



# 2012–2016 Strategic Plan

American Institute of Aeronautics and Astronautics



# **Table of Contents**

Section I: Vision, Mission, and Strategic Imperatives1
Section II: Strategic Goals for 2012–20162
Section III: Strategic Action Plans4
Financial4
Products and Services:
Technical Activities6
Publications8
Public Policy9
Member Services11
Standards12
International13
Education14
Other Key Areas:
Corporate Communications16
Aerospace America17
Partnerships18
Information Technology20
2011–2012 AIAA Board Members21

# 2012–2016 Strategic Plan American Institute of Aeronautics and Astronautics

The American Institute of Aeronautics and Astronautics (AIAA) 2012–2016 Strategic Plan consists of three sections. Section I defines the vision, mission, and strategic imperatives of the Institute. Section II identifies the strategic goals of the Institute for the next five years, through the end of 2016. Section III describes the specific action plans to be implemented in each of the Institute's product and service areas to accomplish these strategic goals.

# Section I: Vision, Mission, and Strategic Imperatives

AIAA is the world's leading professional society in the field of aerospace science, engineering, and operations. We are a service organization focused on creating tangible value for our individual and corporate members by providing products, services, and venues that stimulate creative technical exchange on emerging opportunities and critical problems in the aerospace profession; by facilitating lifelong learning and career enhancement opportunities for aerospace professionals; by pursuing initiatives on aerospace workforce development, including a focus on early-career and next-generation professionals; and by acting as the public policy advocate and voice of the aerospace profession.

#### The AIAA Vision

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

#### The AIAA Mission

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

In support of our vision and mission, the Institute pursues four core goals that create substantial value for our members and for society:

- To advance the aerospace profession and the community it supports by acting as a catalyst for information flow and creative interchange to keep our members well informed, through meetings that address technical developments as well as critical issues facing our community, and through a world-class technical information and publications service;
- To sustain and strengthen the profession by stimulating workforce
  development through lifelong learning for today's professionals, by
  enhancing the development of future professionals through support of
  students, faculty, and academic institutions, and by enhancing retention of
  aerospace workers;
- To stimulate progress in the state of the art of aerospace science and technology by promoting communication and personal interaction among students, engineers, and scientists as well as with other professional groups, and by recognizing outstanding professional accomplishments; and
- To serve as an advocate for the profession by highlighting the tremendous societal contributions of aerospace systems and technologies, by focusing the scientific and technical capabilities of the profession on areas of international importance, and by providing an appropriate voice for the professional community in public policy discussions at international, national, and local levels.

# **AIAA's Strategic Imperatives**

Today, the aerospace community is challenged by several critical strategic issues threatening its future vitality. With the public at large not understanding the contributions of the community, the profession is hard pressed to maintain the funding continuity and the workforce enthusiasm that led to the past decades of progress and relevance to national goals. This is leading to continuing challenges in development and growth of the aerospace workforce. Consequently, consistent with and supporting our basic mission, two major imperatives must shape the activities of the Institute as we address these challenges to the future of the aerospace profession. These imperatives are as follows:

 Sustain a Robust Aerospace Workforce and Develop Next-Generation Professionals.

AIAA must provide the leadership to promote the professional growth of today's aerospace workforce and overcome the challenges of developing tomorrow's aerospace professionals. Faced with an aging workforce and an inadequate supply of new graduates educated in the "STEM" subjects of science, technology, engineering, and mathematics, AIAA must establish and lead a collaboration of government, industry, and academic partners to guarantee the availability of a high-quality aerospace workforce for future needs and challenges.

 Build AIAA's Relevance and Credibility with the Nation's Government/ Industrial Leadership.

AIAA must solidify a position of high regard with product companies and with government policymakers and decision makers to strengthen its relevance and broaden its support throughout the aerospace community. Historically, as a critical technology partner with the government/industrial leadership of the nation, AIAA's objective community-wide opinions were solicited to help establish policy and to explain the benefits of aerospace technologies to the public at large. This enviable position eroded over the post–Cold War years as our industry shrank and as it evolved into ancillary areas. To be an influential factor in the development and operation of the emerging national and global technology infrastructures for space exploration, aviation transportation, environmental monitoring, and other areas, AIAA must regain this position of leadership and trust to once again be a primary, sought-after, critical participant in the creative application of aerospace innovation to the challenges facing today's society.

