCroskey
Charles W. McCutchen
Michael McGinnes In Honor of Darrel McGinnes
Leon E. McKinney
Travis E. Michalak
Gene J. Mikulka
Michael W. Miller
Ronald I. Miller
Rinaldo L. Miorini
Ernesto Moralez
John M. Morgenstern
Gerd Muhlbauer
In Honor of Joe Murano
Patrick C. Murphy
Amar S. Murthy
Dora E. Musielak
Jack E. Myers
Arun A. Nadkarni
James C. Neidhoefer
George Nicols
In Memory of Nick and Kalliope Nicols
Paul Nordin
Karen F. Oates
William L. Oberkampf
Walter F. O'Brien
David M. O'Brien
Toru Okumura
Malcolm Ross O'Neill
Rosa M. Oseguera-Lohr
David J. Pabst

Kishan Padakannaya
Alfred R. Paiz
Dean A. Panik
Chris M. Pantuso
Blaine R. Parkin
Sondra D. Peart
Neal J. Pfeiffer
Angela Phillips-Diaz
Edward T. Pitkin
Louis Pollack
Joshua A. Powers
Scott W. Poynter
Christopher A. Probe
Dave Quackenbush
John T. Quarles
Jürgen Quest
Joseph Quigley
William J. Quinlan
Michael P. Radke
Farid K. Rafla
Nalin A. Ratnayake
Graham T. Reader
Laura A. Richard
Christoph Rixen
Larry W. Roberts
Philip J. Robinson
Patrick Roche
John M. Rodgers
Morris W. Rubesin
Earle Rudolph
Raymond J. Rynearson
Pradip M. Sagdeo
In Honor of the St. Louis Section Tech. Spec. Committee: Dan Johnson, Brad Sexton, and Frank Youkhana
Gary E. Sanger
Sriprakash P. Sarathy
Branko Sarh
Megan Scheidt

Dominique Schinabeck
Robert L. Schneider
Carl R. Schultheisz
Christopher S. Schulz
Matthew J. Schwaab
Merrie J. Scott
Sanjeev Seereeram
Richard L. Shearer
Mark S. Sheldon
Kevin J. Shepherd
Kenneth M. Shimabukuro
Noboru Shinozaki
Takaaki Shizawa
Sarah A. Shull
Sidra I. Silton
Rudolph F. Simpson
Dan Sims
Susan H. Skemp
Helene N. Skratt
Matthew E. Smith
David P. Smith
Philip E. Smith
Clyde S. Smithson
Holly Snow
Trevor C. Sorensen
Ronald R. Sostaric
William Speed
Michael G. Spishock
Nancy M. Squires
Robert E. Strite
Tony Taylor
Daniel M. Tellep
Vincent L. Teofilo
Shinichi Terashima
Karen R. Thomas
Jerin S. Thomas
Youling Tian
Frederic E. Titus
Nick Tongson
Quyen Q. Tonnu
Joshua M. Tristancho

Lawrence Trupo
John C. Tsucalas
Eric J. Tuegel
Felix Turcios
Clayton Turner
Ilhan Tuzcu
Caroline Twomey
Wolff H. Van Sintern
William W. Vaughan
Robin M. Vaughan
Paul D. Vieira
Daniel D. Villani
Jack R. Vinson
Antonio Viviani
Louis F. Vosteen
Scott E. Wadley
Randall Walden
James D. Walker
Linda Walters
Myles Walton
Tom Warwick
Patrick J. Wayne
Annalisa Weigal
Stacy Weislogel
Neil R. Weston
Robert J. Wetherall
Marilee J. Wheaton

Glenn G. Whiteside
Charles R. Wilkers
Larry D. Williams
Christine and Rodger Williams
Roger M. Williams
William R. Williams
Bruce W. Wilson
Byron J. Wing
Joseph R. Witherspoon
Timothy D. Woodbury
Chris D. Wright
Michael A. Yaskowsky
Julia Yefimenko
Peter W. Young
Robert Young
David Yuen
Thomas A. Zang
Jeffrey V. Zweber

List as of 3.30.12

* Indicates Matching Gift
+ Donor has made a planned gift in addition to an immediate donation.

AIAA
FOUNDATION
Invest In The Future

BOOKS AND JOURNALS

Public Access Publishing and AIAA's Path Forward

The Publications Committee and publications staff continued assessing the best approach to the “public access publishing” issue. In 2011 this took the form of three webinars commencing in March 2011 and culminating with a one-day workshop in May. The Committee invited Dr. H. Frederick Dylla, CEO and Executive Director of the American Institute of Physics (AIP), to address a group of approximately 30 Publications Committee members, Board members, editors-in-chief, staff, and several representatives of other engineering and scientific societies. Dylla surveyed the policy landscape, drawing upon his experience as a member of the Scholarly Publishing Roundtable as well as the chief executive of a significant scientific and technical publisher. In the second webinar, representatives of Wiley-Blackwell and the Optical Society addressed the business models that commercial and not-for-profit publishers are employing to facilitate public access publishing, including so-called hybrid models, where revenues derived by combinations of publication fees (paid by authors or their sponsors), advertising, sponsorship, and subscriptions underwrite the article or entire journal being made publicly accessible.

A third session, restricted to members of the Publications Committee, journal editors-in-chief, and staff, examined AIAA's internal journal operations to set the stage for future options. The May workshop assimilated the findings of the webinars and launched the development of an action plan for AIAA Publications to implement over the next one to three years. Emerging from the workshop, VP-Publications Michael Bragg, Journals Subcommittee Chair John Daily, and staff Managing Director for Technical Publications Rodger Williams drafted an “AIAA Public Access Report.” The full report and its recommendations were presented to the Publications Committee and adopted in January 2012. Its key findings are that AIAA should:

- provide a rich online experience to AIAA's journal readers, believed by the committee to be the strongest response available to AIAA.
- explore opportunities to host the federal repository for public access articles in the aerospace engineering and science disciplines.
- explore advertisement and sponsorship opportunities for the AIAA electronic library.
- provide input to the White House Office of Science and Technology Policy and Congress on public access policies, directly and through our professional organizations.
- explore a voluntary pay to make open access model while maintaining its current subscription offerings.

AIAA Principles on the Publication, Preservation, and Dissemination of Scholarly Aerospace Research

Defining what AIAA believes publishing stands for in the context of a learned professional society is a critical first step in approaching the public access issue. Inspiration was drawn from the broad coalitions behind statements such as the “Washington DC Principles for Free Access to Science” and the “Brussels Declaration on STM Publishing,” and from statements by peers such as “IEEE’s Principles of Scholarly Publishing: Putting Open Access into Context.” The Publications Committee initially adopted and revised these in 2011 and early 2012. Publications staff will seek the endorsement of the Technical Activities Committee and the AIAA Board of Directors in 2012. These principles:

- endorse the ability of authors from all segments of the global aerospace enterprise to submit papers for consideration;
- affirm AIAA’s commitment to peer-review, its acceptance of papers regardless of the author’s ability to contribute financially, and its assurance of a high ideal of publication ethics;
- plan for the pursuit of evolving and sustainable business models; and
- outline the preservation of the body of aerospace knowledge through electronic archives.

