



Shaping the Future of Aerospace





The AIAA Credo

As aerospace professionals, we have devoted our lives to understanding what many people believe is unknowable. We pursue the undiscoverable. We work in the uninhabitable. We ponder the indecipherable. Dream the impossible. Chase the unattainable.

And in the end, we routinely accomplish the unimaginable.

We unravel the mysteries of flight and space, constantly finding new ways of showing gravity who's boss.

But if our work is to continue, we must also ignite the imagination of people outside the profession, convincing them that the things we learn are worth discovering. That daily life is better because of them.

And that is our reason for being at AIAA. To foster an environment that helps our members succeed. Where their work can be enriched, acknowledged, and advanced.

To that end, we provide an intellectual meeting place where ideas can be exchanged among members in industry, government, and academia. Where partnerships can be formed. And global collaboration can thrive.

We celebrate our members' discoveries and achievements, from the small but brilliantly simple to the complex missions that alter the course of human existence. We lay the groundwork for future discoveries by creating an atmosphere that inspires innovation. And we help the world to understand the need for it.

We provide continuity and camaraderie for our members, wherever their careers may take them. And we ensure their adaptability in an ever-changing industry. We provide a launching pad for emerging professionals. And a welcoming atmosphere for students pursuing careers in aerospace.

We work hard to make sure that aerospace professionals are recognized for their contributions in making the world safer, more connected, more accessible, and more prosperous. And we prove every day that with enough support, enough intellectual stimulation and enough collaboration, nothing is impossible.

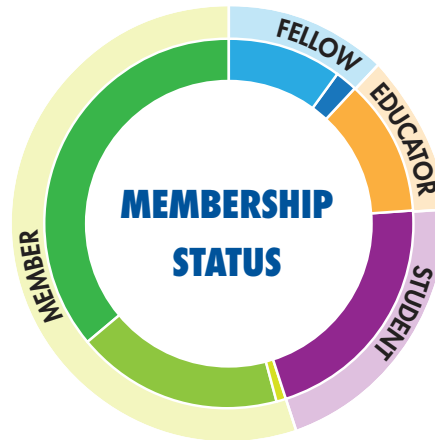
Our purpose and our goal is to fuel our members' imaginations. To support their ambitions. And to inspire the rest of the world to do what has always come naturally to us.

To dream.

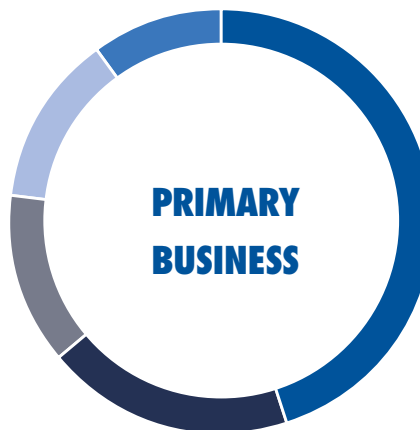
A Snapshot of AIAA

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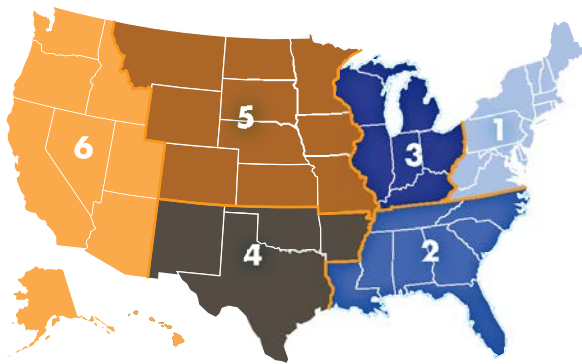
3,658	■	ASSOCIATE FELLOWS
738	■	FELLOWS
66	■	HONORARY FELLOWS
4,381	■	EDUCATOR ASSOCIATES
7,987	■	STUDENT MEMBERS
353	■	ASSOCIATE MEMBERS
6,811	■	MEMBERS
13,267	■	SENIOR MEMBERS
6	■	HONORARY MEMBERS
37,267		TOTAL MEMBERSHIP



45%	■	INDUSTRY
19%	■	GOVERNMENT
13%	■	ACADEMIA
13%	■	RETIRED
10%	■	NOT SPECIFIED



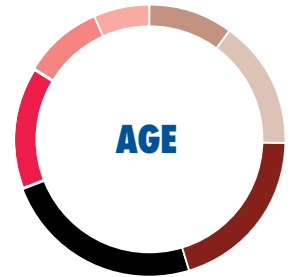
10%	■	ENGINEERING AND TECHNOLOGY MANAGEMENT
30%	■	AEROSPACE SCIENCES
14%	■	AIRCRAFT AND ATMOSPHERIC SYSTEMS
6%	■	INFORMATION SYSTEMS
12%	■	PROPULSION AND ENERGY
16%	■	SPACE AND MISSILES
11%	■	AEROSPACE DESIGN AND STRUCTURES
2%	■	NOT SPECIFIED



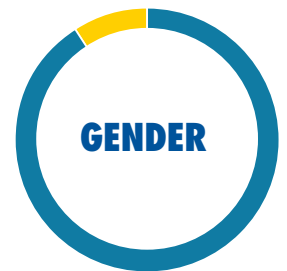
- 24% REGION 1 (NORTHEAST)
- 11% REGION 2 (SOUTHEAST)
- 8% REGION 3 (CENTRAL)
- 8% REGION 4 (SOUTH CENTRAL)
- 7% REGION 5 (MID WEST)
- 24% REGION 6 (WEST)
- 18% REGION 7 (OUTSIDE U.S.)



- 48% EUROPE
- 35% ASIA AND PACIFIC
- 9% CANADA AND MEXICO
- 3% CENTRAL AND SOUTH AMERICA
- 4% MIDDLE EAST AND NORTH AFRICA
- 1% AFRICA



- 9% 20-29
- 16% 30-39
- 19% 40-49
- 24% 50-59
- 15% 60-69
- 10% 70-79
- 7% 80+



- 91% MALE
- 9% FEMALE

FINANCIAL INFORMATION 2011-2013 (in thousands U.S. \$)

	Institute Total Assets	Institute Revenue	Institute Net Assets
2011	27,862	23,216	7,416
2012	36,642	25,713	20,103
2013	38,151	22,116	26,789

President's Report



Michael Griffin

With proper stewardship our industry and profession should be able to continue to do impossible things for years to come.

In 2013 the aerospace sector held its own despite the ongoing effects of a sluggish economic recovery, sequestration, and a disruptive government shutdown. Sales are projected to be slightly downward in 2013 and employment is expected to decline by about 13,000 to 618,200. However, aerospace professionals are a resilient lot and so is the industry we comprise. In these challenging times—one of the most challenging in decades—overall aerospace exports grew, led by a commercial aviation industry that remains the United States' leading manufacturing export industry. In total aerospace was responsible for almost \$112 billion in exports, growing significantly by \$12.5 billion and delivering a trade surplus of \$73.5 billion in 2013. The key takeaway: with proper stewardship our industry and profession should be able to continue to do impossible things for years to come.

When I took office as your president in May 2012, the annual report referenced winds of change, an image that can cut both positively and negatively: opportunity and threat. I think everyone realized then that there were challenges and threats to our industry and to AIAA as an organization. When confronted with tough times every organization must face the choice either to hunker down and try to ride it out, or to confront the challenges on the horizon and take action. I am pleased by the steps AIAA has taken to confront our challenges, and in the process enhance our relevance. We are not hunkering down.

We confronted the reality of what was ahead of us and changed the way we communicate who and what we are. This started last year as we took on the charge to ignite the fires of imagination and to celebrate our members, our profession, and what has been accomplished by all of us collectively. But to move forward requires us to look toward the future. This year, by restating AIAA's vision and mission, we clarified our position and identified steps forward. "AIAA's vision is to be the voice of the aerospace profession through innovation, technical excellence, and global leadership" with a mission "to inspire and advance the future of aerospace for the benefit of humanity." With these two guiding elements and the input collected from members across the spectrum of AIAA, we now look to fulfill this year's annual report theme and AIAA's new tagline, "Shaping the Future of Aerospace."

Visions, missions, and taglines are critical to orient oneself, but to truly shape something one must actually do something. We have to produce results. For an engineer—a critical segment of the aerospace profession—doing something meaningful involves conceiving, designing, building, testing, analyzing, retesting, and finally producing a usable product. Reorienting a professional society for the future is no different. Last summer we prototyped the much talked about and awaited "new event model," first with AVIATION 2013, followed by SPACE 2013. These then gave rise to the first full-scale model forum, SciTech 2014, in January of this year. At AVIATION 2013 the technical core of the conference, long AIAA's calling card, was anchored by AIAA's Aviation Technology, Integration, and Operations Conference and the International Powered Lift Conference. The AIAA Complex Aerospace Systems Exchange (CASE) continued the exploration of complex systems in its 2013 iteration with an aeronautics theme; while new areas and constituencies were incorporated through major focuses on cybersecurity challenges for aviation, the global outlook and future challenges facing all aviation segments (commercial,

military, general, and rotorcraft), the energy imperative, and developing the market for unmanned aerial systems.

At SciTech 2014 the forum approach was on full display, integrating 10 technical events, four plenary keynotes and related panel sessions, and eight integration-focused panel sessions. More than 3,000 individuals from more than 1,600 institutions in 44 countries participated, taking in approximately 350 sessions and just under 1,500 technical papers—the largest event for aerospace research, development, and technology in the world—all packed into five extraordinary days. SciTech also attracted a number of prominent stakeholders such as Congressman Chaka Fattah (ranking member of the House Appropriations Subcommittee for Commerce, Justice, Science and Related Agencies), Richard F. Ambrose (Executive Vice President of Lockheed’s Space Systems Company), Frank Kendall (Under Secretary of Defense for Acquisition, Technology and Logistics), C. D. Mote Jr. (President of the National Academy of Engineering), and Arati Prabhakar (Director of the Defense Advanced Research Projects Agency), as well as the engineering and technology leadership of Airbus Americas, Lockheed Martin, NASA, and Boeing. From these prominent voices it was heard repeatedly that events like SciTech are critical to addressing current challenges and developing solutions for the future.

Below: “Future of Aerospace Education and Professional Development” panel discussion at SciTech 2014



Events like SciTech are critical to addressing current challenges and developing solutions for the future.

All of you who are active in AIAA know this full well. The amount of volunteer hours that you give to AIAA in organizing technical sessions, panels, and programs each year is an indication of the value you place on our forums and it creates value for the overall aerospace enterprise and the global community. This is repeated across all of AIAA's activities, products, and programs. But in an era of budget cuts, travel restrictions, and calls for public access to peer-reviewed federal research published in journals, it is imperative that this message—that what AIAA does matters to our nation's future—be made crystal clear. Technical societies generally, and AIAA in particular, remain relevant in today's web-based world. Going beyond the key issues carried to Capitol Hill each year on Congressional Visits Day, AIAA has spoken out on the issues threatening its ability to sustain our forums, our technical publications, and our current and future members. Through speaking engagements, op-ed columns, congressional testimony, collaborative outreach, and personal conversations with congressional staff and members, Sandy, Jim, myself, and many others have articulated what we believe are important messages:

- That a sustainable, predictable long-term research and development policy and accompanying funding are critical.
- That allowing federal engineers and scientists to come together at technical conferences with their private sector and international peers enhances the value of U.S. investments in research and development.
- While exploring avenues to expand public access to peer-reviewed research, flexible evidenced-based policies should be the basis of public access and will enable scholarly publishing to contribute to technical excellence at large.

Hand-in-glove with that is the need to be good stewards of AIAA's resources in all its forms. We've faced that reality this year as well. We have had to curtail or cancel some programs, and Sandy and her leadership team implemented an organizational restructuring that resulted in cutting and reallocating staff resources. These things are never easy, but it is a reality that those in our cyclical industry have faced time and again. I am confident that AIAA will emerge from this difficult time both stronger and better suited for tomorrow.

There remains much to do. My successor Jim Albaugh is well aware of the tasks ahead and is fully engaged in them. AIAA is fortunate indeed that he was willing to take on this new challenge, and my guess is that he will handle it with same distinction that he has brought to every other phase of his legendary career. He now takes on the responsibility of working with each of you, your executive director, and professional staff to refine a strategic plan based upon our vision and the ever-changing macro-environment that will test our resilience. There are many ways for each of you to become involved and help, so please, get involved and remained involved in shaping the future of aerospace.

Executive Director's Report

Weathering the Storm

Few will argue that this has been a difficult and trying year for the aerospace community—economically, governmentally, and financially. But despite this adversity, aerospace professionals across industry, government, and academia continued to achieve, to invent, and to unravel the mysteries of flight and space. That is what engineers and scientists in aerospace do every day—we adapt, we overcome, we persevere.