Directly aligned with AIAA's vision, mission, and strategic imperatives are a set of strategic goals (Section II) and supporting strategic action plans (Section III). Inherent in this identification of missions, goals, and plans is the emerging realization that, as this Strategic Plan evolves and is put into action, the internal structure of the AIAA professional staff and functional volunteer organization may need realignment to properly focus on and implement these new initiatives.

# Section II: Strategic Goals for 2012–2016

Despite the poor economy of the past three years, the Institute's results of operations continue to meet business goals and objectives in a challenging environment. However, progress towards our visionary goals is mixed, with those areas most heavily dependent on economic factors facing the greatest challenges. Specifically, revenue generation from both sales to individuals and sales to organizations have stagnated. These trends must be reversed. To do so may require investments in expanding our operations. In addition, it is anticipated that the environment for both the civil and defense government sectors will be more difficult in the near term due to a growing national concern with balanced budget operations and with European Union financial stability. Therefore, AIAA's major non-financial strategic goals for the next five years remain unchanged in nature but have been adjusted to reflect the realism of the economy. They continue to provide the overarching framework of the AIAA Strategic Plan. Strategic financial goals may be adjusted to reflect investments needed to reverse the multi-year trend of revenue stagnation and return to growth, even if modest. These major goals drive how we think about our future and how we will change to address it. Steps needed for implementation are detailed in Section III. The major strategic goals are as follows:

# Membership Retention, Growth, Diversity, and Engagement

The membership of AIAA has been stable for a decade, varying by only a few percentage points from year to year. New members are added regularly, but not all of them become actively engaged. As a result, the attrition rate of new members is too high in the first few years of membership. The goals in this area are as follows:

- Stabilize membership, returning to the pre-economic downturn level of 29,000 by 2015.
- Substantially reduce professional member attrition, from about 5,000 annually (~20%) to no more than 15% per year by 2015. This is a reduction of about 1,500 non-renewals per year.
- Actively engage prospective college graduates (while they are student members) to provide a seamless transition to membership as young professionals; increase our student-to-professional member conversion rate from 40% to 60%.
- Increase the participation of under-represented groups (young professionals, women, minorities) in our membership until it reflects industry demographics (while we continue to lead the efforts to improve these industry demographics):
  - ° Increase the percentage of women members (from 8% to 15%);
  - ° Boost the percentage of young professionals (from 18% to 20%); and
  - Substantially increase minority membership (Hispanic, Asian, African-American, Native American).
- Expand our roster of corporate members by 37%, from 95 companies today to 130 or more by 2015.

# **Technical Activities**

Hosting between 22 and 26 conferences annually, Technical Activities are a major contributor to the Institute's science, engineering, and technology focus as well as its financial success. A few well-attended conferences generate most of these revenues. Collocation of smaller conferences having some technical alignment to our larger ones will be pursued. Additionally, new business models will be created to ensure the financial success of newly established or smaller conferences, as appropriate. New conferences and themes need to be initiated in emerging growth areas. Our goals are as follows:

- $\bullet\,$  Increase attendance at our technical events by 5–10% annually.
- Develop and initiate a plan to reorganize AIAA technical conferences into integrated events comprised of technically focused sessions and programmatic/systems discussions. These changes, investigated in 2011, are intended to improve the relevance of our events to a wider cross section of

- the industry. An inaugural systems-focused event is planned for September 2012. A new, major aviation-focused event is targeted for establishment in 2013.
- Leverage our conferences as the primary platform to expand our focus
  on increased cross-engagement of technical and program committees
  with local sections, student chapters, standards committees, public policy
  initiatives, and international engagement. Achieve an average of two annual
  engagements for each TC and PC.