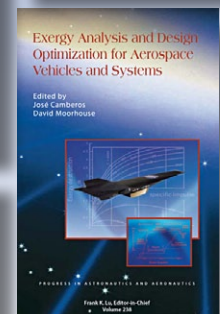
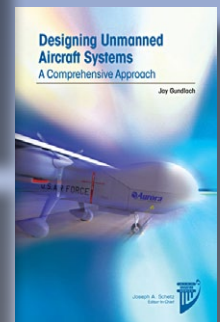
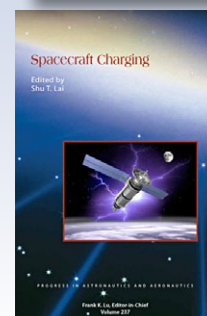
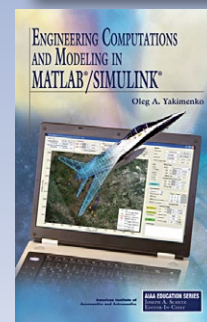
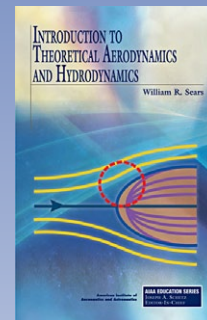
AIAA Books Published in 2011

AIAA Education Series

<i>Engineering Computations and Modeling in MATLAB/Simulink</i>	O. Yakimenko
<i>Introduction to Flight Testing and Applied Aerodynamics</i>	B. McCormick
<i>Boundary Layer Analysis, Second Edition</i>	J. Schetz and R. Bowersox
<i>Introduction to Theoretical Aerodynamics and Hydrodynamics</i>	W. Sears
<i>Basic Helicopter Aerodynamics, Third Edition (Wiley Copublication)</i>	J. Seddon and S. Newman
<i>Gas Turbine Propulsion Systems (Wiley Copublication)</i>	B. MacIsaac and R. Langton
<i>Designing Unmanned Aircraft Systems: A Comprehensive Approach</i>	J. Gundlach

Progress in Astronautics and Aeronautics

Vol. 236	<i>Space Operations: Exploration, Scientific Utilization, and Technology Development</i>	C. Cruzen, J. Gunn, and P. Amadiou (Editors),
Vol. 237	<i>Spacecraft Charging</i>	S. Lai (Editor)
Vol. 238	<i>Exergy Analysis and Design Optimization for Aerospace Vehicles and Systems</i>	J. Camberos and D. Moorhouse (Editors)





Aerospace Research Central—A New System and New Brand

Since 2008 AIAA has made extensive upgrades to its information technology infrastructure, starting with the association management system, through peer review and conference submission systems, and most recently its website. Following a formal source selection process, in 2011 AIAA selected Atypon® and its Literatum™ platform to reconfigure and host its electronic library. Atypon is recognized for its expertise in developing platforms that effectively deliver online content. Literatum, Atypon's flagship publishing platform, is used to host more than 11 million journal articles, more than 25,000 eBooks and many other types of professional and scholarly content.

In addition to archiving all of AIAA's books, journals, standards and conference proceedings – past and present – the updated electronic library, scheduled to be available in the first half of 2012, will allow users to save and schedule searches, highlight journal articles, download citations, sign up for alerts on subjects of interest to their research, post links to their research articles on a variety of social networking websites, and suggest other articles that might be of interest to them. The Literatum for Mobile™ feature will allow AIAA subscribers to access the full text of the latest research and professional information anytime, anywhere.

The new electronic library deserves an identity that conveys the value of the cumulative AIAA (including ARS and IAS) intellectual property. So with the relaunch of the AIAA electronic library, Aerospace Research Central (ARC) will centralize AIAA's many research sources (journals, papers, books, standards). The ARC's new social media tools will make it the central location for exchange and interaction for aerospace researchers. The ARC will be an archive. The ARC traces the full arc of aerospace research over the last 80 years. And, of course, an ark is a place to preserve things for the future.

Transitions

Three editors-in-chief concluded their service to AIAA in 2011.

Thomas Weeks retired as editor-in-chief of the *Journal of Aircraft (JA)* ending a tenure that began in 1979, and that saw more than 6,200 papers published in *JA*. His successor will be Dr. Eli Livne, Professor of Aeronautics and Astronautics at the University of Washington in Seattle, Washington. Livne, who will become the fifth editor-in-chief of *JA*, is a recognized expert in aeroelasticity, aeroservoelasticity, multidisciplinary flight vehicle optimization, aircraft design, aerospace structures, structural optimization, and structural dynamics.

Dr. Frank Lu, editor-in-chief of AIAA's Progress in Astronautics and Aeronautics book series, also indicated a desire to move onto new activities. VP-Publications Michael Bragg and the Publications Committee asked Lu to delay his departure until the *Journal of Aircraft* search was nearly complete. With book publishing undergoing myriad changes and challenges, the VP and Book Subcommittee Chair Michael Mendenhall thought an assessment of the series and recommendations to a new editor-in-chief might be valuable. To have time for this process, AIAA President Dailey made a one-year interim appointment of Dr. Tim Lieuwen, Georgia Institute of Technology, who has served as an editorial advisory board member for the AIAA Education Series since 2006. Lieuwen assumed his responsibilities on 1 January 2012; a formal search for a full-term editorial appointment will commence later this year.

Dr. Michael Hinchey retired as editor-in-chief of the *Journal of Aerospace Computing, Information, and Communication (JACIC)* in 2011 as well. Dr. Vigor Yang, former editor-in-chief of the *Journal of Propulsion and Power* and VP-elect Publications, volunteered to act as a caretaker editor-in-chief while a formal search is carried out. It is anticipated that a final appointment can be made by mid-2012.



■ Long-time *Journal of Aircraft* Editor-in-Chief Thomas Weeks was recognized for his 32 years of service at a December luncheon. He was presented with a commemorative plaque by AIAA VP-Publications Michael Bragg (right). Also among those in attendance was new *Journal of Aircraft* Editor-in-Chief Eli Livne (left).

AIAA Journals Measure Up

The quantitative assessment of scholarly journals dates back to the 1920s. The current predominant measure – the Impact Factor (IF) – was invented in the 1960s, and considers not only the articles published by journals but also their frequency of citation.

AIAA Journal and the *Journal of Guidance, Control, and Dynamics* rank third and fourth, respectively, in the Aerospace Engineering category of the 2010 Journal Citation Reports, published by Thomson Reuters. (Note that the journals that rank first and second published less than 40 articles collectively in the last two years, and thus should not be considered competitors.) For the 28 ranked publications, AIAA journals and *Aerospace America* account for over 60% of the citations but only 44% of the articles, indicating that AIAA's periodicals are punching above their weight in terms of IF. This represents a unique competitive advantage for AIAA.

In addition to AIAA's excellent Impact Factor ratings, AIAA journals fare well in cited half-life, which is an indication of the long-term value of source items in a journal publication, with cited half-lives of near or above 10 years for four AIAA journals.

AIAA Fares Well in the 2009 – 2010 Journal Citation Report for Journals in the Aerospace Engineering Category

2010 Rank	2009 Rank	Journal Title	Publisher	2009 Impact Factor	2010 Impact Factor
1	1	PROG AEROSP SCI	Elsevier	2.185	2.821
2	2	ESA BULL-EUR SPACE	ESA	1.491	1.4
3	5	AIAA J	AIAA	0.99	1.174
4	4	J GUID CONTROL DYNAM	AIAA	1.031	1.07
5	3	IEEE T AERO ELEC SYS	IEEE	1.23	0.917
6	-	INT J AEROACOUST	Multi-Science Publishing,UK	-	0.902
7	18	J ASTRONAUT SCI	AAS	0.362	0.857
8	6	J PROPUL POWER	AIAA	0.884	0.854
9	10	MICROGRAVITY SCI TEC	Springer	0.632	0.713
10	13	ACTA ASTRONAUT	IAA (Elsevier)	0.508	0.612
11	9	AEROSP SCI TECHNOL	Elsevier	0.674	0.607
12	12	J AIRCRAFT	AIAA	0.591	0.552
13	11	J SPACECRAFT ROCKETS	AIAA	0.611	0.523
14	16	INT J SATELL COMM N	Wiley	0.368	0.5
15	14	AERONAUT J	RAeS	0.412	0.496
16	7	P I MECH ENG GJ AER	IMechE (Sage)	0.773	0.48
17	8	J AEROSPACE ENG	ASCE	0.714	0.42
18	19	T JPN SOC AERONAUT S	JSASS	0.333	0.397
19	21	J AM HELICOPTER SOC	AHS	0.254	0.393
20	23	AIRCR ENG AEROSP TEC	Emerald	0.076	0.372
21	17	COSMIC RES+	Springer	0.366	0.325
22	20	CHINESE J AERONAUT	Elsevier	0.294	0.301
23	-	J AEROS COMP INF COM	AIAA	-	0.284
24	26	SPACE COMMUN	SSPI	0	0.25
25	15	IEEE AERO EL SYS MAG	IEEE	0.374	0.179
26	24	INT J TURBO JET ENG	DeGruyter	0.061	0.082
27	22	AEROSPACE AM	AIAA	0.15	0.047
28	25	J SPACECR TECHNOL	ISRO	0.034	0.037

Journal Citation Reports, 2010, copyright © 2012 Thomson Reuters

Journal Special Sections 2011

Journal of Aerospace Computing, Information, and Communication, April 2011: “Autonomous and Autonomic Space Exploration Systems” (3 papers plus an editorial), organized by Associate Editor Roy Sterritt

Journal of Spacecraft and Rockets, January–February 2011 and March–April 2011: “Space Environmental Effects on Materials III” (13 papers spread over two issues), organized by Associate Editor David Edwards

Journal of Aircraft, May–June 2011: “Systems Engineering” (5 papers), organized by Guest Editors John Hsu and Satoshi Nagano

Journal of Spacecraft and Rockets, September–October 2011: “Mars Phoenix Lander: A 10-Year Journey to the Red Planet” (12 papers), organized by Guest Editor Prasun Desai

Articles in AIAA journals achieve high impact.