Recent times have tested the collective mettle of the Institute as well. We've weathered the storm so far thanks to strong Board leadership and guidance, coupled with fiscal restraint and a renewed strategic focus. Still, the senior staff and I had to make many difficult decisions that affected lives. That meant having to say goodbye to some of our colleagues. The decisions that have been made are meant to ensure that AIAA survives as a viable professional association in the current fiscal and budgetary reality, and that we are able to maintain our exceptional legacy of support for the core interests of the constituencies we serve. Change is rarely easy, but it is often necessary.

I'm pleased to report that we've also made many positive changes and achieved some victories as well. I'd like to share some of those highlights, successes, and opportunities with you.

Reigniting the AIAA Foundation

As I outlined in last year's annual report, the AIAA Foundation's Board of Trustees and I have been evaluating the Foundation's strategic vision and mission to ensure we are best serving the needs of the next generation of aerospace professionals. A strong Foundation with sustained support from industry and individuals is critical to the future of the aerospace community and the workforce we'll need to ensure it continues to grow and advance.

During the coming year, we will be laser-focused on reimagining and refocusing the Foundation and its mission of educational outreach and support. As our industry evolves to meet the economic realities of today, so too must the ways we foster and support student success. And to do that successfully requires substantial financial resources—which we don't currently have—to support long-term planning and program development.

To that end, we are working on establishing strong national STEM outreach programs with the goal of attracting interested partners to join in the implementation. We are looking to our strongest and most active industry members to join with us to make this a reality. I am delighted to announce that Dr. Ray Johnson, Senior VP and CTO of Lockheed Martin Corporation, informed me earlier this year that Lockheed Martin will lead this charge to reignite the Foundation with a transformative, multi-year corporate commitment. I am grateful to Ray and Lockheed Martin for this generous support of the Foundation.



Sandy Magnus

A handwritten signature in black ink that reads "Sandy Magnus".

As our industry evolves to meet the economic realities of today, so too must the ways we foster and support student success.

Fond Farewells

I would like to acknowledge the retirements of two individuals who have meant a lot and contributed so much to the Institute.

First, I would like to thank **Elaine Camhi**, who retired in August, for her more than 35 years of service to AIAA; 22 of them as Editor-in-Chief of *Aerospace America*. Elaine's tenure included coverage of our community's triumphs, such as the Curiosity Rover landing on Mars, and its tragedies, including the loss Space Shuttles Challenger and Columbia, and through it all Elaine worked to ensure that the magazine's coverage was concise, insightful, and relevant. Her leadership helped steer *Aerospace America* through challenging times, evolving technology, and the emergence of the 24-hour news cycle, and AIAA can't thank her enough for her devotion, leadership, and support.

I would also like to bid an early farewell to **Klaus Dannenberg**, AIAA's Deputy Executive Director and Chief Strategy Officer. Klaus will be retiring this summer after serving the Institute for more than 45 years, both as a volunteer and a member of the professional staff. A Fellow of the Institute, a past winner of AIAA's Sustained Service Award, and a former Board member, Klaus has devoted much of his life to advancing the Institute and aerospace professionals. I will miss Klaus, his vision, his insight into our community, and the support he has given his colleagues in senior leadership as we have worked together through both challenges and opportunities. I know I speak for everyone at AIAA in wishing Klaus nothing but the best as he and his wife, Betty, retire to Texas.

Taking Flight and Saying Thanks

One of my favorite parts of this job is traveling across the country—and around the world—to meet you, my fellow members. This year I visited more than 15 different professional and student sections, participated in scores of amazing events and panel discussions, and went on some eye-opening tours, all while I continued to learn what is important to you and how we can improve AIAA. These opportunities to engage and hear from so many of you firsthand allow me to gather your ideas, which I share with the staff at headquarters after every trip.

I know I speak for the entire Institute staff, and many in our aerospace community, when I say thank you to all the members who dedicate so much time and energy to make this organization what it is. Your enthusiasm and passion for AIAA and the aerospace community are truly inspirational! We appreciate the hours you put in and your leadership on every level. From regions and sections to student branches, and from events and publications to our board of directors and committees—technical, program, standing, and standards—it's the volunteers who make AIAA great!

New Event Model, Forum Websites, and Social Media

AIAA's "new event model" is indeed off to a great start. SciTech 2014 was an excellent event and a big success. In fact, for the first time—during SciTech—an AIAA event was regionally "trending" on Twitter. I am excited about the upcoming AVIATION, Propulsion and Energy, and SPACE forums, and I hope to see you at one of these great events!

To better serve you and enhance the value of our new forum lineup, AIAA is launching dedicated forum websites. Beginning with AVIATION and SciTech earlier this year, these new sites promote interaction, highlight innovation, and provide the information you need for a meaningful event experience—all in one dynamic, easy-to-access package. The new website format moves beyond its traditional "gatekeeper" role of facilitating conference registration and paper submission, and will now feature all of the AIAA activities in the area of the forum's subject. Users will find a responsive design, accessible from all media—desktop, laptop, tablet, smartphone, etc. The site features simpler and straightforward navigation, with the information you need no more than a few clicks away. I hope you will visit these websites early and often and find them useful and easy to use.

Speaking of the web, we also have been working hard to build and enhance AIAA's online presence, especially on social media platforms like Facebook, Twitter, LinkedIn, YouTube, and Google+. Our goal is to give those in AIAA and the aerospace community more comprehensive opportunities to stay connected, celebrate success, share ideas, and network. Through social media we're also providing broader opportunities for the world to learn what we already know—that aerospace professionals make the world safer, more connected, more accessible, and more prosperous. I hope you'll join the conversation, follow us, and let us know what you are thinking.

Aerospace America Moving Forward

Aerospace America, AIAA's flagship publication, just celebrated its 30th anniversary in January 2014. Looking back over three decades provides us with an opportunity to think about what *Aerospace America* should be moving forward. We need to ensure that we are addressing the needs and issues of the industry as well as highlighting the successes and benefits. One major goal is to build a robust online platform for content: a website where aerospace news is broken as it happens rather than when it arrives in your mailbox. And, as with AIAA's other products and services, we need the magazine to fit with the new vision and mission of the Institute as outlined by Jim Albaugh in his President-Elect's Report. The process of rethinking, retooling, and redesigning the magazine and its departments and content will be comprehensive. It will be guided by the *Aerospace America* vision statement adopted this year by the *Aerospace America* Steering Committee and an ad hoc committee of the Board. We will update you as this project progresses.

A Note of Thanks

I would like to thank Mike Griffin, whose term as President of AIAA ends this month, for his staunch support of the Institute, his insistence that we start to tackle some of the hardest issues facing our community, and for articulating his vision for a stronger and more responsive Institute that is much more engaged with shaping the future of aerospace. Mike's leadership and his tireless, ongoing support of the Institute have been appreciated these last many months, as the senior staff had had to make extremely difficult decisions about the future of AIAA. I look forward to working with him in his new role as Past-President as we continue to revitalize the AIAA Foundation and continue to strive to transform the Institute.

To all my fellow AIAA members, thank you for the opportunity to serve as your Executive Director. I so enjoy being an active part of this vibrant and collaborative community. To quote our new tagline, I look forward to working with you and "Shaping the Future of Aerospace" together.



Aerospace America Vision

Aerospace America enriches the professional lives of AIAA members by publishing visually compelling and thought-provoking feature articles and commentaries about the technologies and issues most relevant to them. The magazine:

- Places the achievements of individuals, organizations, and the community at large in context;
- Covers developments in the United States and abroad while delivering a depth of understanding not available in other media;
- Contributes to the broader societal and policy discussions about aerospace-related topics through authoritative coverage and groundbreaking opinion writing; and
- Provides a convenient, ubiquitous, multi-format communications link for AIAA members to learn about accomplishments in their fields and share ideas.

Serving the Profession: Our Members



■ Clockwise from top left: John Grunsfeld, Administrator for the Science Mission Directorate at NASA Headquarters, recipient of the **2013 National Capital Section Barry M. Goldwater Educator Award**; Paul G. Kaminski, Chairman & Chief Executive Officer, Technovation, Inc. and Former Under Secretary of Defense for Acquisition and Technology, recipient of the **2013 AIAA Reed Aeronautics Award**; Scott Pace (bottom right), Director, Space Policy Institute, Elliott School of International Affairs at George Washington University, recipient of the **2013 AIAA International Cooperation Award**; Aubrey T. (Tom) Smith, President, ATS Solutions, Inc., recipient of the **2013 AIAA Distinguished Service Award**.

AIAA HONORS AND AWARDS

AIAA is proud to recognize 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.

We celebrate our industry's discoveries and achievements from the small but brilliantly simple innovations that affect everyday lives to the major discoveries and missions that fuel our collective human drive to explore and accomplish amazing things.

For over 80 years, AIAA has been a champion to make sure that aerospace professionals are recognized for their contributions. 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, and 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. Their achievements have inspired us to dream and to explore new frontiers.

On 8 May 2013, more than five hundred guests gathered to salute honorees from academia, government, and industry at the AIAA Aerospace Spotlight Awards Gala—a glittering event that showcased the 2013 AIAA Honorary Fellows, the 2013 AIAA Fellows, and the recipients of AIAA's top honors.



■ AIAA President Michael Griffin (left) congratulates William Ballhaus Jr., President and CEO (retired), The Aerospace Corporation and recipient of the **2013 AIAA Goddard Astronautics Award**.

AMONG THE STARS — SALUTING THE BEST OF AEROSPACE



■ 2013 AIAA Fellows at the AIAA Aerospace Spotlight Awards Gala



■ 2013 AIAA Honorary Fellows with Skip Fletcher, Selection Board Chair (left) and Mike Griffin, AIAA President (right)



■ Recipients of the **2013 AIAA Foundation Award for Excellence** Curiosity Mission Team, Mars Science Laboratory, NASA Jet Propulsion Laboratory



■ Recipients of the **AIAA Educator Achievement Awards**: (Front row) Deborah Swan, Windsor Hills Math, Science, Aerospace Magnet School; Joan Labay-Marquez, Curington Elementary School; Lanena Berry, Houston Independent School District; Elizabeth Dabrowski, Magnificat High School. (Back Row) Sean McCullough, Anderson Districts I & II Career and Technology Center; James Weber, Timberland High School; Lisa Damian-Marvin, Camden Hills Regional High School.



DISTINGUISHED LECTURESHIPS 2013–2014

Addressing Strategic Imperatives

In mid-2013, AIAA was pleased to add the Yvonne C. Brill Lectureship in Aerospace Engineering to its honors and awards program.

Brill was best known for developing a revolutionary propulsion system that remains the industry standard for geostationary satellite stationkeeping. In the last quarter-century of her life, she dedicated a large part of her time to helping others pursue careers in engineering, science, and mathematics, and to ensuring professional women are given the recognition she felt they deserved. She was one of the first women elected to the National Academy of Engineering and the second woman to become an Honorary Fellow of AIAA. The inaugural lectureship will be awarded in September 2014.

The Yvonne C. Brill Lectureship in Aerospace Engineering joins several lectureships in AIAA’s unique portfolio, each providing a showcase for individuals to share discoveries, inspire others to achieve, and exchange knowledge.

The following lectures were presented during 2013 and 2014.



2013 AIAA Dryden Lectureship In Research

Alan H. Epstein, *Pratt & Whitney*



2014 AIAA Dryden Lectureship In Research

Mark J. Lewis, *Institute for Defense Analyses*



2013 AIAA von Kármán Lectureship In Astronautics

James H. Crocker, *Lockheed Martin Space Systems Company*



2014 AIAA von Kármán Lectureship In Astronautics

Antonio L. Elias, *Orbital Sciences Corporation*



2013 AIAA Wright Brothers Lectureship In Aeronautics

Thomas J. Cogan, *Boeing Commercial Airplanes*



2014 AIAA Durand Lectureship For Public Service

Scott Pace, *George Washington University*



2013 AIAA Durand Lectureship For Public Service

John R. “Jack” Dailey, *Smithsonian National Air and Space Museum*

PUBLIC POLICY

Addressing Strategic Imperatives

Many of AIAA's public policy activities seek to address two goals: sustain a robust aerospace workforce, and restore AIAA's relevance and credibility with national policymakers and industry leadership. However, these goals can appear abstract and ambiguous without specific definitions and milestones. Accordingly, in 2012 the Public Policy Committee set out to create a roadmap with defined goals, and identified paths to achieve these imperatives. This roadmap acknowledges existing challenges and realities and identifies achievable milestones using existing resources while reaching for growth in these areas.

Last year's AIAA annual report noted that, "Although assessing relevance is subject to individual judgments, a concise measurement with regard to national policymakers and industry leaders alike would be 'Do they call us when they have a need? Do they accept our calls when we have something to say?' When the answers to those questions are consistently 'yes' we will know we have reached a point of enhanced relevancy." It has not taken long for noticeable progress to be made in each of these areas.