#### **Publications**

AIAA continues to be the preeminent publisher of books and peer-reviewed journals for aerospace professionals and students. Publications are a primary source of AIAA revenues. With focus and diversity, AIAA will further strengthen its position as the publisher of choice worldwide for all aerospace and aerospace-related topics. Our goals are as follows:

- Support the AIAA Strategic Imperatives by promoting publications in new energy technologies, reduced environmental impact, and other emerging fields. Use the Library of Flight series and AIAA Education Series as platforms to facilitate and enhance workforce development.
- Launch at least one new electronic information product outside of the conventional concepts of electronic journals and books.
- Increase the profit margin, as well as customer value, by establishing custom-bundled packages, introducing new production technologies, and increasing engineering textbook market share by 50%.
- Increase publication sales in international markets and establish a global presence through translation and emerging market pricing.
- Retire print versions of journals by 2016, move to electronic only journals
  and realize significant increases in margin by preserving and increasing
  online subscribers.
- Increase publication efficiency, relevance, and value by reducing the time to publication for both journals and books.
- Sustain growth of the books product line by actively soliciting new quality authors with emphasis on strategic topics and global outreach.

#### **Education Programs**

In accordance with our Strategic Imperatives, AIAA will lead aerospace workforce development throughout our community while actively supporting broader STEM education initiatives.

- Professional development goals: Develop and introduce two new course delivery methods that generate revenue. Increase on-site courses by 20% (from nine courses in 2011 to 12 courses in 2016).
- Academic affairs goals: To ensure a quality, customer based evaluator force, maintain the number of industry-based Program Evaluators for ABET, Inc. above 30% of the total number of AIAA evaluators.
- Increase student membership by roughly 28% (from 7,000 in 2008 to 9,000 by 2016).
- Increase the percentage of female students (from 13% in 2011 to 18% by 2016).
- Increase the percentage of minority (Hispanic, African American, and Native American) student members.
- Student member activity goals: Increase student member participation in section activities, conferences, and design/paper competitions by 40%.
- STEM K-12 program goals: Increase interaction among educator associates, aerospace professionals, and K-12 students by developing and providing engaging programs to inspire K-12 students to pursue STEM careers in aerospace.
- Continue to develop new partnerships with targeted strategic organizations to encourage K-12 teachers and students to promote education in the "STEM" subjects of science, technology, engineering, and mathematics.

- Continue to significantly expand the local recognition of teachers throughout the educational system for efforts contributing to a stronger aerospace workforce.
- Formalize the relationship with the AIAA Foundation to assure two-way communication with regard to AIAA educational insights as well as Foundation donor and financial considerations.

#### **International Activities**

International membership in AIAA activities remains strong and significant at 18%. AIAA will continue to attract international participation to its events, and encourage our continued participation in other co-sponsored and/or partnered global aerospace activities. AIAA will strengthen its leadership in global engagement to become increasingly relevant to aerospace decision makers worldwide.

The following are AIAA's strategic goals for international activities:

- Expand AIAA's global presence by exploring extended and unique
  membership services tailored for value to aerospace professionals of all
  nations, especially nations that have significant growth in air or space
  capabilities and that are underrepresented within AIAA. At least one
  innovative membership service model will be developed and launched as a
  pilot prior to implementing the model across the board.
- Stimulate meaningful global technical exchange by advocating and fostering the standardization or harmonization of
  - o aerospace technical services,
  - o aerospace technical terms of reference, and
  - ° key global aerospace capabilities and products

through the exchange and dissemination of publicly available aerospace technical information.

• Collaborate with other professional societies to leverage the global workforce to support the development of next-generation professionals.

#### **Public Policy**

As a 501(c)(3) nonprofit organization, AIAA is restricted in the extent of its lobbying. As we provide unbiased technical information to policymakers, we must assure that we factually represent the perspectives of the aerospace community at large. Thus, we must broadly involve all elements of the Institute. Our public policy goals are as follows:

- Lead at least one high visibility outreach event in support of the strategic imperative to restore AIAA's relevance and credibility with the nation's government and industry leadership.
- Sponsor at least eight public policy events (fully or partially sponsored)
  every year, with many topics focused on our Strategic Imperatives, and with
  the inclusion of the broader technical community through selected hosting
  at major conference events.
- Enhance the Institute's Congressional Visits Day program, building participation to 300 members by 2013, including annual representation from at least 70% of sections, and 30% of TCs and PCs.
- Achieve participation of more than 65% of U.S. sections in the "August is for Aerospace" home district event by 2013.
- Hold annual public policy colloquia in each of AIAA's six U.S. regions.