■ AIAA's remaining journal, *Journal of Thermophysics and Heat Transfer*, (*JTHT*) is not included in the Aerospace Engineering segment but rather under the Mechanical Engineering and Thermodynamics segments and has a 2010 IF of 0.823. *JTHT* is ranked 44 of 122 journals in Mechanical Engineering, and 30 of 51 journals in Thermodynamics. AIAA's *Journal of Guidance, Control and Dynamics* (*JGCD*) is also included in the Instruments and Instrumentation category, where it is ranked 30 of 61 journals.

STANDARDS

Update of New Procedures Approved

A revised *AIAA Standards Program Procedures* (January 2012) was approved by the American National Standards Institute (ANSI). The revised document benefits the Committees on Standards (CoS), the Standards Executive Council (SEC) members, as well as in-house users by improving the process of developing standards.

The revised *Standards Program Procedures* underwent the same process as any other Standard, including having the final draft placed for public review and comment, with the final version submitted for approval by ANSI's Executive Standards Council, and approval by ANSI for AIAA use.

AIAA to Continue its Support of the Consultative Committee for Space Data Systems

Since 2006, AIAA has provided secretariat support service for NASA to the Consultative Committee for Space Data Systems (CCSDS). This valuable relationship is currently extended through January 2013 with options for three more successive years, potentially taking the relationship through January 2016.



Founded in 1982 by the major space agencies of the world, the purpose of CCSDS provides a multinational forum for the development of communications and data systems standards for spaceflight. The secretariat is the administrative arm of the CCSDS and International Standards Organization (ISO) TC20/SC13.

CCSDS and AIAA are natural partners in this endeavor because of AIAA's position as the main ANSI-accredited standards development organization (SDO) for space activities in the United States and as an ANSI U.S. Technical Advisory Group (TAG) to ISO/TC20 subcommittees 13 and 14. One of the CCSDS stated goals is to maintain harmony among these interrelated standards activities and bodies, and AIAA remains uniquely positioned to fulfill this objective.

Additional International Support

AIAA administers the U.S. Technical Advisory Group for ISO TC20/SC13 Space Data and Information Transfer Systems and SC14 Space Systems and Operations. International collaboration on civil space programs has become necessary and the norm, especially with the expanding commercial space market. TAG members cover areas such as design engineering, interfaces and integration, operations and ground support, space environment, program management, materials and processes, and orbital debris.

In 2011, AIAA Standards staff provided secretariat support, assisting TAG members in the development of 8 new proposed standards and more than 35 standards in development. Important activities included facilitating ongoing discussions regarding the proposed development of two additional working groups, advising on voting protocol in the TAG, and coordinating U.S. votes on international documents.

Recently Published Standards

ANSI/AIAA S-131-2010	Astrodynamics: Propagation Specifications, Technical Definitions, and Recommended Practices
ANSI/AIAA S-119-2011	Flight Dynamics Model Exchange Standard

Standards Under Development

AIAA G-129-201X	Nomenclature for Aerodynamic Wind Tunnel Test
AIAA G-043-201X	Guide for the Preparation of Operational Concept Documents
AIAA G-095-201X	Guide for the Safety of Hydrogen and Hydrogen Systems
AIAA G-133-1-201X	SPA: XTED
AIAA S-133-2-201X	SPA: Networking
AIAA S-133-3-201X	SPA: Logical Interface
AIAA S-133-5-201X	SPA: Power Service
AIAA S-133-7-201X	SPA: Ontology
AIAA S-133-9-201X	SPA: Spacewire Subnet Adaptation
AIAA S-115A-201X	LEO Spacecraft Charging Design Standard and Handbook
AIAA S-112A-201X	Qualification and Quality Requirements for Space Solar Panels
AIAA R-093A-201X	Calibration of Subsonic and Transonic Wind Tunnels
AIAA S-017B-201X	Aerodynamic Decelerator and Parachute Drawings
ANSI/AIAA G-034A-201X	Guide to Reference and Standard Ionosphere Models

Education and Outreach

In an effort to increase the awareness of AIAA's involvement in the standards community and to educate primarily members who are interested in or already participating on Committees on Standards (CoS), AIAA Standards staff created workshops to present a broad view of the Standards development process in AIAA. These workshops focus on how the process works and what requirements and timelines are needed to produce standards. The workshop that was conducted recently (ASM 2012), "Standards and Their Development at AIAA: Benefits and Process," emphasized the AIAA domestic standards process.

The materials developed have been provided to CoS chairs with the aim of streamlining the development process for new or revised standards and ensuring compliance to AIAA's ANSI-accredited procedures. These workshops are available for CoS members who plan to meet at AIAA conferences or in conjunction with interested Technical Committees who are interested in discussing AIAA Standards at their meetings.

Standards-related announcements have been on the rise in the *Daily Launch*, *Momentum*, and *AIAA Bulletin* in 2011, as well as email notifications to TCs about AIAA standards activities such as collaboration with ANSI to deliver ANSI standards news, call for members for specific CoS, outreach to TCs to assist with standards development, information regarding ISO TAG activities and special interest group formation, and availability of documents for public review.

In fall 2011, AIAA Standards supported the publication of two articles in a prominent standards publication, *ISO Focus*. A special report on space standards featured the articles "Keep It Clean: Taking Action on Space Debris" and "Interoperability and Innovation: Securing the Future of Space Communication."

AIAA Committees on Standards

Aerodynamic Decelerator
Atmospheric and Space Environments
Computational Fluid Dynamics
Ground Testing
Hydrogen
Mission Assurance
Pressure Vessels
Solar Cells/Solar Panels
Space Internetworking
Space Plug-and-Play Architecture
Systems Engineering

Creating Value – Networks and Information Exchange

TECHNICAL ACTIVITIES

Technical Activities Remain AIAA's Core

AIAA's technical activities continue to be a core part of the Institute. These activities are most often exemplified through AIAA's conferences, which rely on the dedication of the more than 2000 active members of the Technical Committees, Program Committees, and the Technical Activities Committee (TAC).

AIAA organized 26 technical conferences in 14 different sites during FY2011. Overall paid attendance was down by 7.4% from FY2010, from 9,287 to 8,644. We continue to see strong participation from students, with 489 undergraduate students and 1,724 graduate students attending conferences in FY2011. Our five largest events for the year were the Aerospace Sciences Meeting, the U.S. Missile Defense Conference (which AIAA organizes on behalf of the Missile Defense Agency), the Joint Propulsion Conference, the SPACE Conference, and the co-located group of conferences that meets with the Fluids Dynamics Conference. The co-located group that met with Fluid Dynamics in 2011 included: Applied Aerodynamics, Computational Fluid Dynamics, Thermophysics, Theoretical Fluid Mechanics, Plasmadynamics and Lasers, and Atmospheric and Space Environments Conferences.

While AIAA is committed to maintaining its technical core in its conferences, TAC continues to work to integrate other areas of the Institute into conferences and to make AIAA's conferences more relevant to the broader aerospace community.