In September 2012, AIAA was asked to provide several perspectives on the current state of NASA's Flight Research programs, and to discuss modernized approaches to conceptualizing and developing research programs that better serve and transition technologies and capabilities to end users within both the civil and commercial sectors. Because of our significant involvement in this project, in August 2013, AIAA was again asked to reach into the aerospace community to help federal policymakers gain a better understanding of, and develop a roadmap for, domestic space technology needs and infrastructure. AIAA is currently working with the Office of Science and Technology Policy and the Office of Management and Budget to identify current capabilities and future needs in order to construct a comprehensive strategy. The first in a series of events scheduled at AIAA venues took place in January at SciTech 2014 in National Harbor, MD. This session introduced the project to our membership and was designed to begin the discussion and engage AIAA's technical community in this process.

In October 2013, lawmakers from the California State Legislature invited AIAA Executive Director Sandy Magnus to testify on the growth potential of unmanned aerial vehicle (UAV) manufacturing and to address various policy issues involved with the testing, evaluation, deployment, and utilization of UAVs. At this same hearing, Bruce Pitman, chair of the AIAA Commercial Space Working Group, testified on the growth of the commercial space industry, including the utilization of Mojave Air and Space Port and the manufacture of commercial space systems.

Dr. Magnus was also asked to speak before the U.S. House of Representatives' Committee on Science and Technology. On 27 February, she testified as part of a panel examining the proposed Mars Flyby 2021 mission as a viable component to the domestic space exploration goals. Dr. Magnus said that the mission could be a viable component, but should not be seen as a goal, but rather that these missions should be placed in context of a longer term national strategic vision for space exploration.

On 25 March, Dr. Magnus returned to Sacramento to address a Joint Hearing of the California Senate Select Committee on Aerospace and Defense and the Assembly Select Committee on Aerospace, "Launch California: Leading the Nation into Space." At this hearing, she provided an overview of the economic impact the aerospace sector has in California, and singled out specific policy areas where the legislature can enhance and grow the research and manufacturing base in the state.

AIAA's 2013 Key Issues

Promoting and Incentivizing Public-Private Partnerships that Improve Technology Transition to End Users from the Nation's Aerospace Research Laboratories

Enabling Sustained Deep Space Exploration with a Broad Vision

Completing Public-Private Human Earth-Orbit Access Programs in a Timely Manner

Recruiting, Retaining, and Developing a World-Class Aerospace Workforce

Building our Competitive Foundation: Supporting K-12 STEM Education

Assuring the Viability of the U.S. Aerospace and Defense Industrial Base

Lessening the Impact of Export Controls on the Domestic Aerospace Industry

Accelerating the Integration of UAV/UAS into the National Airspace System

Developing an Integrated Cybersecurity Policy as a Top National Security Priority

Ensuring the Continued Advancement of the Nation's Science and Technology Portfolio by Removing Restrictions on the Federal Science & Technology Professional Workforce to Participate in Technical Conferences



■ Congressman Chaka Fattah addressing attendees at SciTech 2014



■ Richard Clarke, former National Coordinator for Security, Infrastructure Protection, and Counter-Terrorism at AVIATION 2013

In October 2012, AIAA became the lead technical professional organization in an effort to contest new federal policies that reduce the ability of federal researchers to access conferences and participate in technical exchanges, and to restore funding for researcher participation in these forums to reduce the impacts of these new policies. AIAA continued to lead this effort in 2013 including authoring letters to the Administration and congressional leaders and securing the signatures of 64 like-minded professional societies for those correspondences, and holding several meetings with federal policymakers to convey the implications of these policies and to propose exemptions that would sustain the intent of the original policies while reducing the negative repercussions on our nation's research and development community.

Other measures include the level of speakers that AIAA is able to secure for public policy events, the level of our participation in coalitions we associate ourselves with, and the interaction we have with congressional and administration staff, such as providing expert testimony, participating in mandated studies and reports, and being invited to participate in panels or to provide insight in one-on-one or group discussions were also noted in the 2013 annual report as indicators of our relevance. Examples of this include the keynote address provided at AVIATION 2013 in Los Angeles by Richard Clarke, former National Coordinator for Security, Infrastructure Protection, and Counter-Terrorism, who gave an effective overview of the obstacles with providing comprehensive cybersecurity throughout the enterprise, and highlighted areas where security efforts should be prioritized. At SciTech 2014, Congressman Chaka Fattah discussed the need to invest in advanced research to sustain the innovation that has been at the heart of the nation's economic engine. Again, AIAA has made significant progress in the one year since.

There is no precise metric for assessing relevancy and credibility just as there is no exact process for attaining them.

Making Public Policy Part of Our Technical Conferences

Our goal is to build on and fully integrate policy events at major AIAA conferences, both to better inform AIAA members on the issues, and to expose local and national media to substantive discussion of the major policy issues impacting our profession. We cannot deny that national policies impact the aerospace industry and aerospace research significantly. The new event model acknowledges the integral role that public policy plays in this sector by providing a platform for these issues to be discussed and more fully understood. Over time, this emphasis will increase the credibility of the Institute by offering more and better coordinated opportunities to interact with policymakers, and to showcase the expertise of our members.

Expanding Grassroots Activities

AIAA Takes its Case to the States

By reducing and suspending other aspects of the grassroots programs, the Public Policy Committee has been able to redirect resources to burgeoning advocacy programs in the states that have shown the potential for high growth and increased impacts. AIAA undertook a new grassroots effort in 2012, holding its first State Aerospace Day. With the closing of the California Space Authority, a very active local AIAA membership looked to continue an activity that had been held in Sacramento annually to make elected officials more aware of the impacts of the aerospace enterprise in California. AIAA picked up the mantle and held its first California Aerospace Week in 2012. The success of this event has spurred activities in other states as AIAA looks to expand its influence and relevance to statehouses across the country.

In March 2013, AIAA held the second California Aerospace Week, and subsequently held its first state specific policy conference also in California. AIAA began to gain traction in other states as well, supporting and participating in state aerospace advocacy programs in Colorado, Florida, Georgia, and Virginia. The Public Policy Committee has appointed a State Aerospace Activities Working Group to develop a strategic approach for AIAA's continued growth and participation in state advocacy programs and it continues to seek candidate states to target for future activities. To date in 2014, AIAA has held the third California Aerospace Week, this year highlighting the impact that the space sector has provided and continues to provide in California. AIAA has also been involved in planning and supporting programs in Florida, Georgia, and Virginia.

Also in March 2013, AIAA held a three-day symposium, "Civilian Applications of UAVs—A California Perspective" in Westlake Village, CA. While this forum was developed as a stand-alone activity, it has provided a model for future programs that can help grow our state advocacy outreach, and further the reach of our organization in areas where large local AIAA constituencies exist, and where AIAA is planning future conferences.

Congressional Visits Day Increases Our Impact

The 2014 Congressional Visits Day (CVD) was retooled in an effort to streamline our focus and increase our impact. The Public Policy Committee honed in on core issues that have a high impact on the aerospace profession. As the committee sharpens its focus on this issue set, it will seek to increase our visibility by fully integrating these issues across AIAA activities and throughout our external outreach programs.

The Public Policy Committee also restructured the program. In years passed, CVD included a full-day training session the day before the congressional visits to provide another opportunity for the state teams to discuss their meetings, and to provide more in-depth background on the key issues as well as the legislative proposals associated with our issues. The 2014 program suspended the day-before planning and training session, and instead offered several webinar briefings leading up to this year's event. The event also included a welcoming breakfast for members before the congressional visits, instead of the traditional congressional reception at the end of the day. The Public Policy Committee will continue to evaluate changes in the event's structure to determine how to communicate our message most effectively to policymakers while encouraging a growing number of AIAA members to get involved in aerospace advocacy.

In an effort to shift resources to the state advocacy programs while not significantly impacting other areas, the Section Participation Program was reduced to support new investments in the state advocacy programs. The goal was to sustain participation in underrepresented areas of the membership, and not significantly impact the effectiveness of CVD. In 2013, 170 members from 36 states attended the annual CVD. In 2014, the total number of members participating declined to 119 members, but CVD still included members from 32 sections from 22 states who held nearly 200 meetings over the course of the day. As members adjust to the changes in the program, we expect to see those numbers quickly approach and exceed the 2013 participation in the near future.

The Public Policy Committee and the Technical Activities Committee worked very closely together in formulating the 2013 and 2014 Key Issues. Their collaboration produced a diverse set of issues, encompassing traditional concerns such as strengthening the aerospace workforce and supporting a more robust space program, as well as relatively new concerns like strengthening cybersecurity and improving technology transition from the nation's aerospace research programs.



■ Members of the California Legislature hold a roundtable discussion on issues facing the state's aerospace industry – Head of the table from left to right: Senator Joel Anderson (36th District), Chairman of the Senate Select Committee on Defense and Aerospace Steve Knight (21st District), Chairman of the Assembly Select Committee on Aerospace Al Muratsuchi (66th District), and Assemblyman Jeff Gorell (44th District)



■ Team New York with Representative Dan Maffei (D, 24th Congressional District of NY) in March 2014

AIAA's 2014 Key Issues

Long-Term Investment in Technology Development and Transition

Assuring the Viability of the U.S. Aerospace and Defense Industrial Base

Developing a Seamless National Cybersecurity Policy

Providing Access for Unmanned Aerial Vehicles (UAVs) in the National Airspace System (NAS)

Ensuring a Robust U.S. Human Spaceflight Program

Addressing the Growing Threat of Orbital Debris

Building our Competitive Foundation: Supporting K-12 STEM Education

AIAA continues to enjoy a high level of support for this program from student members across the country who are enthusiastic and well prepared as they present these issues to their contemporaries in many cases—speaking with and educating young legislative staffers about the incredible research they are able to work on as a part of these national issues. Combined with the experience and insight of more seasoned aerospace professionals, they are able to bring a new level of effective advocacy to our congressional visits.



■ Congressman Frank A. LoBiondo of New Jersey's 2nd District poses with the AIAA Southern New Jersey Section staff following his presentation in August 2013 at an All Aerospace is Local event. From left to right are Mike Paglione, AIAA SNJ Vice-Chair; Scott Doucett, AIAA SNJ Treasurer; Congressman LoBiondo; Michael Konyak, AIAA SNJ Chair; Andrew Wakefield, AIAA SNJ Secretary; and Dr. Wilson Felder, former AIAA Vice-President, Standards

AIAA's All Aerospace is Local Program Reminds Us Aerospace is Too Big for August

In 2013 AIAA changed the name of its August is for Aerospace grassroots program to All Aerospace is Local. Many sections had reported that August is a month during which members spend time with family and friends, away from the workplace and regular section activities, making it difficult to organize events. The new program recognizes that fact and encourages sections and student branches to interact with their Congressional decision makers and other public officials throughout the summer or early fall. As a result 27 sections staged 49 local events during 2013.

All Aerospace is Local continued the goals of the original program encouraging sections to invite their representatives to events, to hold roundtable discussions on the importance of aerospace, or simply conduct a tour of a local aerospace facility. As a further response to the need to reposition resources, direct AIAA Headquarters support of the All Aerospace is Local program has been curtailed. This will allow members and staff to focus on new grassroots advocacy efforts. While the direct investment from AIAA Headquarters is being shifted into the State Aerospace Advocacy programs, local sections continue their engagement with national, state, and local elected officials. Those efforts have been broadened to include events throughout the year, integrating these activities into the new State Aerospace Advocacy program as part of that local outreach. Despite these changes, anything that facilitates interaction and immerses elected officials in the local aerospace scene remains a long-term priority.



CORPORATE MEMBERS

On behalf of Frank Culbertson, Chair of the Corporate Member Committee, we are pleased to report that AIAA has sustained more than 95 corporate partners. All of our corporate partners have increasing numbers of opportunities to interact with various government and academic partners at special networking events held in coordination with our conference and events in addition to developing invited sessions and plenary speakers for our major forums. This focus assures that all AIAA events are addressing critical issues in policy, systems, acquisition, operations, and international affairs in addition to our legacy emphasis on technology.

In support of the AIAA Bylaws and Constitution, and in an effort to make the Corporate Membership Committee more of a decision-making body, it was determined that a new Corporate Member Governance Committee would be established and composed of an appropriate representation of the various Corporate Member organizations.

The corporate program titled “Aerospace Today...and Tomorrow...An Executive Symposium” continues to provide our corporate partners a unique networking opportunity by bringing together aerospace and defense executives in a casual, non-attribution environment (with no media) for candid discussions on industry progress, issues, and lessons learned, from the perspectives of corporate and government executives.

This year, an emphasis has been placed on corporate business-to-business (B2B) engagement. At each of our forums, AIAA has organized B2B Networking Events to help both our prime and our small business members to learn about the latest technology opportunities, to form new alliances and partnerships, and to maximize business resources. After companies outline what they are looking for in partnerships, there are one-on-one matchmaking and detailed discussions about programs and opportunities.

In coordination with the International Activities Committee, corporate representatives will be working with the Aeronautical Society of India (AeSI) on welcoming an AIAA delegation to India in December 2014, to foster our partnership and to better serve the common interests and welfare of our respective memberships and to offer support to each other’s technical, student, and professional development activities. The delegation will visit aerospace venues in South India, including Bangalore, Chennai, and Hyderabad.