#### **Standards Activities**

AIAA has a well established ANSI-accredited standards program that is managed by the Standards Executive Council and experienced AIAA staff. Standards goals are as follows:

• Increase membership participation in AIAA standards activities by 25%, in part by establishing closer ties with each technical committee.

- Initiate at least five new standards projects over the next five years, with
  special emphasis on standards development for emerging areas such as
  commercial space and unmanned aerial systems and on leveraging AIAA's
  increased focus in the development and integration of complex aerospace
  systems. Assess our viability in areas with other existing major standards
  development organizations.
- Operate at break-even or better budget impact through identification and capture of revenue growth by 2013.

#### **Financial Performance**

AIAA operates on a sound fiscal basis, with selected products and services historically providing the revenues not only to cover the associated expenses, but also to provide sufficient margin to support desired non-revenue services supporting the aerospace profession and community. However, with the stagnation of revenues over the last few years, some short term strategic investments may be necessary to return to revenue growth. Our financial goals are as follows:

- Expanding corporate revenues through the use of AIAA branding opportunities and through outreach to constituencies ancillary to the current AIAA membership.
- Maintain Institute operations from current constituencies and current products and services on a self-sustaining annual basis (i.e., maintain a balanced budget).
- Fund enhanced revenue generating products and services and outreach to new constituencies from the endowment portfolio as they are approved to encourage growth in membership and subsequent growth in revenue. Near term initiatives include hosting NASA's IT Summit.
- Stimulate innovation and fund key strategic initiatives that support the growth and sustainment of the Institute's vision and mission.
- Implement selected strategic operational cost efficiencies requiring endowment portfolio resources.
- Coordinate among all AIAA VPs to understand the financial implications, both positive and negative, of VP initiatives.
- Maintain formal financial policies and procedures to keep the Institute on a sound financial basis and to guide the use of endowment resources that support the overall strategic goals.

#### **Institute Operations and Support Areas**

Underlying the highly visible professional and public activities described above are indirect and support activities that are critical to the smooth operation of all of AIAA's efforts. Key goals in these areas are as follows:

- Continue to stabilize the Institute's Information Technology (IT)
  infrastructure and operations including the Association Management
  System as well as the recently deployed AIAA website and Content
  Management Systems upgraded in 2011. By 2013, be widely regarded as one
  of the premier professional associations at using IT to better serve member
  needs.
- Fully fund the Institute pension plan by 2017.
- Increase annual revenues from organizational sales (i.e., corporate membership, sponsorships, exhibits, advertising) by 50% by 2013.
- Reinforce AIAA's high profile and relevance in the aerospace community on at least a monthly basis, by judiciously placing branding ads in the media and by sponsorship and participation in high visibility community events.

# **Section III: Strategic Action Plans**

The following pages present the Institute's Strategic Action Plans, organized by the product and service areas represented by the eight elected Vice Presidents. The plan begins with the Vice President for Finance's presentation of AIAA's overall business strategy and financial structure. The other Vice Presidents then present their respective strategies in each area, calling for collaboration with other areas as appropriate. Those sections are followed by strategies for three areas of critical importance to the Institute throughout its membership as well as to the perception of the Institute by the public at large: Corporate Communications, Aerospace America, and Partnerships. Finally, an Information Technology (IT) strategy is presented. IT is of critical importance, as it enables all of the Institute's business elements and all users of AIAA's products and services, including customers, members, and staff. The strategies for these last four areas were prepared by the responsible staff, with oversight and review provided by an elected Director-at-Large who has been given this responsibility by the President, since these areas do not explicitly fall within the purview of any of the elected Vice Presidents.