Making AIAA Events More Relevant to the Aerospace Community

Developing a Future Conference Strategy

Over the last half of FY2011, a tiger team of TAC members, other volunteers, and staff assessed various event models to take a critical and strategic look at AIAA's current conferences and events, and evaluate changes necessary in today's climate to better serve our membership and the broader aerospace community. The group collected feedback from surveys of past attendees, individuals who don't normally attend AIAA events, and AIAA Corporate Members. This initial assessment culminated in a Future Conference Strategy workshop in conjunction with the 50th Aerospace Sciences Meeting, in which volunteers from TAC and other areas of the Institute participated. During the workshop, various alternate event models were presented with the tiger team's analysis and the participants provided feedback on each of the models. The models attempted to create multi-layered events that include various topics of interest to the aerospace professional, including technical disciplines, systems integration, operations, and policy. The tiger team will continue to work into 2012 to assess feedback from the workshop and to further define the future event model plan.



Addressing System-Level Execution Issues Head-On

To make system-level issues and thinking a central component across the Institute's products and services, a new AIAA event focused on systems integration is being planned for September 2012 in Pasadena, CA and will be co-located with SPACE 2012. The goal of the AIAA Complex Systems Aerospace Exchange (CASE) is to provide value to those working in complex system development and to bridge the gap between the technology and science of the components and the integration and management skills needed to field successful aerospace systems of increasing complexity. This event will help to shape and articulate the important issues facing this community so that future forums can continue the dialogue and begin to shape future directions. AIAA President-Elect Mike Griffin is serving as the CASE Executive Chair and Vice President-Elect Standards Laura McGill is serving as Program Chair.





■ The AIAA JPC and IECEC conferences featured a keynote address by SpaceX CEO Elon Musk.



Starting the Transition to AVIATION 20XX

In September 2011, AIAA organized another successful Aviation Technology, Integration, and Operations (ATIO) Conference in Virginia Beach. Featured in conjunction with this conference were the Centennial of Naval Aviation Forum and the New Horizons in Aviation Forum. Both these events helped to expand ATIO beyond its traditional constituency and are important stepping stones to a new AIAA AVIATION 20XX event. In 2012, AIAA will organize a follow-on New Horizons in Aviation Forum at ATIO, and planning efforts have begun for transitioning ATIO and the New Horizons in Aviation Forum in 2012 into the first AVIATION 20XX event in late summer 2013. The vision for AVIATION 20XX is to create a forum for technologists, developers, operators, program managers, chief engineers, and policymakers to come together to discuss aviation issues and challenges.

Using Technology to Enhance the Event Experience

As AIAA looks to build on its technical core as it evolves to a new event model and expand into new areas, we have introduced new technologies to how we organize conference to improve the experience for attendees and to reach out to new audiences.

- AIAA's first mobile app for an event was launched for SPACE 2011. With over 300 downloads, the app included general information about the event, exhibit, and vicinity in addition to details about the program and special events. A strategy is being developed to create apps for all AIAA events.
- The ExpressPass system was deployed at all domestic AIAA events starting with the summer conferences in June in Hawaii. The system allows for preregistrants to scan a bar code or type in their last name into a self-service screen to quickly print their badge. We will use this system to make registration check-in more efficient for attendees.
- We launched an app to allow session chairs to easily fill out the session report with information used to continually improve the technical program. The data collected will be shared with organizing committees to plan subsequent conferences. In addition, we continue to develop resources for conference organizers and make them available online so they can access them at their convenience. Currently, training videos for session chairs, technical program organizers, and moderators are being planned.
- In partnership with the National Institute of Aerospace, selected keynote addresses at the 2011 New Horizon Forum (held in conjunction with the Aerospace Sciences Meeting); Joint Propulsion Conference; Centennial of Naval Aviation/New Horizons in Aviation Forum (held in conjunction with the Aviation Technology, Integration, and Operations Conference); and SPACE Conference were livestreamed. AIAA and NIA are continuing this partnership in order to livestream from selected 2012 AIAA events.

AIAA SECTIONS ENGAGE AND INSPIRE WITH LOCAL ACTIVITIES

Every month there are activities held across the country and around the world by AIAA's 58 sections. These events help members exchange information, build professional relationships, mentor young professionals, and reach out to local students as well as the community at large. Not to mention that they are lots of fun! A small sampling of events from the seven regions exemplifies the scope and diversity of the many events and the hard work of members in the field.

Region 1

During the summer, the AIAA Hampton Roads section sponsored a summer camp with Cooper Elementary School, a unique partnership between AIAA and a local magnet elementary school for technology. Adult leaders created activities, which involved a short lecture or demonstration followed by hands-on involvement by up to 25 students. These activities are part of a science-focused summer camp that engages the students in science and engineering projects and visits were made the school each week during the four-week summer camp program. The summer activities are complemented over the winter with additional activities during Engineers' Week that focus on the STEM curriculum for each grade at the school and reach all of the students.



■ Members of the Adelaide section, which helped develop the AIAA section banners that have now been provided to all AIAA sections. In this photo, Adelaide members are shown with AIAA Distinguished Lecturer Michael Drake (center).



REGION 1



■ The Hampton Roads Section held a science-focused summer camp for elementary school students.

REGION 4



■ The North Texas Section welcomed NRO historian emeritus Cargill Hall, who described the exploits of fighter pilots during the Spanish Civil War.



Region 2

Members of the University of Central Florida student AIAA branch held an event called Wings 'n' Things where they volunteered to teach Cub Scouts and Boy Scouts (and their siblings) how to build model rockets. Later that afternoon, the scouts enthusiastically launched their rockets.

Region 3

Members of the AIAA Michigan Section held a Rocket Lab in May 2011 for three classes of elementary school students, following the principle of Learn, Build, and Launch. They discussed what rockets are, Newton's laws, a history of rocket propulsion, and why we need rockets. They showed video of a space shuttle launch, and discussed the Hubble telescope. In the next step, the students themselves built Estes rockets – 45 in all – with the help of three AIAA Michigan Section engineers. The students estimated how high their rockets would fly and discussed variables like weight and drag. On the following day, they launched their rockets and saw them in action. They recorded the information needed to calculate the maximum height of each rocket's trajectory, and discussed the variation seen in the maximum heights recorded for all rockets launched in their class. The maximum altitude achieved by the best rocket in each of the three classrooms was 417 ft, 421 ft, and 421 ft. Overall, the data seemed to reflect a strong inverse correlation between peak altitude and the number of decorative stickers applied.

Region 4

The North Texas Section welcomed Cargill Hall, historian emeritus of the National Reconnaissance Office, to speak to the section in January. He is the 2012 winner of the AIAA History Manuscript Award, for "Ace of Chaos: Frank G. Tinker and the Air War in Spain." He evoked a bygone era, and the romance of flight, with his tales of Frank Tinker and his exploits during the Spanish Civil War.

■ The University of Central Florida student branch helped scouts build model rockets during their "Wings 'n' Things" event.



REGION 2



Region 5

The Twin Cities AIAA Section held an Engineering Week event in conjunction with the University of Minnesota Student AIAA Chapter, entitled “The Future of Engineering,” featuring displays from various student and design groups at the University and two short talks on student design projects given by AIAA student members. Lectures were given by two university professors: Professor Demoz Gebre-Egziabher (shown receiving a certificate of appreciation) spoke about the U of M UAV Project, after which and gave a tour of the UAV lab, and Professor Richard James gave a talk on “Materials for the Direct Conversion of Heat to Electricity.”