With the cooperation and participation of our corporate partners, we continue to strengthen our program and visibility while advancing the aerospace industry and

This year, an emphasis has been placed on corporate business-to-business engagement.

AIAA Corporate Members – Who’s Who of the Aerospace Industry

AIAA’s Corporate Membership roster represents companies that lead the world in the advancement of flight. AIAA corporate membership gives them a further edge.



■ From top: Frank Culbertson, Executive Vice President and General Manager, Advanced Programs Group, Orbital Sciences Corporation, and Chair, AIAA Corporate Membership Committee, addresses AIAA members at the AIAA SPACE 2013 Forum; Delores Alexander from The Boeing Company addresses B2B participants at AVIATION 2013

AAC Microtec	HRP Systems	Sierra Nevada Corporation
ACenT Laboratories	Intelligent Light	Software Engineering Institute
Aerojet Rocketdyne	Jacobs Technology	Space and Ground Engineering Solutions
Airborne Systems	Lockheed Martin Corporation	Space Environment Technologies
Airbus Americas	McKinney Associates	Space Systems/Loral
Alenia Aermacchi, S.p.A	MSC Software Corporation	SpaceX
Altair Engineering	National Institute of Aerospace	Spectral Energies
Applied University Research	National Technical Systems	Spincraft
ARES Corporation	NextGen AeroSciences	Stellar Solutions
Arianespace	Nielsen Engineering & Research	Systems Technology
Assured Space Access Technologies	NLR: National Aerospace Laboratory	Teaching Science and Technology
Astrium Americas	Northrop Grumman Corporation	The Aerospace Corporation
Aurora Flight Sciences	Ohio Aerospace Institute	The Boeing Company
Ball Aerospace & Tech Corp	ONERA	The Charles Stark Draper Laboratory
Bastion Technologies	Orbital Sciences Corporation	The Georgia Center of Innovation for Aerospace
Booz Allen Hamilton	Orbital Technologies Corporation	The Johns Hopkins University/ Applied Physics Laboratory
BRAHE Corporation	Paragon Space Development Corporation	The MITRE Corporation
Bron Aerotech	Parametric Solutions	The Tauri Group
Carol Cash & Associates	Physics, Materials, and Applied Mathematics Research	United Launch Alliance
Cessna Aircraft Company	Planetary Resources	United Technologies Corporation
CSSI	Pointwise	US Space
Cummings Aerospace	Practical Aeronautics	Virgin Galactic
DARcorporation	Raytheon Company	Wolverine Ventures
dataCon	Red Canyon Engineering & Software	XCOR Aerospace
DLR – German Aerospace Centre	Rigel Aerospace	
dSPACE	Rincon Research Corporation	
Dunmore Corporation	Rockwell Collins	
Dynetics	Rolls-Royce	
Edge Space Systems	Royal Aeronautical Society	
Engineering Systems	Saab Sensis	
Ephemeris Technology Solutions	SAFRAN Group	
GE Aviation	Schafer Corporation	
Global Business Analysis	Sierra Lobo	
Gulfstream Aerospace Corporation		
Honda Aircraft Company		
Honeywell International		

Serving the Profession: The Future



UNIVERSITY

Design/Build/Fly Competition Gets Stronger Every Year

The Student Design/Build/Fly Competition—in which students build and fly a small electric-powered, remote-controlled airplane over a predefined course in a limited time—continues to grow in popularity, and is a tremendous success story for the Technical Activities Committee and the Student Activities Committee. The 2013 event, held 19–21 April, in Tucson, AZ, hosted 60 teams at the fly-off. Over 600 students, faculty, and guests were onsite for the event.

First place went to the University of California, Irvine; second place went to San Diego State University; and third place went to Rensselaer Polytechnic Institute. The Best Paper Award, sponsored by the Design Engineering TC for the highest report score, went to Cornell University with a score of 96.00.

AIAA Hosts Eight Student Conferences

The AIAA Regions hosted six U.S. Regional Student Conferences and two International Student Conferences. The Australian Student Conference featured 25 students from around the Asian basin presenting their work in person and via videoconferencing, allowing student participation from a larger geographic area.

The European Region Conference, held in Milan, Italy, in partnership with PEGASUS (Partnership of a European Group of Aeronautics and Space Universities), continued its success with the presentation of over 27 graduate papers.

AIAA Foundation Scholarships and Graduate Awards

Student members of AIAA received valuable financial aid support toward their college education. There were eleven undergraduate and five graduate students that received scholarships or awards to help with college expenses. The values of the awards varied from \$1,000 to \$5,000.



■ The 2013 PEGASUS Student Conference award winners

INTERNATIONAL

Brazil

AIAA and the Brazilian Society of Mechanical Sciences and Engineering (Associação Brasileira de Engenharia e Ciências Mecânicas) (ABCM) signed a memorandum of understanding (MOU) in January 2014 during the AIAA Science and Technology Forum and Exposition (SciTech). Jim Albaugh, AIAA president-elect, and Professor Leonardo Alves, finance director and secretary of the ABCM's Aerospace Technical Committee, signed the MOU.

"We are excited to reach this understanding with our Brazilian colleagues," said AIAA Executive Director Sandy Magnus. "As Brazil continues to emerge as an economic power, there will be several opportunities to collaborate on the pressing issues that face our community, and this MOU will make that process even more effective and seamless." Magnus concluded, "It is important that we could bring this agreement to fruition during our SciTech 2014 Forum, as the cooperation it will engender embodies one of the dominant themes of this event: the urgent need for nations and for organizations like AIAA and the ABCM to find ways to foster the critical international ties needed to continue driving innovation and progress in our industry."

The MOU calls for cooperation between AIAA and ABCM on a wide range of activities, including cosponsoring and promoting each other's activities; copublishing information of mutual interest; collaborating on student activities, professional development, technical lectures, training, and related activities; organizing official visits between the organizations; and cooperating on issues of importance to the international aerospace community and its member organizations.



■ Professor Leonardo Alves, Susan Ying (AIAA VP-International), and Jim Albaugh, following the MOU signing.

AIAA Membership in Brazil

100 Professional Members

40 Senior Members

4 Associate Fellows

1 Fellow

17 Student members



■ Professor Leonardo Alves and Jim Albaugh sign the MOU between AIAA and the Associação Brasileira de Engenharia e Ciências Mecânicas.



China

Two major aerospace events were held in Beijing, China, at the end of September 2013: the 64th International Astronautical Congress and the 1st Aviation Science and Technology Conference. AIAA's presence at these events was a great opportunity to further engage a number of Chinese organizations. A delegation of AIAA senior volunteer and staff leadership traveled to China with a number of clearly defined objectives to advance AIAA's strategy in China.



This trip allowed AIAA's leadership to engage in dialogues to strengthen the Institute's presence in the global aerospace community, including our growing relationship with the primary aerospace professional societies in China: the Chinese Society of Astronautics (CSA) and the Chinese Society of Aeronautics and Astronautics (CSAA). AIAA had the opportunity to meet with both organizations to discuss continued collaboration.

AIAA delegation members also met with China Aviation Publishing and Media Group (CAPM), AIAA's aviation publishing partner in China since 2009. Along with the ongoing publishing partnership between AIAA and CAPM, additional subjects of conversation included potential collaboration in the areas of conferences, continuing education, and membership activities.

While in China, AIAA staff leaders took the opportunity to meet with representatives from the local ASME and IEEE offices to better understand their activities and operations in China. During the meetings, staff members were able to ask about professional societies in the Chinese culture; how Chinese industry, government, and academia relate and work together; membership concentration and activities of these societies in China; and the prevailing market for Chinese language journals, publications, and events in China.

The trip to Beijing offered a number of opportunities for Sandy Magnus to engage with students and young professionals about her experiences as an astronaut and working in space. A highlight was when Magnus and Chinese astronaut Liu Yang participated in "A Dialogue between Female Astronauts of China and United States." Organized and hosted by the Beijing University of Aeronautics and Astronautics, and cosponsored by AIAA and CSA, the event featured a lively discussion between the two astronauts in front of nearly 300 students from selected grade schools and major universities throughout Beijing. The discussion allowed Magnus and Liu to discuss their experiences during their individual space missions, with Magnus focusing on her time aboard STS-135 and Liu on the Shenzhou-9 mission. During the event, Magnus reinforced for the students that "persistence, hard work, and education" are important if one wants to work in space.

■ AIAA delegation members Vigor Yang, Sandy Magnus, and Megan Scheidt meet with CAPM President Liu Xin and his staff at their Beijing office.

AIAA Membership in China

116 Professional members

43 Senior Members

8 Associate Fellows

1 Fellow

92 Student members

2 Student branches



■ Sandy Magnus and Chinese astronaut Liu Yang engage with grade school and high school students during "A Dialogue between Female Astronauts of China and United States," which was hosted by the Beijing University of Aeronautics and Astronautics and sponsored by AIAA and the CSA.



■ AeSI President G.M. Rao and AIAA Vice President-International Susan Ying sign the MOU between the two societies.



India

In May 2013, an MOU between AIAA and the Aeronautical Society of India (AeSI) was signed in conjunction with the spring Board of Directors meeting. AeSI President G.M. Rao and President-Elect Dr. V.K. Saraswat were in attendance, along with a small delegation from AeSI. Following the MOU signing, there was a meeting between representatives of the two organizations to discuss areas of collaboration. As a result, a small working group with representatives from AIAA and AeSI was formed to work on these efforts. Key areas of focus for collaboration included events, journal publications, membership, and student activities.

The first activity being planned is an executive-level visit of AIAA Corporate Members with their industry counterparts in India in December 2014. The itinerary will include stops in Bangalore, Hyderabad, and Chennai and involve industry tours, business-to-business discussions, and networking opportunities with Indian companies interested in building partnerships with U.S. companies.

AIAA Membership in India

89 Professional members

28 Senior Members

18 Associate Fellows

129 Student members

3 Student branches

17 Student members



■ Representatives from AIAA and AeSI participate in a meeting to discuss areas of collaboration.



AIAA FOUNDATION

AIAA Foundation Classroom Grants

The AIAA Foundation believes that one of the most significant means to inspire and advance the future of aerospace is to fund grants to provide the unmet and unfunded educational need of students. Each school year, AIAA awards grants of up to \$250 per classroom to worthy projects that significantly influence student learning.

The AIAA Foundation Classroom Grant program promotes aerospace education activities in classrooms from kindergarten through twelfth grade. The program encourages the development of innovative aerospace activities within the prescribed curriculum.

The grant process is competitive in nature. The STEM K–12 Outreach Committee, composed of experts in the field of aerospace education, review all qualified grant applications and make recommendations on funding. Based on the funding available, the committee will choose to invest in projects that best serve our nation's students and support the mission of AIAA.

Throughout the course of this year, over 50 Classroom Grant proposals have been submitted, and over 70% of these grants have been funded.

Susan Gardner, a 4th–6th grade teacher at Barnwell Elementary in Barnwell, SC, was one of many educators to receive an AIAA Foundation Classroom Grant. She provided an inside look into her students' "Day with Kites."

"My students were involved in a unit about flight. They learned about the four forces of flight through a Smart Board Lesson I created. They also learned the importance of Bernoulli's Principle with hands-on lessons. We took this information and applied it to kites. After discussing the history of kites and their many uses, we created a tetrahedron kite made from the KaZoon Kite Kits (these were purchased through money donated by AIAA). This led to many mini-lessons on shapes and surface area. We also took a trip to our local airport where a pilot showed them how to make a flight plan, and the students got to look "up close" at many small air crafts... even a homemade one!

We had a beautiful day in February in which to fly their kites. We were all pleasantly surprised at how our kites took "flight" that day!"



■ Barnwell Elementary School students prepare to release their kites for flight.



Publishing Essential Technical Information

Books Published in 2013

AIAA Education Series

Design and Development of Aircraft Systems, Second Edition, by I. Moir and A. Seabridge

Fundamentals of Aircraft and Airship Design: Vol. 2, Airship Design and Case Studies, by G. Carichner and L. Nicolai

Weaponering, Second Edition, by M. Driels

Ablative Thermal Protection Systems Modeling, by G. Duffa

Global Aeronautical Communications, Navigation, and Surveillance (CNS), Volumes 1 and 2, by D. Ilcev

Civil Avionics Systems, Second Edition, by I. Moir et al.

Primer for the Finite Element Multidisciplinary Analysis Computer Program – STARS, by K. Gupta and J. Meek

Progress in Astronautics and Aeronautics

Space Operations: Experience, Mission Systems, and Advanced Concepts, by M. Schmidhuber et al.

Library of Flight

Safety Management Systems for Aviation Practitioners, by K. Hollinger

The Aircraft Designers: A Grumman Historical Perspective, by M. Ciminera

Meeting the Challenge: The Hexagon KH-9 Reconnaissance Satellite, by P. Pressel

Space Shuttle Legacy: How We Did It and What We Learned, by R. Launius et al.