Each individual strategy is derived from the Institute's overall mission and vision, and is tailored to the specific situation assessed. The intent is that these Strategic Action Plans will be living documents, with annual updates of each section encouraged, and explicitly required of each new Vice President-elect at the beginning of their term. For continuity and ease of comprehension, each section is organized similarly, as follows:

- Vision 2016
- · Progress in 2011
- Plan Changes for 2012
- Strengths in 2012
- · Weaknesses in 2012
- Opportunities in 2012
- Threats in 2012
- Strategic Actions (2012 to 2016)

Unless otherwise stated, the Progress and Plan Changes sections reflect actions and resulting changes incorporated during 2011.

# **Financial**

#### Vision 2016

AIAA operations will continue to be totally self-sustaining on an annual basis as a result of investments made using endowment funds over the past five years. Annual revenue growth has returned to high single digit percentages. Revenue from our products and services is sufficient to absorb all product-related costs and to underwrite AIAA's non-revenue services that enable AIAA to be the shaping, dynamic force in the aerospace profession. Towards that end, AIAA's financial structure includes Operations and four additional financial components supporting Operations: the Endowment Fund, the Institute Development Committee Fund, the Pension Fund, and the AIAA Foundation. Each of these five components has its own financial strategy.

# Progress in 2011

We achieved our vision of annual self-sustainment during 2011. For the first time in over a decade, our Operations budget absorbed all Information Technology costs, including utilization of the newly implemented Association Management System. Strategic investments were also made to the AIAA website to enhance our business operations, thereby eliminatingd a continuing drain on the Institute's investment resources. In FY2011, the Operations budget also absorbed selected Strategic Plan Initiatives making Operations self-sustaining for our current mix of products and services to our current constituencies. With the stock market apparently recovering from the lows reached in mid-2009, our portfolio has partially recovered to a value more than 16% greater than the minimum funding level. The Endowment and Foundation Fund portfolio manager was replaced through a competitive process and is now being managed for protection of assets rather than growth. All assets for the Endowment and the Foundation Fund have been transferred.

Our pension funding complies with all government requirements although it is not yet fully funded. We have put a temporary hold on contributions to the Pension Fund beyond the minimum requirements to assess if market and Fed actions will rebuild the reserves (through increased portfolio valuation) and will reduce the funding requirements (through increased discount rates) while we retain our cash. We have implemented a 5–6% spending level target for our Foundation Fund for FY2012, reducing the 9% spending levels experienced during prior years needed to maintain expected activities with the reduced principal of the fund. Since this expenditure rate is too high for sustained performance with the current level of the principal, the fundraising campaign begun in 2009 is continuing, after having made adjustments in Foundation programs to make donations more appealing to donors. The IDC Fund is generated by voluntary contributions associated with membership renewal. The size of the Fund indicates substantial volunteer support.

# Plan Changes for 2012

No significant conceptual plan modifications have been made from the previous Strategic Plan. However, it is anticipated that substantial investments may be required to assure long-term Operations efficiency and to again achieve sustained revenue growth. Any investments will be made in accordance with the Minimum Funding Level policy for our Strategic Reserves. The Minimum Funding Level is calculated by a three-part formula, which is remains very conservative compared to known association and non-profit benchmarks.

# **Operations**

- The Institute has a solid base of commercially viable products and services that are valuable to a stable community of constituent users.
- We are able to provide significant and meaningful non-revenue generating services to support our profession based on the financial viability of our revenue generating products.
- We have a favorable, respected brand with a high level of recognition in the aerospace community.

- We have had difficulty creating new products or services. We often stick
  with old formulas even after they have become economically unfavorable.
- We have had difficulty in identifying and penetrating emerging market areas.
- We have several specific operations with long-term inefficiencies that have not been addressed due to up-front costs.
- We have several programs that have not produced the revenues that were expected when the programs were implemented.

#### **Opportunities in 2012**

- New and innovative products and services must be developed to increase
  the revenue base. With new marketing and sales staff, we anticipate
  greater penetration of the corporate community with enhanced branding
  opportunities.
- Investments are needed to identify and recruit new constituencies into
  active AIAA participation from areas ancillary to our legacy membership
  and activities. Examples are IT communities with aerospace applications
  and earth observing communities using aerospace platforms and products
  for a great variety of user applications, and the people/corporations
  supporting the Next Generation Air Traffic Management System. None of
  these constituencies have an obvious professional outlet for sharing their
  knowledge and networking within the community.
- With the health of the Institute despite ongoing economic challenges, nearterm investments may be affordable to implement long-term efficiencies.