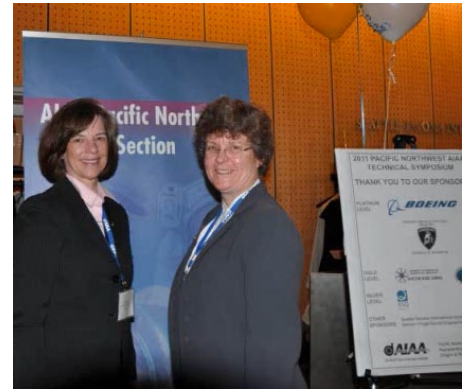
Region 6

The 150 attendees at the Pacific Northwest Section’s annual Technical Symposium heard addresses by Aerospace Corporation CEO Wanda Austin and Dr. Randii Wessen of Jet Propulsion Laboratory. Two technical tracks featured wide-ranging presentations, from “Numerical Analysis of Flow Interactions Between Moving Objects With Relative Velocity: Canoe and Paddle” and “Children of Stuxnet: The Emerging Trend of Hardware Hacking via Malware” to “The Space Elevator and Our Future” and “Cross-Industry Tech Transfer and Collaboration: How to Make Technology Jump the Fence (But Not the Shark).” The program also featured a non-technical panel on education, “The Right to Your Brain STEM,” and an “Engineers as Educators” workshop to teach AIAA members how to engage school groups in hands-on activities that will inspire them to study science and engineering.

Region 7

Ken Szalai, an AIAA Distinguished Lecturer, travelled to Munich to lecture to students, faculty, AIAA members, and the public at the Technische Universität-München on Experimental Flight Research in the Modern Era. He then travelled to Zurich and gave a similar lecture to AIAA members and others. Overall, he addressed well over 350 people. The Distinguished Lecture program funds speakers to travel to sections that would not otherwise have access to these speakers.

REGION 6



■ Former NASA astronaut Bonnie Dunbar (left) with Brig. Gen. Katherine Roberts (USAF, ret.), chair of the Technical Symposium organizing committee for the Pacific Northwest Section.

REGION 5



■ Professor Demoz Gebre-Egziabher addressed the Twin Cities Section on the University of Michigan UAV project.

■ In Munich, AIAA Distinguished Lecturer Ken Szalai addressed AIAA members and the public on experimental flight research in the modern era.

■ The Michigan Section held a “Rocket Lab” where they led students in examining the science behind the test results for the rockets they launched.



REGION 3



REGION 7



Expanding the Reach of the Profession

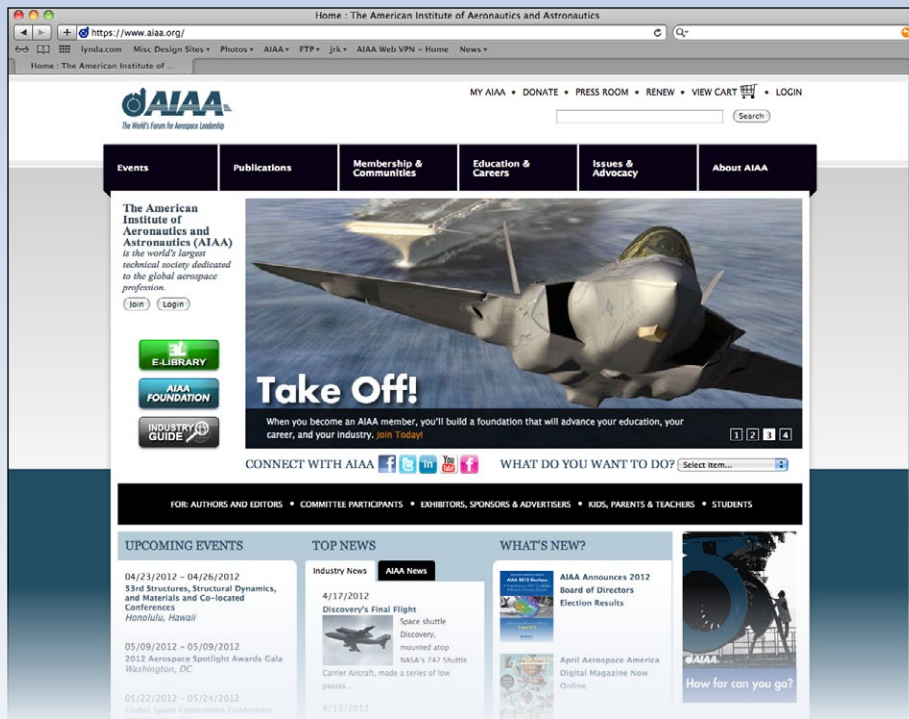


COMMUNICATIONS

Raising Our Profile

Momentum continues to push AIAA's outreach to new heights. For the second straight year, AIAA received more than 5,000 mentions in the news. Throughout 2011, expert requests were received from world class national and international media outlets such as Inc. Magazine, the Associated Press, Fortune.com, The Washington Post, Britain's New Scientist Magazine, the Associated Press London Bureau, BBC World News America, the Australian Broadcasting Corporation, and China's Xinhua News agency.

SPACE 2011 was noteworthy in that an all-time high 26 reporters attended. The crew of STS-135 attracted much attention with their attendance; their press conference drew many reporters from the Southern California press, including Easy Reader Magazine, which is one of the largest scholastic publications in the world for children in grades K-12. Sixty-four stories appeared in print after the SPACE conference concluded.



New Technologies Power www.aiaa.org

Over the past year, the AIAA website was entirely overhauled from the ground up. A new content management system was implemented, the design was updated to be modern and bold, a new search engine was deployed, and fresh content was written. Other improvements included user friendly navigation, better integration with our Association Management System, single sign-on for AIAA and extranet sites, an improved membership upgrade process, and a newly designed shopping cart to make purchasing easier. Thanks to the many members who were involved with usability testing, web surveys, and pre-launch testing. More enhancements are planned for the site.

Hollywood came calling in 2011 with Bob Dickman's discussion of surface-to-air missiles on the popular "Ancient Aliens" series on The History Channel, and with Mischer Films requesting consultations with our experts on futuristic spacecraft design for a feature film that is on the production boards. In addition, representatives of AIAA appeared on The Space Show with Dr. David Livingston, an internationally broadcast radio/web program focusing on aerospace issues, to discuss AIAA conferences, the end of the space shuttle era, and the future of commercial space.

Aerospace America Looks Forward and Back

Aerospace America's coverage of topics that matter most to the profession continued in 2011. For example, a special "Wings of Gold; One hundred years of U.S. Navy air power" article appeared in the September 2011 edition, and the March issue featured a valuable UAV Roundup chart.

Development of a new *Aerospace America* mobile app began. It will be accessible across iPhone, iPad, Android, and BlackBerry. Members will be able to access the magazine from any location and updates will be pushed to their devices. The app will have an interactive UAV poster, a search by article function, an events calendar that can download into app calendars, videos, photos, and more. The app will launch in mid-2012.



Expanding Our Reach with Livestreaming

The Institute began to livestream key conference sessions from our events in 2011. Elon Musk's presentation from the Joint Propulsion Conference was picked up by MSNBC and Fox News, and aired in real-time on their web pages. For three events in 2011 (JPC, Centennial of Naval Aviation, and SPACE) we reached more than 11,800 unique viewers who watched 426,300 total minutes of our video. AIAA's Livestream channel is located at www.livestream.com/aiaa.



THE AIAA HISTORIC AEROSPACE SITES PROGRAM

Recognizing the Contributions of Our Predecessors

AIAA continues to honor the work of aerospace pioneers around the world. The Historic Aerospace Sites Program was created in 2000 to remember, and honor, those sites in this country and around the world that have contributed in some way to the aerospace community. Especially for sites that are not well known, this helps ensure that they and their contributions will not be forgotten. Five sites were honored in the past year.

Getafe Airfield

The Getafe Airfield, outside Madrid, Spain, is where Juan de la Cierva's C.4 Autogiro made its first successful flight, on 17 January 1923, with Lieutenant Alejandro Gómez Spencer at the controls. The Cierva Autogiro was the first practical rotorcraft, and many aspects of its design were critical to the development of helicopters and other vertical lift aircraft. Between 1920 and 1924, Juan de la Cierva tested four prototype Autogiros at Getafe; and after numerous attempts, solved his control problems with flapping blade hinges.