Launching into Commercial Space: Innovations in Space Travel, by J. Pelton and P. Marshall

Aerospace Press

Band Model Theory of Radiation Transport, by S. J. Young

BOOKS AND JOURNALS

JGCD welcomes a new Editor-in-Chief



In August, Professor Ping Lu of Iowa State University was appointed to a three-year term as the new editor-in-chief of the *Journal of Guidance, Control, and Dynamics (JGCD)*, following a rigorous editorial search process. Lu was a long-serving associate editor of *JGCD*, and he is the fourth editor-in-chief of the journal, following Dr. George Schmidt, whose first term began in 1996. The transition to the new editor was appropriately made at the AIAA Guidance, Navigation, and Control Conference, where Dr. Schmidt's contributions to the journal and GNC community were gratefully acknowledged.

Growth Expected In International Content Acquisition For Books

Although international submissions to our journals continue to grow, expanding the pool of book authors internationally continues to be challenging. Over the past few years AIAA staff has sought to build relationships that will help with content acquisition outside the United States, and these efforts are beginning to bear fruit. A U.K.-based acquisitions consultant has been engaged to recruit book content on AIAA's behalf in the U.K. and Europe. Projects resulting from his efforts are under contract in both the Education and Progress Series and are expected to publish during FY2014 and beyond.

International Outreach Expands As New Vendors Come On Board

In mid-2013, AIAA signed agreements with Publishers Communications Group (PCG) and Accucoms to perform AIAA's sales outreach services for journal print and electronic subscriptions, e-book packages, and purchases from the technical papers archive. PCG represents AIAA in North, Central, and South America whereas Accucoms represents AIAA in Europe, India, and Middle East/North Africa. Publications staff have worked with iGroup for several years as our non-exclusive sales representative in Asia and Australia, and that relationship continues to be a productive one.

These partnerships allow AIAA to communicate with customers in their native languages. Our sales representatives have been vital in addressing the differences in government purchasing and changes in government policies as well as aiding AIAA in effective communication that may be complicated by the nuances of different cultures. Their outreach efforts build awareness of AIAA's published content generally and also encourage recognition of the Institute as a whole.

Open Access Update For 2013

Initiatives to expand access to federally funded research continue to be of significant interest to scholarly publishers. In February 2013 the White House Office of Science and Technology (OSTP) released guidelines for “Expanding Public Access to the Results of Federally Funded Research,” which requires federal agencies with over \$100 million in research and development expenditures to develop plans for allowing access to their research. Also in February, the Fair Access to Science and Technology Research Act (FASTR) was introduced, which is similar to the Federal Research Public Access Act (FRPA) that was introduced in the last Congress. Key open access discussions among publishers in 2013 focused on the development of repositories for content where authors can self-archive their publications and also the length of embargo periods permitted to publishers before they need to make federally funded research freely available. AIAA is considering conducting an engineering-specific usage study in collaboration with other publishers to measure the impact of the proposed embargo periods on our publications.

AIAA continues to track the actions of OSTP and the legislation that is introduced, with the intent of supporting proactive options and alternatives to the various open access proposals, in concert with other publishers. Ideally, a system that can point to publicly accessible content on researcher sites in a cost-efficient and consistent manner, and that transparently demonstrates researcher compliance with public mandate requirements, will be most beneficial to all parties.

Design Guide App Released



In early 2013 the *AIAA Aerospace Design Engineers Guide, Sixth Edition* was released as an iOS App for iPhone and iPad. A small portion of content is available in a free, downloadable preview version of the App. In-App purchase allows users access to the entire App. Verified AIAA student members may download the entire App for free as part of their student membership. To date there have been 2151 downloads since the App was released, and 58 in-App purchases of the premium content. Along with the United States, purchases have come from

Australia, the Netherlands, Pakistan, Colombia, Israel, United Kingdom, Germany, Mexico, Chile, and Hong Kong.

The App is available for purchase from the iTunes App Store; a direct link also is available from the *Design Guide* page in ARC: <http://arc.aiaa.org/doi/book/10.2514/4.869129>. Plans are underway to release an update to the App in 2014, to include additional functionality within the product.



2013 Download Metrics for the Design Guide App

Downloads by Platform

Platform	Downloads
iPad	1,050
iPhone	835
Desktop	138
iPod Touch	128

Downloads by Territory

Territory	Downloads
USA and Canada	1,120
Europe	471
Asia	307
Africa, the Middle East, and India	139
Latin America and the Caribbean	110

Technical Papers 2013

Total Number of Papers Published = 4,926

Total Number of Abstracts Submitted = 6865

Total Number of Abstracts Rejected = 604

ARC Statistics 2013

2,186,972 total visits

1,153,952 unique visitors

7,666,430 page views

Top 3 Countries

31% from the United States

13% from China

6% from India

Journal Special Sections 2013

Journal of Spacecraft and Rockets

January–February 2013: “**Hypersonic Aerothermodynamic Uncertainty Assessment**” (seven papers), organized by Guest Editor D. Bose.

Journal Special Papers 2013

Journal of Guidance, Control, and Dynamics

HISTORY OF KEY TECHNOLOGIES PAPER

May–June 2013: “**Blazing Gyros: The Evolution of Strapdown Inertial Navigation Technology for Aircraft**,” by Paul G. Savage.

AIAA Journal

SURVEY PAPER

September 2013: “**Multidisciplinary Design Optimization: A Survey of Architectures**,” by Joaquim R. R. A. Martins and Andrew B. Lambe.

AIAA Books Expand To Include Kindle Format



AIAA published three Library of Flight titles in Amazon's Kindle format during summer 2013. *Hired Minds: A Career Guide for Engineering Students and Graduates* (2007) by Bryan Gardner and *Terminal Chaos: Why U.S. Air Travel is Broken and How to Fix It* (2008) by George L. Donohue and Russell D. Shaver III added the Kindle format to their existing print and AIAA e-book versions. *Launching Into Commercial Space: Innovations in Space Travel* (2013) by Joseph N. Pelton and Peter Marshall debuted in Kindle format, and a print version followed.



Enhancements Continue To Be Made To ARC and AIAA's E-Commerce Site

Aerospace Research Central (ARC) has been showcasing AIAA's content for a little over a year. Metadata cleanup and adding missing backfile articles to the site continued throughout 2013; the look and functionality of the site will continue to improve over time. In response to customer feedback, among the enhancements that were made in 2013 are the following:

- Conference paper numbers were added to the Table of Contents view for current and future proceedings.
- The number of results that can be displayed by the end user has been increased
- ARC's commenting feature is now available for *Journal of Aerospace Information Systems*, where subscribers can comment directly on an article and read comments posted by others.
- The ability of authors to include supplemental material files along with their manuscript submissions was expanded to all journals in early summer 2013.
- The e-commerce site also was streamlined in 2013, to improve the process for journal publication charge payments.

STANDARDS

New Standards Supporting the Commercialization of Space

In 2013 AIAA released a full suite of (10) standards dedicated to plug-and-play (PnP) capabilities that support the Commercialization of Space. This Space Plug-and-Play Architecture (SPA) and related technologies leverages the PnP approach developed to support the computer market in the 1990s to accelerate the development and assembly of small spacecraft. Application of these standards will enable small sat development to occur within days instead of months or years. Under SPA, computer-negotiated interfaces permit the elements of a complex system to transparently contribute information that accelerates the integration process by reducing or eliminating error-prone human interpretation. Electronic self-configuration/self-organization allows for rapid space vehicle construction, and the placement of sensors and actuators on the spacecraft is not restricted to specific, predetermined locations.

The set comprises eight standards and two guides; highlighted features include:

- A general description of a data-centric spacecraft model to form the on-board PnP network with illustrations to clearly indicate how this works.
- A common ontology to allow for a profile-specific Common Data Dictionary (CDD), so that a stable set of terms may exist.
- Interfaces between devices to simplify the implementation of PnP at the device level.
- Descriptions of PnP protocols identified to date, as well as descriptions of the adaptations needed for space application.

The SPA standards may be accessed individually or as a set.

Converting Standards to eReader Formats

AIAA is in the process of converting the current backfile of roughly 90 documents and 6,250 pages from basic PDFs to XML source files. AIAA standards, recommended practices, guides, and special projects will be accessible and delivered in an HTML and PDF format ready for any eReader. The new format allows the incorporation of supplemental material and multimedia to enrich content, which will provide additional benefit to users. The conversion of these files could lead to additional standards products such as bundles, miniseries collections, and apps that could lead to new revenue sources.

Promoting Standardization Activities

At the 2013 Aerospace Sciences Meeting, AIAA hosted A Guide to Getting Involved: An Introduction to AIAA Standards in an afternoon forum. Staff discussed the benefits of standards, reviewed the standards development process at AIAA and within the American National Standards Institute accredited system, explained the specific standards products at AIAA, and outlined the various ways members can get involved in standards development.

In April 2013, AIAA was invited to participate in a senior mechanical engineering class at the Catholic University of America in Washington, DC. The presentation was conducted by the FAA and NASA, with AIAA providing additional information and support based on AIAA S-114-2005, *Moving Mechanical Assemblies for Space and Launch Vehicles*. This was a culmination of a senior design project to build a radio-controlled airplane to submit to an SAE contest in Dallas. Students who had not been previously exposed to standards were presented with an overview that addressed the importance of standards and various issues related to their use. Students enthusiastically participated in the discussion, and professors resolved to incorporate standards instruction in the junior design class and then follow up with a second, more in-depth lesson in the beginning of the senior design course.

AIAA Committees on Standards

- Aerodynamic Decelerator Systems
- Aerospace Pressure Vessels
- Atmospheric and Space Environments
- Computational Fluid Dynamics
- General Notation System Subcommittee
- Electric Propulsion Testing
- Ground Testing
- Hydrogen
- Mass Properties
- Mission Assurance
- Solar Cells/Solar Panels
- Space Systems Battery Safety
- Space Architecture
- Systems Engineering





Supporting Standardization Efforts

AIAA administers the international secretariat for the International Standards Organization (ISO) Technical Committee (TC) 20, Subcommittee (SC) 14 on Space Systems and Operations and the U.S. Technical Advisory Group (TAG) for SC 14 and ISO TC 20/SC 13 on Space Data and Information Transfer Systems. In 2013, AIAA assisted SC 14 TAG members in the development of 8 new proposed standards and more than 35 standards in development.

Through a contract with NASA, AIAA also administers the Secretariat for the Consultative Committee for Space Data Systems (CCSDS). In June 2013, CCSDS published the Recommended International Standard, *Conjunction Data Message (CDM)*. With this milestone, providers of satellite positional data will be able to use a common format to notify satellite operators that their satellite is approaching another satellite. The CCSDS standards development process requires these types of documents to be prototyped prior to approval. Several of the world's providers of satellite conjunction assessment services conducted these prototype developments in late 2012 and early 2013, which could put CDM into operation in the relatively near future.

Documents Developed in 2013

Published

AIAA S-115A-2013	LEO Spacecraft Charging Design Standard and Handbook
AIAA S-112A-2013	Qualification and Quality Requirements for Space Solar Panels
AIAA G-133-1-2013	Standards Development Guidebook for Space Plug and Play Architecture
AIAA S-133-2-2013	Space Plug-and-Play Architecture Standard: Networking
AIAA S-133-3-2013	Space Plug-and-Play Architecture Standard: Logical Interface
AIAA S-133-4-2013	Space Plug-and-Play Architecture Standard: Physical Interface
AIAA S-133-5-2013	Space Plug-and-Play Architecture Standard: 28 V Power Service
AIAA S-133-6-2013	Space Plug-and-Play Architecture Standard: System Timing
AIAA S-133-7-2013	Space Plug-and-Play Architecture Standard: Ontology
AIAA S-133-8-2013	Space Plug-and-Play Architecture Standard: Test Bypass
AIAA S-133-9-2013	Space Plug-and-Play Architecture Standard: SpaceWire Subnet Adaptation
AIAA G-133-10-2013	Space Plug-and-Play Architecture Guide: System Capabilities

In Process

AIAA S-017B-201X	Aerodynamic Decelerator and Parachute Drawings
AIAA G-135-201X	Aerospace Systems Integration Guide
AIAA R-093A-201X	Calibration of Subsonic and Transonic Wind Tunnels
AIAA R-101B-201X	CFD General Notation System: Standard Interface Data Structures
AIAA G-095-201X	Guide for the Safety of Hydrogen and Hydrogen Systems
AIAA G-077A-201X	Guide for the Verification and Validation of CFD Simulations
ANSI/AIAA G-034A-201X	Guide to Reference and Standard Ionosphere Models
AIAA S-120A-201X	Mass Properties Control for Space Systems
AIAA S-136-201X	Battery Safety Standard for Space Applications
ANSI/AIAA S-081B-201X	Space Systems—Composite Overwrapped Pressure Vessels (COPVs)
ANSI/AIAA S-080A-201X	Space Systems—Metallic Pressure Vessels, Pressurized Structures, Pressure Components, and Special Pressurized Equipment
ANSI/AIAA S-141-201X	Code Verification in Computational Fluid Dynamics
AIAA G-140-201X	Terrestrial Environment Guidelines for Use in Aerospace Vehicle Development

Creating Value – Networks and Information Exchange



EVENTS

The last year has brought changes in AIAA events as part of the transition to our new event model. New features were added to 2013 conferences in order to start expanding AIAA's events to serve the broader aerospace community. And January 2014 saw the new event model come to fruition with the AIAA Science and Technology Forum and Exposition (SciTech) in National Harbor, Maryland.