#### Threats in 2012

- Competition from "for profit" companies can cherry-pick profitable products in the aerospace arena.
- If recovery from the economic downturn of the last few years takes longer than anticipated, our current portfolio of revenue-generating products and services may not produce enough revenue to offset our expenses.
- Continuing inefficient practices and underperforming programs may threaten long term growth through non-affordability of needed near term investments.

# **Operations Strategic Actions (2012 to 2016)**

- Ensure that the Operations Budget will continue to break even on an annual basis for current legacy products and services provided to current constituencies.
- Create a strong, Institute wide awareness and focus on revenue generation
  and growth. This includes deeper penetration of corporations for all
  branding opportunities (exhibits, ads, sponsorships, and corporate
  memberships) as well as development of new products and services for
  ancillary professional constituencies.
- Eliminate strategic inefficiencies through near term, timely investments.
- Modify or eliminate programs that are not meeting their expected revenue generation targets.
- Develop a business intelligence capability to provide early insight as to potential and actual threats to the Institute's revenue base.

#### **Endowment Fund**

# Strengths in 2012

- After several years of below benchmark returns, the fund's investment
  portfolio manager was changed from Alliance Bernstein to Vanguard
  Institutional Advisory Services (VIAS). The transfer of assets was completed
  early in FY2012. VIAS has an excellent track record dealing with non-profit
  institutions like AIAA.
- The fund's value is 16% greater than the Institute established minimum requirements.
- The endowment usage policy developed during 2009 and 2010 has been implemented with several funding initiatives in place.

#### Weaknesses in 2012

 Although the fund has partially recovered from the dramatic bear market of 2008–2009, the fund's value is still down significantly from Spring 2008, when it was considerably in excess of annual expenses.

#### Opportunities in 2012

- As older initiatives have migrated into the Operations budget and we
  continue to develop future Operations budgets to include activities that
  rightly belong therein, the value of the Endowment will allow for funding of
  new strategic initiatives with the potential to enhance revenues.
- With VIAS as the Institute's new portfolio manager and our emphasis has
  changed to protection of assets (vs. growth), the dramatic value swings of
  past years are not expected to continue.

#### Threats in 2012

 If current financial market trends reverse, the portfolio value may decrease again.

#### **Endowment Fund Strategic Actions (2012 to 2016)**

- Use the Endowment to fund specific Strategic Plan initiatives, of a meaningful
  and lasting nature, as recommended by the IDC and specifically approved by the
  Board with the primary focus being sustainable revenue growth and enhanced
  relevance within the aerospace community.
- Revise the Endowment Usage policy to be more timely while retaining the emphasis on protection of assets from funding non-strategic requirements.

# The Institute Development Committee (IDC) Fund

#### Strengths in 2012

 Expenditure of these funds requires approval by both IDC and the Board separately from the Operations budget. In ongoing operations, these funds are managed carefully by the IDC to support new initiatives.

#### Weaknesses in 2012

To initiate potential growth projects, the IDC in its enthusiasm often does
not examine the longer-term fiscal consequences of emerging projects.
Historically, many proposed projects do not support AIAA's vision and
mission statements and/or are unlikely to break even.

#### **Opportunities in 2012**

• Since IDC projects are usually short-term, there are frequent opportunities to align new projects with the vision and mission of the Institute and to stimulate the Institute's relevance within the aerospace community.

#### Threats in 2012

 Trends affecting membership at large may very well impact the IDC Fund first, since it is dependent on voluntary contributions associated with membership renewal.

#### **IDC Fund Strategic Actions (2012 to 2016)**

- Approve those projects which best support the vision and mission of the Institute.
- Select projects which will be self-supporting in a reasonable time frame.