Ramo-Woodridge Corporation, at Space Park

The Ramo-Woodridge Corporation, at Space Park, in Redondo Beach, California, created more than 100 of the world's most technically challenging satellites, rocket engines, and astronomical observatories. The technologies they developed led to such breakthroughs as NASA's Pioneer 10, the first spacecraft to leave our solar system; the descent engine for the Apollo Lunar Excursion Module; the Defense Department's Milstar satellite communication network; NASA's Tracking and Data Relay Satellite System "Switchboard in the Sky"; and astronomy and science satellites such as the Chandra X-ray Observatory. Space Park today is part of the Northrop-Grumman Corporation.

Delta Air Lines Headquarters

The original Atlanta headquarters buildings of Delta Air Lines officially moved its headquarters to Atlanta on 1 March 1941, and soon constructed offices and Hangar 1, the largest aircraft hangar in the Southeast. In 1947, the complex doubled in size, with Hangar 2 and an executive building, housing the office of Delta founder C.E. Woolman. Today, the original 1940s buildings of Delta's headquarters are the oldest existing facilities on Atlanta airport property.

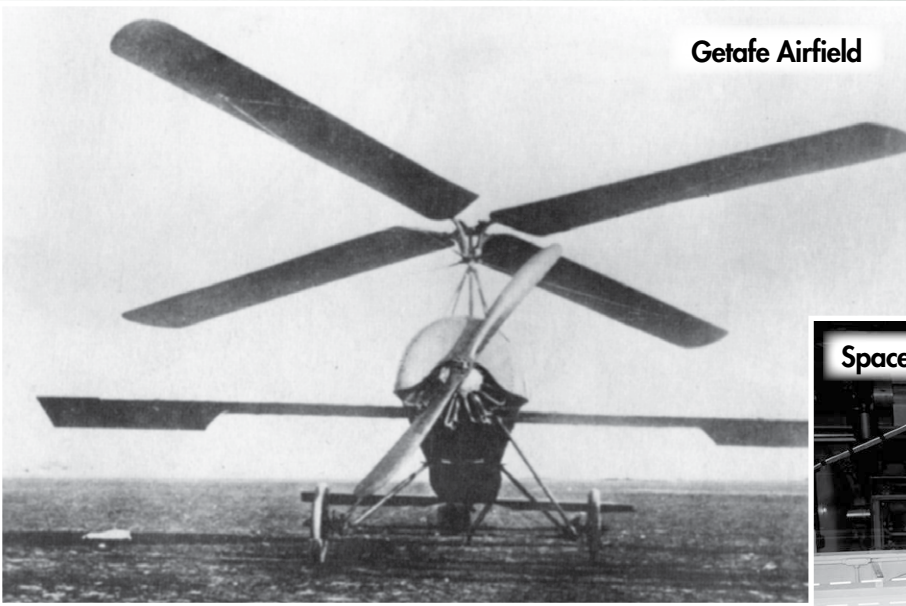
Bremen Airport

Bremen Airport, Germany, started as a simple landing field in 1909 used by a local aviation club, the Bremen Airship Aviation Association. A few years later, the city of Bremen officially established it for use in air travel. In 1924, Henrich Focke and Georg Wulf founded the Focke-Wulf company there for the development and construction of civil and trainer airplanes. On 26 June 1936, Henrich Focke's Fw 61 made its successful maiden flights at Bremen Airport site with test pilot Ewald Rohlfs at the controls. One year later the Fw 61 – the world's first practical helicopter – set all existing world records for helicopters for Germany.

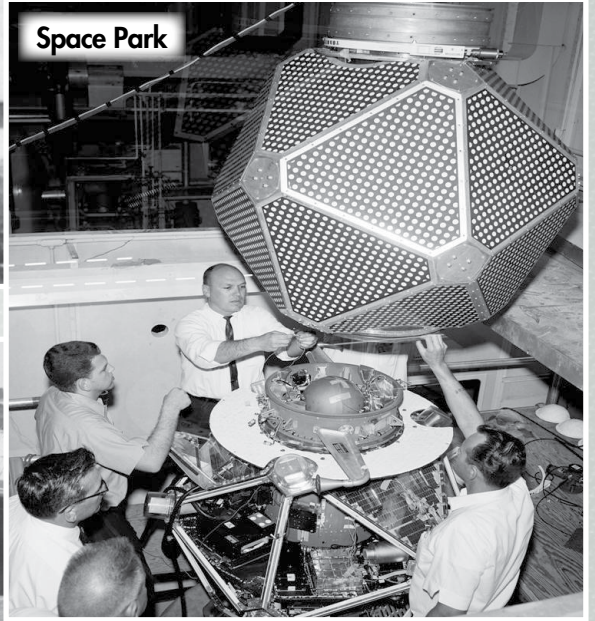
Yeşilköy Military Apron

The Yeşilköy Military Apron, in Istanbul, Turkey, is the birthplace of Turkish aviation. The first Turkish military plane took off from this site on 26 April 1912, and in the same year a flight school was established here. The first long-range flight of Turkish aircraft, from İstanbul to Cairo, started here in 1914, during the Ottoman Empire. The first national civilian airline company also started here. (Due to unforeseen events, AIAA was unable to hold a designation ceremony during the past year for this site).

Getafe Airfield



Space Park



Delta Air Lines Headquarters



Bremen Airport



AIAA FINANCIAL POSITION STRENGTHENS

AIAA has been a strong steward of its financial resources in a slowly, but steadily improving macroeconomic environment. AIAA's long-term endowment portfolio assets continue to rebound, albeit slowly, with FY11 ending slightly below the ending balance of FY10, but significantly improved from the market lows of 2008–2009.

Changes were made in the management of AIAA's Endowment Portfolio in FY11. AIAA's Finance Committee changed its investment services provider to one renowned for its pragmatic and efficient approach to investing, whose tenets are closely aligned to the Institute's own investment philosophies. The transfer of portfolio assets to the new investment company was completed on September 30, 2011, in an effort to coincide with the FY11 fiscal year.

This year is highlighted by the following performance:

- The Endowment Portfolio dipped slightly in FY11, reflecting broader market uncertainty and volatility. The Endowment Portfolio began FY11 with a value of \$ 22,910K, and ended the year with a decrease of \$1,753K to \$21,157K. This decrease includes portfolio withdrawals of \$630K that were made in support of Strategic and Special Initiatives for FY11.
- The Pension Fund Portfolio increased by 2.3% to \$9,537K from \$9,318K the prior year. The improvement in the Pension Fund Portfolio performance is welcome in that it reduces the Institute's overall unfunded pension liability and keeps AIAA above government mandated funding minimums.

In addition to the FY11 investment results and the progress made toward underpinning our long-term financial stability, the Institute continues to navigate a challenging and uncertain operating environment. Near-term risk caused by federal budget consolidation in key sectors such as Defense, broad-based cuts in discretionary spending among our university, corporate, and agency constituencies, and the ever-changing aerospace business environment continue to be our primary challenges. In response, AIAA continues to set program priorities, exercise prudent expense management, and improve operating and financial management processes in support of its long-term mission.

In addition, AIAA is investing in new growth areas, as well as recalibrating existing products and programs to ensure the Institute's long-term relevance and success. The Institute is committed to enhancing its level of service, creating and supporting product and programs that are unparalleled in quality, and using technology to drive exciting and innovative ways of delivering value to our members as well as our institutional and corporate partners around the world.

For the fiscal year the overall net result, as indicated in the attached audited Consolidated Statements of Financial Position, was an increase in the Institute's total assets to \$27,862K at the end of FY11 from \$27,622K in FY10 and a decrease in the Institute's net assets for FY11 to \$7,416K from \$9,271K in FY10. The primary driver in the decline in net assets was caused by actuarial projections for the AIAA unfunded future pension liability.

Accounting guidelines require the consolidation of financial results for AIAA and the AIAA Foundation. The complete financial results for AIAA and its related Foundation are provided in the following pages. Both AIAA and the AIAA Foundation are tax exempt under Section 501(c)(3) of the Internal Revenue Code. AIAA received an unqualified clean audit opinion from our independent auditors, Johnson-Lambert & Co. LLP, concerning our consolidated financial statements and our business and accounting practices. Key elements of our combined audited financial statements are found on the following pages.