Increasing the Relevance of AIAA

One of the primary objectives of the new event model is to build on the existing strong technical core represented by more than 70 technical communities within AIAA while introducing new topics that will attract new constituencies and address critical issues facing the aerospace industry.

At AVIATION 2013, held in August in Los Angeles, cybersecurity was a primary focus. This topic was threaded through the program and featured a keynote by Richard A. Clarke, Chairman and CEO, Good Harbor Risk Management, LLC, and the former National Coordinator for Security, Infrastructure Protection, and Counter-terrorism for the United States, who addressed what the cybersecurity experience might mean for aviation. In addition, panels of experts discussed the cyber threat landscape, the types of threats that exist for the cyber landscape and what must be done to neutralize those threats, and connectivity and the cybersecurity challenge.

Other topics addressed during AVIATION 2013 included:

- Commercial Aviation: Global Outlook, Opportunities, and Challenges
- Military Aviation: Future Challenges Facing Military Aviation
- Business Aviation, General Aviation, and Rotorcraft: Global Outlook, Opportunities, and Challenges
- The Energy Imperative
- Developing the Market for Unmanned Aerial Systems



■ Congressman Chaka Fattah visits the Exposition Hall at SciTech 2014



■ Dan Geer participates in a cybersecurity panel at AVIATION 2013



■ AIAA Executive Director Sandy Magnus with young professionals during an event at SciTech 2014

AVIATION 2013 featured the AIAA Aviation Technology, Integration, and Operations Conference and the International Powered Lift Conference. The second AIAA Complex Aerospace Systems Exchange (CASE) was also held in conjunction with AVIATION 2013. CASE addresses some of the most important system development issues facing aerospace chief engineers, program managers, and systems engineers today, such as minimizing cost overruns and delays, and mitigating late test failures. In 2014, CASE will be held as part of the AIAA Space and Astronautics Forum and Exposition. After 2014, CASE topics will be infused into all AIAA forums.

Integrating a Spectrum of Topics of Interest to the Profession

An exciting new component of AIAA forums are the integration sessions. The intention of these sessions is to bridge the gap between plenary and technical sessions. They offer relevant and instructive topics and materials to the great number of aerospace professionals who may not think of, or see, AIAA as offering much to them in terms of professional career development, training, or networking. By expanding the products that AIAA offers at its forums to a broader swath of aerospace professionals than the R&D community, we hope to entice design engineers, analysts, systems engineers, and others, to join AIAA, or to become active if already a member. Examples of integration sessions at SciTech 2014 included:

- Analysis and Perspectives from the Complex Aerospace Systems Exchange 2013
- Aeronautics R&D Policy and the Strategic Direction of NASA's Aeronautics Research Panel
- Turning Technology into a Business Panel
- Additive Manufacturing – A Transformative Technology Panel
- Emerging Technologies of Importance to Aerospace Panel
- Small Satellite Technology and its Role in Education and Professional Development Panel
- Future Aerospace Workforce Development and Education

Providing Meaningful Professional Development and Interaction Opportunities

In a test case for including restricted sessions in AIAA events, there were four ITAR-compliant sessions at the 2013 Joint Propulsion Conference. Over 100 attendees registered to attend the sessions and the feedback received was positive. Restricted sessions will be included at the 2014 AIAA Aviation and Aeronautics Forum and Exposition (16–20 June, Atlanta, GA) and the AIAA Propulsion and Energy Forum and Exposition (28–30 July, Cleveland, OH).

To better serve small businesses and to provide them opportunities to develop potential business opportunities, AIAA debuted B2B Speed Networking as an enhanced feature at AVIATION 2013. This new offering at AIAA events demonstrated how the capabilities of small companies match with the needs of major government R&D agencies and aerospace corporations. The session allowed companies to outline what they are looking for in partnerships and then provided opportunities for one-on-one matchmaking and detailed discussion about programs and opportunities. AIAA's B2B Speed Networking also occurred at SPACE 2013 and SciTech 2014 and will be offered at upcoming 2014 forums.

AIAA's Rising Leaders in Aerospace Forum is a special initiative that first occurred at SPACE 2013 and was a highlight of SciTech 2014. The Rising Leaders Forum provides a venue for young aerospace leaders, age 35 and under, to learn from and engage with others. The multidimensional program features a speed mentoring leadership exchange, panel or keynote sessions, Q&A with top industry leaders, and multiple opportunities for networking. This exciting and energetic activity provides young professionals with access to top aerospace leaders and their perspectives, with subject matter relevant to their career stage. AIAA plans to continue this program as part of the forums to provide value to its young professional members.

AIAA maintained its focus on professional development for its members while looking at ways to expand into non-technical topics to cover a variety of needs. At SciTech 2014, a number of topics and formats were offered, including:

- Decision Analysis short course
- Introduction to Integrated Computational Materials Engineering short course
- Verification and Validation Best Practices for Integrated Computational Materials Engineering tutorial
- Low Reynolds Number Workshop
- 1st AIAA Sonic Boom Prediction Workshop
- Protecting Intellectual Property Workshop
- Get Your Green Card — Immigration Options for Scientists and R&D Engineers Q&A Session
- AIAA Advocacy and Grassroots Workshop

Reaching a Broader Audience

To get the word out to a broader audience and start conversations about our exciting new forums, we are using social media channels including Facebook, Twitter, LinkedIn, YouTube, and Google+. By using social media, we hope to continue the dialogue about the forums and the critical topics they address before, during, and after events. AIAA also live streams high-level plenary and panel sessions from its forums. By live streaming these sessions, we hope to serve those AIAA members not able to travel to forums but also bring in aerospace professionals not familiar with AIAA and its events.



■ Laura McGill talks with young professionals at the Rising Leaders in Aerospace Forum



■ Cheryl Nickerson, Professor at Arizona State University, discusses imperatives and opportunities at SPACE 2013



Upcoming Forums

AIAA Aviation and Aeronautics Forum and Exposition

16–20 June 2014
Atlanta, GA
www.aiaa-aviation.org
#aiaaAviation

AIAA Propulsion and Energy Forum and Exposition

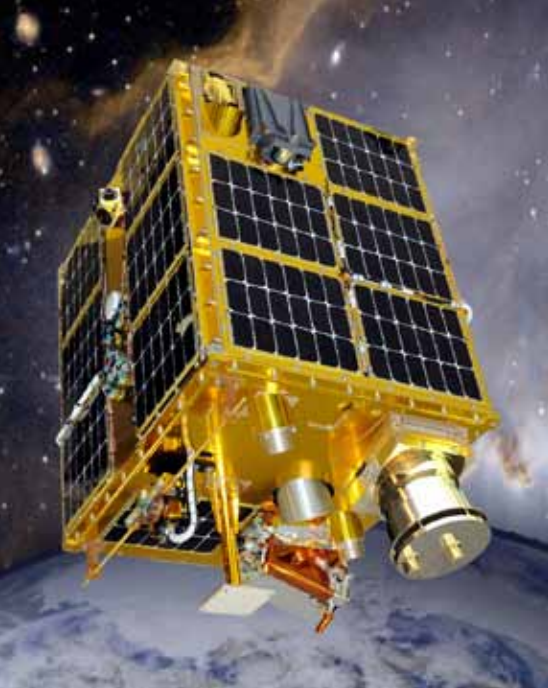
28–30 July 2014
Cleveland, OH
www.aiaa-propulsionenergy.org
#aiaaPropEnergy

AIAA Space and Astronautics Forum and Exposition

4–7 August 2014
San Diego, CA
www.aiaa-space.org
#aiaaSpace

AIAA Science and Technology Forum and Exposition

5–9 January 2015
Kissimmee, FL
www.aiaa-scitech.org
#aiaaSciTech



TECHNICAL ACTIVITIES

Although the primary focus of the many AIAA Program Committees (PCs) and Technical Committees (TCs) is organizing recognized technical forums for engineers, researchers, and scientists in their discipline areas, the work of these groups extends beyond technical conferences. Below are some highlights of the PC and TC activities during 2013.

Expanding into New Areas

AIAA created two new committees last year. The **Transformational Flight PC** developed out of an Emerging Technology Committee working group and focuses on promoting a community of practice engaged in the technical, business, and societal issues associated with transformational approaches to mobility through on-demand air missions and the research needs of this emergent market. The **Small Satellite TC** focuses on all aspects of small satellites and related and supporting technologies, applications, and missions. These aspects include, but are not limited to, MicroSats, NanoSats, CubeSats, hosted payload satellite subsystems, and related supporting systems and technologies.

Sharing and Promoting Technical Excellence

The **Society and Aerospace Technology TC** had a booth at the 2013 Pittsburgh Comic-Con in September, which provided an opportunity to interact with the public at large and distribute aerospace-related information including an aerospace pocket guide that the TC produced. The TC had collaborated with the Georgia Center of Innovation for Aerospace to produce the first aerospace pocket guide, which is a postcard-sized handout featuring several “Why do I care?” type questions. The **Product Support TC** was interviewed by *Aviation Maintenance* magazine for its February/March 2014 issue. The article showcased the TC’s No Fault Found (NFF) working group activities. With support from the Technical Activities Committee, the **Fluid Dynamics TC** live streamed the Fluid Dynamics Award Lecture and the AFOSR 60th Anniversary Invited Session during the June 2013 Fluid Dynamics Conference in San Diego as an experiment with remote presentation and viewing of sessions. The **Air Breathing Propulsion Systems Integration TC** participated in the Seattle Science Festival.



■ 2013 Pittsburgh Comic-Con

Preserving Technical Knowledge

The **Modeling and Simulation TC** collaborated with the Royal Aeronautical Society’s (RAeS) Flight Simulation Group and supported this group through the International Committee for Aircrew Training in the Extended Envelope to define new standards for airline flight aircrew training. The **Aerodynamic Decelerator Systems TC** continues to seek parachute document collections from around the world and send them to the Linda Hall Library, a technical collection archival library. Archiving and oral history remain an area where the **History TC** attempts to provide tools and resources to equip the members at the section level to make positive contributions in preserving the record of aerospace advances.



■ 2013 Pittsburgh Comic-Con

Encouraging the Younger Generation

After many years of effort and planning, the **Non-Deterministic Approaches TC** put a student paper award in place in 2013. The first “Southwest Research Institute Student Paper Award in Non-Deterministic Approaches” will be presented at the 2015 AIAA Science and Technology Forum and Exposition (SciTech). Dr. Julian J. Rimoli, a member of the **Survivability TC**, developed an iPad app to help students, all the way from middle school to college, to learn how to build truss structures, and learn how they fail through physics-based simulations. The **Aerodynamic Measurement Technology TC** hosted a student outreach event in conjunction with AIAA SciTech 2014. The goal of the event was student education and networking.

Working through Technical Challenges

The **Applied Aerodynamics TC** organized a number of workshops at AIAA events over the last year. Held in conjunction with the 2013 AIAA Fluids Dynamics Conference, the CFD High Lift Prediction Workshop was the second in the series and focused on the numerical prediction capability (meshing, numerics, turbulence modeling, high-performance computing requirements, etc.) of current-generation CFD technology/codes for swept, medium-to-high-aspect ratio wings for landing/take-off (high-lift) configurations and developing practical modeling guidelines for CFD prediction of high-lift flow fields. At AIAA SciTech 2014, the TC introduced two new workshops. The 1st AIAA Sonic Boom Prediction Workshop assessed the state of the art for predicting near-field signatures needed for sonic boom propagation. The 1st Low Reynolds Number Workshop addressed new research directions and connection between the sciences and the applications related to Micro Air Vehicles. Organized by the **Space Operations and Support TC** and sponsored by the Southwest Research Institute, the 19th Annual Improving Space Operations Workshop focused on operations technologies associated with space operations infrastructure, including the Internet and other commercial technologies. Track topics included: Commercial Space Operations, Satellite Co-Location and Collision Avoidance, and Reducing Mission Risk: Best Practices and New Paradigms.