# **Pension Plan**

#### Strengths in 2012

- The Pension Plan maintains a balanced asset allocation mix, with a cash or fixed income component sufficient to meet current and projected near term retiree needs.
- The Pension Plan and its funding comply with all relevant laws and regulations.
- The Pension Plan is managed by Prudential. Although challenged to obtain adequate returns in recent years, Prudential exceeded the investment benchmarks in 2010.

#### Weaknesses in 2012

 Pension Plan assets are less than the Projected Benefit Obligation for which AIAA will be liable.

# **Opportunities in 2012**

The Pension Protection Act of 2006 requires increased contributions, over an
eight-year time frame, to improve the plan's funded position. We will continue to
make contributions to the Pension Plan administered by Prudential.

# Threats in 2012

 If recent financial market volatility continues, the portfolio value may decrease to the point that additional contributions are required to comply with all laws and regulations.

#### Pension Plan Strategic Actions (2012 to 2016)

- In accordance with the Pension Protection Act of 2006, increase the pension contribution to meet the new requirements.
- Maintain conservative pension assumptions.

#### **AIAA Foundation**

#### Strengths in 2012

- Founded as an ancillary organization for the Institute to explicitly support
  education and the Institute's honors and awards program, the Foundation is
  protected from annual budget volatility because its programs are outside of
  the Institute's operating budget.
- After several years of below benchmark returns, the fund's investment portfolio manager was changed from Alliance Bernstein to Vanguard Institutional Advisory Services (VIAS). The transfer of assets was completed late in FY2011.
- Multi-year continuity of programs is feasible because they do not rely on annual contributions.
- The Foundation's 2012 plans and budgets (both scope of activities and endowments) have been modified to spend between 4–6% of the portfolio's value annually, which is affordable.

#### Weaknesses in 2012

- The Foundation has no revenue other than income from investments and voluntary donations.
- The bear market of 2008–2009 significantly depleted the fund's value.
- Fund expenses are currently depleting its resources at an unsustainable rate.
- The fundraising campaign initiated in 2010 has not generated the anticipated level of donations.
- Fundraising activities within corporations may be seen as competing with other sales to corporations by the Institute.
- No outreach has been accomplished to date to Foundations that exist to stimulate workforce development in technical areas (such as the Ford Foundation or the Gates Foundation).

# **Opportunities in 2012**

- With VIAS as the Institute's new portfolio manager and our emphasis changed to protection of assets (vs. growth), the dramatic value swings of past years are not expected to continue.
- Based on feedback from potential donors contacted during the fundraising campaign, activities and expenses have been realigned between the Foundation and the Institute to make the Foundation more appealing to high value donors. With this realignment begun in 2011 and to be completed in 2012, the fundraising campaign to increase the investment portfolio will be reinitiated with renewed fervor.
- With a renewed emphasis on marketing and sales for the Institute, opportunities to leverage the additional resources to also benefit the Foundation may exist.

# Threats in 2012

- If expenses continue to be greater than new contributions, depletion of funds will eventually occur. "Scope creep" of existing programs, and/or the addition of new programs, could overburden the Foundation's resources.
- If recent financial market volatility continues, the portfolio value will suffer accordingly.

#### **AIAA Foundation Strategic Actions (2012 to 2016)**

- Develop an MOU with the Institute to finalize the mix of activities and expenses absorbed by the Institute on behalf of the Foundation.
- Assure continuing management of expenses to the revised and reduced scope programs that are affordable based on the existing level of Foundation assets.
- Reinitiate the fundraising program with renewed vigor, building on the
  revised activity mix, which should please potential donors. Coordinate
  fundraising activities with Institute marketing and sales efforts to minimize
  confusion and maximize the return.

# **Technical Activities**

#### Vision 2016

AIAA Technical Activities will provide the world's premier forum for aerospace technical collaboration and information.

# **Progress in 2011**

Economic conditions continued to be unfavorable for another year, which resulted in attendance at AIAA technical events decreasing in 2011 by 8%. Nonetheless, continued expense management produced an overall positive net margin in TAC operations despite the challenges with exhibit and sponsorship revenues. The TAC committees continued to offer high-quality events covering continuing topics of interest to AIAA members.