Angelo M. Iasiello
AIAA Treasurer

A copy of the Institute's complete audited financial statements may be obtained by writing to:

Angelo M. Iasiello
AIAA Treasurer
1801 Alexander Bell Drive,
Suite 500
Reston, VA 20191

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Year ended September 30, 2011 (in thousands)

Year ended September 30, 2010 (in thousands)

	Institute	Foundation	Eliminations	Consolidated	Institute	Foundation	Eliminations	Consolidated
Assets								
Cash and cash equivalents	\$ 2,797	\$ 4	\$ —	\$ 2,801	\$ 1,494	\$ 76	\$ —	\$ 1,570
Investments	21,157	4,626	—	25,783	22,910	4,831	—	27,741
Accounts receivable, net	984	—	—	984	821	4	—	825
Pledges receivable, net	—	112	—	112	—	153	—	153
Due from Foundation	547	—	(547)	—	184	—	(184)	—
Prepaid expenses and other current assets	479	12	—	491	518	3	—	521
Inventory	82	—	—	82	92	—	—	92
Fixed assets, net	1,816	—	—	1,816	1,603	—	—	1,603
Total assets	\$ 27,862	\$ 4,754	\$ (547)	\$ 32,069	\$ 27,622	\$ 5,067	\$ (184)	\$ 32,505
Liabilities and net assets								
Accounts payable and accrued expenses	\$ 3,233	\$ 43	\$ —	\$ 3,276	\$ 3,124	\$ 104	\$ —	\$ 3,228
Due to Institute	—	547	(547)	—	—	184	(184)	—
Deferred member dues	2,878	—	—	2,878	2,687	—	—	2,687
Deferred subscriptions	5,954	—	—	5,954	5,303	—	—	5,303
Deferred other	326	—	—	326	872	—	—	872
Other liabilities	138	—	—	138	142	—	—	142
Capital lease obligation	82	—	—	82	115	—	—	115
Defined benefit pension liability	7,835	—	—	7,835	6,108	—	—	6,108
Total liabilities	20,446	590	(547)	20,489	18,351	288	(184)	18,455
Net assets								
Unrestricted net assets	7,416	3,277	—	10,693	9,271	3,881	—	13,152
Temporarily restricted net assets	—	51	—	51	—	62	—	62
Permanently restricted net assets	—	836	—	836	—	836	—	836
Total net assets	7,416	4,164	—	11,580	9,271	4,779	—	14,050
Total liabilities and net assets	\$ 27,862	\$ 4,754	\$ (547)	\$ 32,069	\$ 27,622	\$ 5,067	\$ (184)	\$ 32,505

CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended September 30, 2011 <i>(in thousands)</i>	Institute	Foundation	Eliminations	Consolidated
Revenue				
Member services	\$ 2,243	\$ —	\$ —	\$ 2,243
Education	727	—	—	727
Technical publications	5,938	—	—	5,938
International	84	—	—	84
Technical activities	11,251	—	—	11,251
Corporate membership and Institute outreach	2,533	—	(97)	2,436
Public policy	21	—	—	21
Standards	951	—	—	951
Strategic plan initiatives	2	—	—	2
Other program services	—	24	—	24
Revenues before investment return, contributions and net assets released from restriction	23,750	24	(97)	23,677
Investment return	(601)	(202)	—	(803)
Contributions	66	329	(150)	245
Change in discount and allowance	—	13	—	13
Net assets released from restriction	—	40	—	40
Total revenue	23,215	204	(247)	23,172
Expenses				
Program services:				
Member services	2,289	161	—	2,450
Education	1,271	332	—	1,603
International	230	—	—	230
Technical publications	4,388	—	—	4,388
Technical activities	8,564	—	—	8,564
Corporate membership and Institute outreach	4,599	—	(97)	4,502
Public policy	733	—	—	733
Standards	1,180	—	—	1,180
Strategic plan initiatives	75	—	—	75
Fundraising	150	279	(150)	279
Other program services	124	—	—	124
Total expenses before investment expenses	23,603	772	(247)	24,128
Investment expenses	180	24	—	204
Total expenses	23,783	796	(247)	24,332
Expenses in excess of earnings - temporarily restricted net assets	—	12	—	12
Change in unrestricted net assets	(568)	(604)	—	(1,172)
Change in temporary restricted net assets				
Investment return	—	17	—	17
Net assets released from restriction	—	(40)	—	(40)
Transfer of expenses in excess of earnings to unrestricted net assets	—	12	—	12
Change in temporarily restricted net assets	—	(11)	—	(11)
Change in net assets from operations	(568)	(615)	—	(1,183)
Pension related changes other than net periodic pension cost	(1,287)	—	—	(1,287)
Net change in net assets	(1,855)	(615)	—	(2,470)
Net assets, beginning of year	9,271	4,779	—	14,050
Net assets, end of year	\$ 7,416	\$ 4,164	\$ —	\$ 11,580

CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended September 30, 2010 <i>(in thousands)</i>	Institute	Foundation	Eliminations	Consolidated
Revenue				
Member services	\$ 2,067	\$ —	\$ —	\$ 2,067
Education	646	—	—	646
Technical publications	5,489	—	—	5,489
International	47	—	—	47
Technical activities	12,304	—	—	12,304
Corporate membership and Institute outreach	1,667	—	—	1,667
Public policy	1	—	—	1
Standards	936	—	—	936
Strategic plan initiatives	1	—	—	1
Other program services	—	23	—	23
Revenues before investment return, contributions and net assets released from restriction	23,158	23	—	23,181
Investment return	1,378	246	—	1,624
Contributions	60	321	(100)	281
Change in discount and allowance	—	6	—	6
Net assets released from restriction	—	44	—	44
Total revenue	24,596	640	(100)	25,136
Expenses				
Program services:				
Member services	2,259	113	—	2,372
Education	1,347	366	—	1,713
International	191	—	—	191
Technical publications	4,569	—	—	4,569
Technical activities	9,464	—	—	9,464
Corporate membership and Institute outreach	3,123	—	—	3,123
Public policy	626	—	—	626
Standards	1,422	—	—	1,422
Strategic plan initiatives	722	—	—	722
Fundraising	100	274	(100)	274
Other program services	194	—	—	194
Total expenses before investment expenses	24,017	753	(100)	24,670
Investment expenses	152	22	—	174
Total expenses	24,169	775	(100))	24,844
Expenses in excess of earnings - temporarily restricted net assets	—	11	—	11
Change in unrestricted net assets	427	(146)	—	281
Change in temporarily restricted net assets				
Investment return	—	52	—	52
Net assets released from restriction	—	(44)	—	(44)
Transfer of expenses in excess of earnings to unrestricted net assets	—	11	—	11
Change in temporarily restricted net assets	—	19	—	19
Change in net assets from operations	427	(127)	—	300
Pension related changes other than net periodic pension cost	1,109	—	—	1,109
Net change in net assets	1,536	(127)	—	1,409
Net assets, beginning of year	7,735	4,906	—	12,641
Net assets, end of year	\$ 9,271	\$ 4,779	\$ —	\$ 14,050

CONSOLIDATED STATEMENTS OF CASH FLOWS

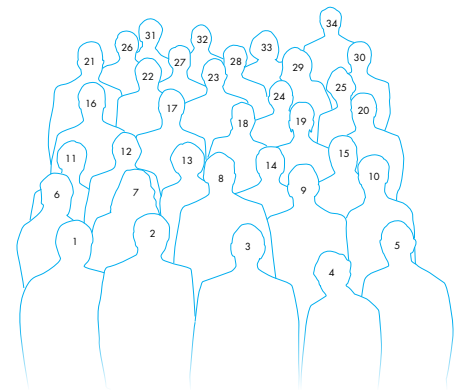
<i>(in thousands)</i>	Years ended September 30,	
	2011	2010
Cash flows from operating activities		
Net change in net assets	\$ (2,470)	\$ 1,409
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation & amortization	387	389
Loss on disposal of furniture and equipment	—	41
Net realized and unrealized losses (gains) on investments	1,617	(966)
Changes in operating assets and liabilities:		
Accounts receivable, net	(164)	(62)
Pledges receivable, net	41	(3)
Prepaid expenses and other current assets	30	17
Inventory	10	(24)
Accounts payable and accrued expenses	52	260
Defined benefit pension liability	1,727	(999)
Other liabilities	(4)	18
Capital lease obligation	(33)	(31)
Deferred income	296	906
Net cash provided by operating activities	<u>1,489</u>	<u>955</u>
Cash flows from investing activities		
Proceeds from the sale of investments	43,612	22,588
Purchases of investments	(43,271)	(22,396)
Purchases of furniture, equipment, leasehold improvements, and software	<u>(599)</u>	<u>(185)</u>
Net cash (used in) provided by investing activities	<u>(258)</u>	<u>7</u>
Net change in cash and cash equivalents	1,231	962
Cash and cash equivalents, beginning of year	1,570	608
Cash and cash equivalents, end of year	<u>\$ 2,801</u>	<u>\$ 1,570</u>