AIAA Technical and Program Committees

Representing more than 80 topics, AIAA's TCs and PCs include:

Adaptive Structures	Management
Aeroacoustics	Materials
Aerodynamic Decelerator Systems	Meshing, Visualization, and Computational Environments
Aerodynamic Measurement Technology	Microgravity and Space Processes
Aerospace Power Systems	Missile Systems
Aerospace Traffic Management	Modeling and Simulation
Air Breathing Propulsion Systems Integration	Multidisciplinary Design Optimization
Air Transportation Systems	Non-Deterministic Approaches
Aircraft Design	Nuclear and Future Flight Propulsion
Aircraft Operations	Plasmadynamics and Lasers
Applied Aerodynamics	Pressure Gain Combustion
Astrodynamics	Product Support
Atmospheric and Space Environments	Propellants and Combustion
Atmospheric Flight Mechanics	Reusable Launch Vehicles
Balloon Systems	Sensor Systems
Communications Systems	Small Satellite
Computer Systems	Society and Aerospace Technology
Design Engineering	Software
Digital Avionics	Solid Rockets
Directed Energy Systems	Space Architecture
Economics	Space Automation and Robotics
Electric Propulsion	Space Colonization
Energetic Components and Systems	Space Environmental Systems
Energy Optimized Aircraft and Equipment Systems	Space Exploration
Flight Testing	Space Logistics
Fluid Dynamics	Space Operations and Support
Gas Turbine Engines	Space Resources
General Aviation	Space Station
Green Engineering	Space Systems
Ground Testing	Space Tethers
Guidance, Navigation and Control	Space Transportation
High Speed Air Breathing Propulsion	Spacecraft Structures
History	Structural Dynamics
Hybrid Rockets	Structures
HyTASP	Survivability
Information and Command and Control Systems	Systems Engineering
Intelligent Systems	Terrestrial Energy Systems
Legal Aspects of Aeronautics and Astronautics	Thermophysics
Life Sciences and Systems	Transformation Flight
Lighter-than-Air Systems	Unmanned Systems
Liquid Propulsion	Value Driven Design
	V/STOL Aircraft Systems
	Weapon System Effectiveness

REGIONS AND SECTIONS

Every month there are activities held across the country and around the world by AIAA's 59 sections. These events help members exchange information, build professional relationships, mentor young professionals, reach out to local students and support their local community. A small sampling of events from the seven regions exemplifies the scope and diversity of the many events and hard work of members in the field.



Members of the Northern New Jersey section with the section booth at Picatinny Arsenal's "Introduce a Girl to Engineering" Engineering Fair.

Region I

In February, the **Northern New Jersey** section participated in the local "Introduce a Girl to Engineering" Engineering Fair at Picatinny Arsenal, part of Engineers' Week. The purpose of this event was to introduce young women to different fields in engineering. Stations included Textile Physics, 3D Printing, Radiation and Environmental Engineering, Robotics, Nanotechnology, Chemical Engineering, and more. The section's table was a big hit with the students who had a lot of fun with the space shuttle, the model planes, and even the flower seeds.

Region II

The recently rejuvenated **Carolina** section joined Boeing South Carolina in celebrating engineers and their contributions by participating in the 2014 Engineers Week Showcase. Section members staffed a booth highlighting AIAA professional membership particulars and benefits.



Allison Carney, Christopher Zuver, and Krystina Johnson of the AIAA Carolina section enthusiastically promoting AIAA membership.



Rich Anthony, symposium chair, kicks off the 39th annual Dayton/Cincinnati Aerospace Sciences Symposium.

Region III

Each year the **Dayton/Cincinnati** section organizes the Dayton/Cincinnati Aerospace Sciences Symposium. Several other local societies, both professional and student, also participate. This wildly popular event, in its 39th year, attracted 275 attendees to hear over 165 presentations. The symposium kicked off with a plenary speaker and paper topics ranged from Human Factors to Hypersonics. The symposium also organized its annual "Art in Science" competition, inviting attendees to submit photos, artwork, or videos that demonstrate that science and engineering discoveries can give rise to images of sublime beauty.

Region IV

The **Albuquerque** Section holds frequent dinner programs with lectures on a variety of topics. In November, over 35 section members gathered at the Copper Canyon Café for dinner and a talk by Dr. D. Todd Griffith. Dr. Griffith is a Principal Member of the Technical Staff in the Wind and Water Power Technologies Department at Sandia National Laboratories. He gave an overview of wind energy technology and recent research on wind turbine rotor blades. He spoke of the many challenges that must be met in designing large wind turbines and making them cost effective. Section members had the opportunity to ask questions regarding manufacturing the blades, their aerodynamics, alternate configurations, the feasibility of wind farms, and other pertinent topics.



Dr. Todd Griffith lecturing on Wind Energy Technology to the Albuquerque Section

Region V

The **St. Louis** Section continues to host their Friday Film Series, which started in 2008. They do this using a certificate of license through the Motion Picture Licensing Corporation, enabling the public showing of licensed films. The idea of the film night was to offer a family friendly aerospace activity that would be inspirational to students. Each evening opens with an hour of browsing time in the Boeing Prologue Room, an aerospace mini-museum, before the screening, and the evening often ends with some spirited discussions. They have shown classic movies such as *No Highway in the Sky*, documentaries, current releases, and independent films produced by aviators and historians. Attendance has varied widely from two on a cold snowy evening to 70 celebrating Women's History Month.

Region VI

Members of the **China Lake** Section created an AIAA display booth for the California Unmanned Aerospace Systems (CAL UAS) Day at Inyokern Airport. They built and demonstrated a wind tunnel and spoke with K-12 students about the importance of science and math education. Close to 3,000 visitors to the airport watched the section's demonstrations.

For a less technical but equally family-oriented evening, the **Phoenix** Section held a heat-beating ice-skating event in September to kick off their new section year. Members' families attended to network, learn about upcoming section activities, and do some skating.



■ AIAA Sydney Section members network with interns and staff at Mount Stromlo Observatory in Canberra.

Region VII

In January, the middle of the Australian summer, the **Sydney** Section joined with the Advanced Instrumentation and Technology Center (AITC) at Mount Stromlo Observatory to host a presentation day and networking session. Interns from the Australian National University had worked on projects at AITC such as identifying asteroids in the solar system and evaluating space-based astronomy missions using CubeSats, and gave presentations on their work in front of their supervisors, industry representatives, and members of the Sydney Section. The presentations were followed by the section's networking session.



■ Ed Jeter, Jeff Scott, and Randall Drobny of the China Lake Section with their custom-built wind tunnel.



■ Members of the Phoenix Section beat the summer heat at their yearly kickoff family skating event.

FY13 LAYING THE FOUNDATION TO SHAPE TOMORROW

AIAA encountered several obstacles that prevented balanced operational financial results in Fiscal Year 2013 (FY13), including continued restrictions on government travel leading to a shortfall in conference registrations and lower than expected publication sales caused by the uncertain financial climate and continual belt-tightening by our customers. Those obstacles, combined with a 6% decline in our Professional Membership ranks, made FY13 a difficult year. However, FY13 was also a year in which our Corporate Members, seeing the value of AIAA, stood by us, with their ranks staying steady in number. FY13 provided several business lessons and in response we are updating our Strategic Plan, which is due to be finished in FY14. Once implementation begins, the new plan will allow us to continue to operate in challenging environments with a solid footing for growth in the Institute's relevance to the aerospace community as well as in our financial bottom line.

Wise stewardship of the Institute's Endowment Portfolio allowed for continued investments in AIAA's growth and sustainability. We also made the difficult, but financially prudent, decision to terminate the AIAA Employee Pension Plan. The Institute has set aside funds from the Endowment to settle all of the plan's current and future obligations when termination is completed in FY14. This decision will save the Institute in excess of three-quarters of a million dollars each year going forward. Bolstering the portfolio's strength was the increase of its long-term assets, which continued to grow in FY13, ending more than \$726,000 better than the FY12 ending balance.

Specific highlights of the investment fund's performance include:

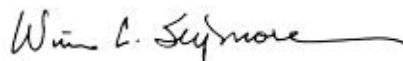
- The growth of the Endowment Portfolio during FY13 from \$25,460,000 at the start of the year to \$26,186,000 at year end. A net increase of \$726,000. \$7,000,000 has been set aside from the fund to settle the pension termination obligations.
- The Pension Fund Portfolio decreased from \$11,547,000 in FY12 to \$5,645,000 in FY13, with the decrease representing the decision to terminate the AIAA Employment Pension Plan. While investment performance was positive, obligations to existing pensioners on the plan required the purchase of \$7,495,000 of annuities to fund obligations to existing pensioners. (Please note, this balance does not include the \$7,000,000 set aside in the Endowment Portfolio to settle future pension obligations.)

FY13 also saw AIAA transitioning to a new event model, transitioning from our traditional conferences to four new forums: Science and Technology Forum and Exposition (SciTech); Aviation and Aeronautics Forum and Exposition (AVIATION); Space and Astronautics Forum and Exposition (SPACE); and the Propulsion and Energy Forum and Exposition. These forums will add new elements and integration levels, will appeal to a wider range of aerospace applications and system professionals than our legacy offerings, and will help attract a broader audience to AIAA events. They also create improved economies of scale.

One thing that did not change in FY13 is AIAA's unshakable commitment to enhancing levels of service, creating and supporting world-class products and programs, and integrating technology that drives innovation in value delivery to our members and institutional and corporate partners around the world.

While FY13 had its challenges, the net result of our fiscal year was positive, as indicated by the attached audited Consolidated Statements of Financial Position. There was an increase in the Institute's total assets to \$38,151,000 at the end of FY13, up from FY12's total of \$36,642,000, as well as an increase in the Institute's net assets to \$26,789,000 from FY12's \$20,103,000.

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. For FY13, AIAA received an unqualified clean audit opinion from our independent auditors, Johnson-Lambert & Co. LLP, concerning our consolidated financial statements. Key elements of our combined audited financial statements are found on the following pages.



William C. Seymore
AIAA Secretary and Treasurer

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

William C. Seymore
AIAA Secretary and Treasurer
1801 Alexander Bell Drive,
Suite 500
Reston, VA 20191

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Year ended September 30, 2013 (in thousands)

Year ended September 30, 2012 (in thousands)

(as restated)

	Institute	Foundation	Eliminations	Consolidated	Institute	Foundation	Eliminations	Consolidated
Assets:								
Cash and cash equivalents	\$ 1,478	\$ 61	\$ —	\$ 1,539	\$ 836	\$ 59	\$ —	\$ 895
Investments	26,186	5,364	—	31,550	25,460	4,626	—	30,086
Accounts receivable, net	491	4	—	495	525	—	—	525
Pledges receivable, net	—	74	—	74	—	247	—	247
Due from Foundation/Institute	50	—	(50)	—	—	3	(3)	—
Prepaid expenses and other current assets	386	1	—	387	380	—	—	380
Inventory	28	—	—	28	33	—	—	33
Beneficial interest in trusts	7,615	—	—	7,615	7,056	—	—	7,056
Fixed assets, net	1,917	—	—	1,917	2,352	—	—	2,352
Total assets	\$ 38,151	\$ 5,504	\$ (50)	\$ 43,605	\$ 36,642	\$ 4,935	\$ (3)	\$ 41,574
Liabilities:								
Accounts payable and accrued expenses	\$ 2,443	\$ 58	\$ —	\$ 2,501	\$ 2,859	\$ 68	\$ —	\$ 2,927
Due to Foundation/Institute	—	50	(50)	—	3	—	(3)	—
Deferred member dues	3,021	—	—	3,021	2,872	—	—	2,872
Deferred subscriptions	1,462	—	—	1,462	1,335	—	—	1,335
Deferred other	721	—	—	721	264	8	—	272
Other liabilities	37	—	—	37	84	—	—	84
Capital lease obligation	12	—	—	12	48	—	—	48
Defined benefit pension liability	3,666	—	—	3,666	9,074	—	—	9,074
Total liabilities	11,362	108	(50)	11,420	16,539	76	(3)	16,612
Net assets:								
Unrestricted net assets	19,174	2,775	—	21,949	13,047	3,531	—	16,578
Temporarily restricted net assets	7,615	1,042	—	8,657	7,056	472	—	7,528
Permanently restricted net assets	—	1,579	—	1,579	—	856	—	856
Total net assets	26,789	5,396	—	32,185	20,103	4,859	—	24,962
Total liabilities and net assets	\$ 38,151	\$ 5,504	\$ (50)	\$ 43,605	\$ 36,642	\$ 4,935	\$ (3)	\$ 41,574

CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended September 30, 2013 <i>(in thousands)</i>	Institute	Foundation	Eliminations	Consolidated
Revenue				
Member services	\$ 2,172	\$ —	\$ —	\$ 2,172
Education	372	20	—	392
Technical publications	5,626	—	—	5,626
International	50	—	—	50
Technical activities	7,323	—	—	7,323
Corporate membership and Institute outreach	1,785	—	—	1,785
Public policy	131	—	—	131
Standards	1,086	—	—	1,086
Other program services	—	—	—	—
Revenues before investment return, contributions and net assets released from restriction	18,545	20	—	18,565
Investment return	3,517	423	—	3,940
Contributions	54	104	(75)	83
Change in discount and allowance	—	(108)	—	(108)
Net assets released from restriction	—	185	—	185
Total revenue	22,116	624	(75)	22,665
Expenses				
Program services				
Member services	1,898	55	—	1,953
Education	831	60	—	891
International	159	—	—	159
Technical publications	4,010	—	—	4,010
Technical activities	6,651	—	—	6,651
Corporate membership and Institute outreach	2,867	—	—	2,867
Public policy	758	—	—	758
Standards	1,177	—	—	1,177
Strategic plan initiatives	145	—	—	145
Other program services	515	152	—	667
Fundraising	75	52	(75)	52
General and Administrative	3,066	—	—	3,066
Total expenses before investment expenses	22,152	319	(75)	22,396
Investment expenses	28	6	—	34
Total expenses	22,180	325	(75)	22,430
Reclassification based upon revision of donor intentions	—	(1,055)	—	(1,055)
Change in unrestricted net assets	(64)	(756)	—	(820)
Change in temporarily restricted net assets				
Investment return	—	334	—	334
Contributions	559	37	—	596
Net assets released from restriction	—	(185)	—	(185)
Reclassification based upon revision of donor intentions	—	384	—	384
Change in temporarily restricted net assets	559	570	—	1,129
Change in permanently restricted net assets				
Contributions	—	52	—	52
Reclassification based upon revision of donor intentions	—	671	—	671
Change in permanently restricted net assets	—	723	—	723
Change in net assets from operations	495	537	—	1,032
Pension-related changes other than net periodic pension cost	6,191	—	—	6,191
Net change in net assets	6,686	537	—	7,223
Net assets, beginning of year <i>(as restated)</i>	20,103	4,859	—	24,962
Net assets, end of year	\$ 26,789	\$ 5,396	\$ —	\$ 32,185

CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended September 30, 2012 <i>(in thousands) (as restated)</i>	Institute	Foundation	Eliminations	Consolidated
Revenue				
Member services	\$ 2,216	\$ —	\$ —	\$ 2,216
Education	480	16	—	496
Technical publications	5,344	—	—	5,344
International	557	—	—	557
Technical activities	10,430	—	—	10,430
Corporate membership and Institute outreach	1,595	—	—	1,595
Public policy	17	—	—	17
Standards	1,031	—	—	1,031
Other program services	—	2	—	2
Revenues before investment return, contributions and net assets released from restriction	21,670	18	—	21,688
Investment return	3,983	654	—	4,637
Contributions	60	245	(150)	155
Change in discount and allowance	—	(13)	—	(13)
Net assets released from restriction	—	93	—	93
Total revenue	25,713	997	(150)	26,560
Expenses				
Program services				
Member services	1,763	45	—	1,808
Education	827	309	—	1,136
International	645	—	—	645
Technical publications	3,733	—	—	3,733
Technical activities	7,565	—	—	7,565
Corporate membership and Institute outreach	2,931	—	—	2,931
Public policy	594	—	—	594
Standards	1,133	—	—	1,133
Strategic plan initiatives	236	—	—	236
Other program services	275	131	—	406
Fundraising	150	208	(150)	208
General and Administrative	2,914	64	—	2,978
Total expenses before investment expenses	22,766	757	(150)	23,373
Investment expenses	14	3	—	17
Total expenses	22,780	760	(150)	23,390
Replenishment of unrestricted net assets for funding of expenses in excess of earnings	—	17	—	17
Change in unrestricted net assets	2,933	254	—	3,187
Change in temporarily restricted net assets:				
Investment return	—	181	—	181
Contributions	7,056	350	—	7,406
Net assets released from restriction	—	(93)	—	(93)
Replenishment of unrestricted net assets for funding of expenses in excess of earnings	—	(17)	—	(17)
Change in temporarily restricted net assets	7,056	421	—	7,477
Change in permanently restricted net assets				
Contributions	—	20	—	20
Change in permanently restricted net assets	—	20	—	20
Change in net assets from operations	9,989	695	—	10,684
Pension-related changes other than net periodic pension cost	(1,829)	—	—	(1,829)
Net change in net assets	8,160	695	—	8,855
Net assets, beginning of year	11,943	4,164	—	16,107
Net assets, end of year	\$ 20,103	\$ 4,859	\$ —	\$ 24,962

CONSOLIDATED STATEMENTS OF CASH FLOWS

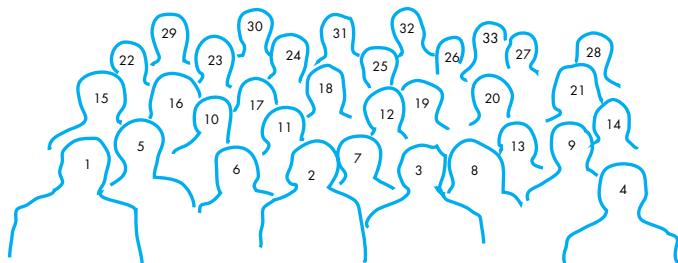
	Years ended September 30,	
	2013	2012
	<i>(in thousands)</i>	
		<i>(as restated)</i>
Cash flows from operating activities		
Net change in net assets	\$ 7,223	\$ 8,855
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Depreciation and amortization	591	431
Contributions restricted for long-term investment	(52)	(20)
Net realized and unrealized gains on investments	(3,502)	(3,955)
Changes in operating assets and liabilities:		
Accounts receivable, net	30	381
Pledges receivable, net	173	(135)
Beneficial interest in trusts	(559)	(7,056)
Prepaid expenses and other current assets	(7)	111
Inventory	5	49
Accounts payable and accrued expenses	(426)	(349)
Defined benefit pension liability	(5,408)	1,239
Other liabilities	(47)	25
Capital lease obligation	(36)	(34)
Deferred revenue	725	(155)
Net cash used in operating activities	<u>(1,290)</u>	<u>(613)</u>
Cash flows from investing activities		
Proceeds from the sale of investments	10,759	2,007
Purchases of investments	(8,720)	(2,353)
Purchases of fixed assets	(157)	(967)
Net cash provided by (used in) investing activities	<u>1,882</u>	<u>(1,313)</u>
Cash flows from financing activities		
Contributions to be held permanently	52	20
Net cash provided by financing activities	<u>52</u>	<u>20</u>
Net change in cash and cash equivalents	644	(1,906)
Cash and cash equivalents, beginning of year	895	2,801
Cash and cash equivalents, end of year	<u>\$ 1,539</u>	<u>\$ 895</u>

Leadership



2013–2014 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 2013 through May 2014.



■ **Members of the 2013–2014 AIAA Board of Directors:** **Front row** (L-R): 1. Klaus Dannenberg; 2. Sandy Magnus; 3. Michael Griffin; 4. In Lee. **Second row** (L-R) 5. Ferdinand Grosveld; 6. Jane Hansen; 7. Sivaram Gogineni; 8. Kathleen Atkins; 9. Shamim Rahman. **Third row:** (L-R) 10. Bob Winn; 11. Luisella Giulicchi; 12. Angelo Iasiello; 13. Sanjay Garg; 14. Laura McGill. **Fourth row:** (L-R) 15. Trevor Sorensen; 16. Laura Richard; 17. Cheryl Blomberg; 18. Neal Pfeiffer; 19. Susan Ying; 20. Kevin Massey; 21. Annalisa Weigel. **Fifth Row** (L-R): 22. Ryan Rudy; 23. David Riley; 24. Jeffrey Hamstra; 25. Mary Snitch; 26. Steve Gorrell; 27. Jayant Ramakrishnan; 28. James Keenan. **Sixth Row** (L-R): 29. Allen Arrington; 30. Alan Lowrey; 31. Basil Hassan; 32. Bob Lindberg; 33. Bill Seymore. **Not Pictured:** Merri Sanchez; Vigor Yang; Neal Barlow; Stephen Rottler

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Schafer Corporation



PRESIDENT—ELECT (2013-14)

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Boeing Commercial Airplanes (Retired)

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Ms. L. Jane Hansen
HRP Systems, Inc.

DIRECTOR—REGION 7 (2013–16)
Dr. Luisella Giulicchi
European Space Agency

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Mr. Ryan Rudy
The Boeing Company

STUDENT LIAISON (2013–15)
Ms. Cheryl Blomberg

AIAA LIAISONS:

Dr. Sandra H. Magnus, Executive Director
Dr. Klaus D. Dannenberg, Deputy Executive Director
Angelo M. Iasiello, Chief Operating Officer
William C. Seymore, Secretary/Treasurer

President-Elect's Report



Jim Albaugh

A handwritten signature in black ink, appearing to read "Jim Albaugh". The signature is fluid and stylized, with the first name and last name clearly distinguishable.

Telling the story of aerospace—pushing the boundaries of innovation every day, growing the global economy, connecting people and cultures, and fostering understanding—is a critical role for our Institute. That’s why I’m so excited about being the incoming AIAA President. Aerospace engineers and the aerospace profession collectively are a force for good worldwide. At the onset of my term as AIAA President here are a few thoughts on the direction AIAA will go in the next few years.

Contrary to what you may think the position of AIAA President-Elect is not merely a presidency in waiting; there are important duties that accompany this stage of a presidency. The AIAA Bylaws stipulate that “the primary purpose of the [this period] shall be to provide the opportunity for the [the President-Elect] to familiarize himself with the programs of the Institute and to plan and develop those activities to be emphasized during his term as President.” There are also provisions for the sitting President to delegate other duties as well; but most critically for the Institute, the President-Elect chairs the Institute Development Committee (IDC). The IDC is charged with continued development and improvement of the Institute; evaluation of organizational changes and changes in Institute services; stimulation, consideration, and evaluation of new initiatives; and implementation of formal associations with other professional organizations. It also has the responsibility “for the development, continuing evolution, and dissemination of the Institute’s Strategic Plan”; it sets the future direction of the Institute.

When the AIAA constitution was amended several years ago, one of the results was that the AIAA President also chairs the IDC for a period of time. During his tenure, Mike Griffin led a revision of the AIAA strategic plan, helping shape it into a fully integrated document that sets strategic imperatives and objectives that drive tactical goals for the members and staff alike. This has been a lengthy process; but at the August 2013 Board of Directors meeting and subsequent executive committee retreat, the final touches were made and priorities determined.

In addition to updating the AIAA vision and mission, which Mike shared earlier in this annual report, formulating a concise meaningful strategic plan was critical. This plan emphasizes results that are relevant, tangible, and beneficial to our members, both individual and corporate. To become a vital lifelong link for aerospace professionals, AIAA needs to move beyond a focus on our traditional products and services and incorporate activities and resources that allow the community to stay connected, offer professional growth opportunities, and help address the numerous challenges facing the industry. To truly be the voice of the aerospace industry, the strategic plan calls for increased promotion of the many benefits the industry provides to the general public. Lastly, by communicating and celebrating the achievements of our members, AIAA will not only illustrate the extraordinary value of the aerospace industry to society but may, more importantly, inspire the next generation of aerospace professionals.

Strategic Imperatives	Objectives			
Develop and Expand our Community	Engage underrepresented constituencies and key technology areas	Increase our legacy technical membership and corporate members	Develop a comprehensive outreach and engagement strategy	
Strengthen our Existing Community	Institutionalize prioritization methodology to align products, programs, and services to align efforts	Develop and institutionalize adaptable and forward-leaning culture	Develop and implement responsive and collaborative Governance Structure and Volunteer–Staff Partnership	Sustain the Institute with operational funds
Deliver Exceptional Results	Leverage online Infrastructure and technology assets	Capture and/or develop new opportunities that impact our broad mission-based focus	Strengthen our core role as aerospace technology clearinghouse	Strengthen leadership relationship with government, industry and academia

To fulfill AIAA’s vision and mission and live up to the words “Shaping the Future of Aerospace,” our strategic imperatives are:

To develop and expand our community;

To strengthen our existing community; and

To deliver exceptional results.

In the coming months you will hear more from the staff, committee and Board members, and me about the goals and plans being developed to support the strategic plan. There is much hard work to be done. However, when this plan is successfully implemented, AIAA should see its membership grow, the demand for its products and services increase, and the benefits of our profession and industry become more fully apparent to the society at large; or put another way, and as described in AIAA’s credo, to support “achievements, from the small but brilliantly simple to the complex missions that alter the course of human existence.”

I would be remiss if I did not acknowledge the valuable input and expressions of support from members from every facet of AIAA; the support I have received this year from my fellow Board members in developing the strategic plan—essentially AIAA’s blueprint for the next two years; and the example and leadership of Mike Griffin. As I think you all know, Mike’s original term as AIAA President was preempted by a summons to serve as NASA Administrator. Because of his dedication to AIAA and desire to see the Institute move forward, he ran again, repeated his apprentice year as president-elect, and then agreed to serve as the first two-year president of the Institute. Mike, I want to sincerely thank you for the example you have set for me, and on behalf of the entire membership, thank you for all that has been accomplished on your watch and for all you have done for the Institute in your many roles.

■ AIAA Strategic Plan

By communicating and celebrating the achievements of our members, AIAA will not only illustrate the extraordinary value of the aerospace industry to society but may, more importantly, inspire the next generation of aerospace professionals.



Shaping the Future of Aerospace

**American Institute of
Aeronautics and Astronautics**

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