2011–2012 AIAA BOARD OF DIRECTORS

The heart of the American Institute of Aeronautics and Astronautics is its volunteer leadership – AIAA members elected by their peers to serve on the Board of Directors. The Board is responsible for guiding the activities of the Institute and for stewarding its resources. Pursuant to the AIAA Constitution, most members of the Board of Directors serve three-year terms. Elections are held annually to fill normally expiring terms as well as any vacancies created by resignation or other causes. The voting period ends in early Spring, and newly-elected members of the Board begin their service at the regularly scheduled May meeting of the Board. The volunteer leadership shown on these pages reflects the composition of the Board from May 2011 through May 2012.



■ Members of the 2011–2012 AIAA Board of Directors, from lower left: Klaus Dannenberg (1), Brian Dailey (2), Michael Griffin (3), Mark Lewis (4), Bob Dickman (5), Neal Pfeiffer (6), Merrie Sanchez (7), Basil Hassan (8), Michael Bragg (9), Alan Lowrey (10), George Lesieutre (11), Wilson Felder (12), Susan Ying (13), Sivaram Gogineni (14), Darin Haudrich (15), Allen Arrington (16), David Riley (17), Laura McGill (18), Carol Cash (19), Matthew Cannella (20), Bob Lindberg (21), Juergen Quest (22), Bruce Wilson (23), Ashwani Gupta (24), Mary Snitch (25), Neal Barlow (26), Shamim Rahman (27), James Walker (28), Laura Richard (29), Vigor Yang (30), Ferdinand Grosveld (31), Bob Winn (32), Kathleen Atkins (33), and Tom Smith (34). Not pictured: Angelo Iasiello, In Lee, Mark Maurice, James Neifhofer, Stephen Rottler, and Trevor Sorensen.



PRESIDENTS



**PRESIDENT
(2011–12)**

Dr. Brian D. Dailey
Lockheed Martin Corporation (retired)



**PRESIDENT-ELECT
(2011–12)**

Dr. Michael Griffin
University of Alabama in Huntsville



**DIRECTOR–IMMEDIATE PAST
PRESIDENT
(2011–12)**

Dr. Mark J. Lewis
University of Maryland

VICE PRESIDENTS



**VP–EDUCATION
(2010–13)**

Colonel Neal Barlow,
PhD
U.S. Air Force
Academy



**VP–ELECT,
INTERNATIONAL
(2011–12)**

Dr. Susan X. Ying
The Boeing
Company



**VP–PUBLIC
POLICY
(2010–13)**

Ms. Carol A. Cash
Carol Cash &
Associates, LLC



**VP–FINANCE
(2009–12)**

Mr. A. Tom Smith
Consultant



**VP–MEMBER
SERVICES
(2011–14)**

Dr. Merri Sanchez
Sierra Nevada
Corporation



**VP–STANDARDS
(2009–12)**

Dr. Wilson N. Felder
William J. Hughes
Technical Center,
FAA



**VP–ELECT,
FINANCE
(2011–12)**

Dr. Robert C. “Bob”
Winn
Engineering Systems
Inc.



**VP–
PUBLICATIONS
(2009–12)**

Dr. Michael B. Bragg
College of
Engineering,
University of Illinois



**VP–ELECT,
STANDARDS
(2011–12)**

Ms. Laura McGill
Raytheon Missile
Systems



**VP–
INTERNATIONAL
(2009–12)**

Dr. Mark Maurice
Air Force Office of
Scientific Research,
International Office



**VP–ELECT,
PUBLICATIONS
(2011–12)**

Dr. Vigor Yang
Georgia Institute of
Technology



**VP–TECHNICAL
ACTIVITIES
(2011–14)**

Dr. Basil Hassan
Sandia National
Laboratories

DIRECTORS

DIRECTOR-TECHNICAL (2009-12)
AEROSPACE DESIGN & STRUCTURES GROUP
Mrs. Kathleen M. Atkins
Lockheed Martin Aeronautics Company

DIRECTOR-TECHNICAL (2009-12)
AEROSPACE SCIENCES GROUP
Mr. David R. Riley
The Boeing Company

DIRECTOR-TECHNICAL (2011-14)
AIRCRAFT & ATMOSPHERIC SYSTEMS GROUP
Dr. Neal J. Pfeiffer
Consultant

DIRECTOR-TECHNICAL (2011-14)
ENGINEERING & TECHNOLOGY MANAGEMENT GROUP
Mr. Allen Arrington
Sierra Lobo, Inc.

DIRECTOR-TECHNICAL (2007-13)
INFORMATION SYSTEMS GROUP
Dr. James Neidhoefer
Aerotomy, Inc.

DIRECTOR-TECHNICAL (2007-13)
PROPULSION & ENERGY GROUP
Dr. Ashwani Gupta
University of Maryland

DIRECTOR-TECHNICAL (2011-14)
SPACE & MISSILES GROUP
Dr. Trevor Sorensen
Hawaii Space Flight Laboratory

DIRECTOR-AT-LARGE (2011-14)
Dr. J. Stephen Rottler
Sandia National Laboratories

DIRECTOR-AT-LARGE (2009-12)
Dr. Robert E. Lindberg
National Institute of Aerospace

DIRECTOR-AT-LARGE (2010-13)
Professor George A. Lesieutre, PhD
The Pennsylvania State University

DIRECTOR-INTERNATIONAL (2011-12)
Mrs. Mary L. Snitch
Lockheed Martin - Washington Operations

DIRECTOR-INTERNATIONAL (2011-14)
Professor In Lee, PhD
Korea Advanced Institute of Science & Technology

DIRECTOR-INTERNATIONAL (2010-13)
Dr. Shamim A. Rahman
NASA Johnson Space Center

DIRECTOR-REGION 1 (2011-14)
Dr. Ferdinand W. Grosveld
Lockheed Martin Information Systems & Global Services

DIRECTOR-REGION 2 (2008-12)
Mr. G. Alan Lowrey
Lockheed Martin Space Systems

DIRECTOR-REGION 3 (2008-12)
Dr. Sivaram P. Gogineni
Spectral Energies, LLC

DIRECTOR-REGION 4 (2006-13)
Dr. James Walker
Southwest Research Institute

DIRECTOR-REGION 5 (2010-13)
Ms. Laura A. Richard
United Launch Alliance

DIRECTOR-REGION 6 (2006-12)
Mr. Bruce W. Wilson
The Boeing Company

DIRECTOR-REGION 7 (2007-13)
Mr. Juergen Quest
European Transonic Windtunnel GmbH

YOUNG PROFESSIONAL LIAISON (2010-13)
Mr. Darin Haudrich
Boeing Defense, Space & Security

STUDENT LIAISON (2011-13)
Mr. Matthew Cannella
University of Colorado at Boulder

AIAA STAFF LIAISONS
Mr. Bob Dickman, Executive Director
Dr. Klaus Dannenberg, Deputy Executive Director/Secretary
Mr. Angelo M. Iasiello, Treasurer



The World's Forum for Aerospace Leadership

**American Institute of
Aeronautics and Astronautics**
1801 Alexander Bell Drive, Suite 500
Reston, VA 20191-4344
703.264.7500 • www.aiaa.org