# **Plan Changes for 2012**

For 2011 the conference attendance goals have been abandoned as the Technical Activities Committee focused on the considering new event models with the goal of improving the overall relevance of our conferences. While serious consideration has been given to co-locating smaller conferences with either larger events or with smaller events having similar interests, we are evaluating more far-reaching changes to accomplish greater integration in our events that span the focused technical topics into integrated flight systems and operations. It is believed that further cuts in government spending, including cuts in R&D funding, will limit the ability of our technical constituencies to attend many of our legacy specialized conferences. It is believed that fewer and larger events with expanded content would provide attendees with more flexibility. Additionally, reorganization will lead to further improvements in expense management, will provide additional options for the members and attendees, and will provide greater opportunities for sponsorships and exhibits due to their enhanced relevance. We will continue to offer high-quality conferences in traditional areas, but leverage these conferences as a springboard to introduce new and emerging areas to a wider cross-section of the aerospace community. These areas should provide a mission focus that integrates our traditional disciplines. Areas to be considered include aviation security, commercial space, Earth observation, and cognitive engineering.

- We hold between 24 and 28 technical conferences each year that are best in class, both in content and in administration.
- We have strong customer support from the Missile Defense Agency, NASA, and the Air Force for selected annual conferences.
- Despite financial challenges for sponsors, there is steady sponsorship of conferences by industry.
- Our conference paper peer-review process assures the involvement of a significant portion of the membership.
- The TAC/TC structure involves some 2,000 volunteers annually.
- Broad based support from the volunteer and staff leadership for examination and implementation of a new events model for our conferences.
- Successful implementation of a New Horizons in Aviation Forum in conjunction with ATIO 2011 as a base for developing an AVIATION meeting.
- A wealth of technical knowledge is distributed throughout the AIAA membership.
- Our annual recognition of excellence through technical awards in aerospace specialty areas encourages involvement with AIAA and the events we sponsor.
- The TAC structure facilitates integration across technical areas, allowing us to address cross-disciplinary issues more readily, and emerging topics more quickly.
- AIAA has a very competent, experienced, and responsive staff.

- Reduction in corporate sponsor support for the two vended conferences AIAA organizes for the Missile Defense Agency.
- There is currently limited or no active involvement in or support for our
  activities from the FAA, Army aviation, Naval aviation, or NOAA. An
  outreach attempt to the Naval aviation constituency with the Centennial
  of Naval Aviation met with disappointing results although it enhanced the
  ATIO event substantially.
- There is minimal coordination of efforts and integration of programs across conferences and technical activities.
- TAC and the TCs have improved, but not yet fully deployed the website tools and capabilities needed to support collaborative activities.
- TAC has a lack of leadership presence in key aerospace technology areas.
- There are only a limited number of exhibitors at conferences, primarily a
  few large businesses at large conferences, and small businesses oriented
  towards design and analysis products at specialist conferences. The supplier
  base to large businesses is missing.

# **Opportunities in 2012**

- With the emphasis on the Next Generation Air Traffic Management System and the growing backlog of commercial aviation products, there is interest in developing an overarching AVIATION conference. This could be facilitated by the fact that ICAS, ATIO, ICNS, and DASC currently address portions of the area.
- With government initiated travel restrictions due to the economic situation, necessity may have created an opportunity to consolidate meetings. This is especially true for a classified aerospace defense-oriented event.
- The development of the systems-focused Complex Aerospace Systems
   Exchange event, which will be co-located with the SPACE and AVIATION
   events in alternating years.
- The successful New Horizons in Aviation Forum, held at ATIO 2011 in conjunction with the Centennial of Naval Aviation will be leveraged to springboard to AVIATION 20XX, a new aviation-focused event (similar in structure and type of content to the current SPACE 20XX conference) beginning in 2013.
- A mission focus emphasizing systems integration is needed in the aerospace community.
- With AIAA's hire of a Managing Director of Sales and Market Outreach, we should see a significant change in emphasis to be more relevant, resulting in greater penetration of the supplier community for sponsorships and exhibits over the next several years.
- We can increase the perceived value of technical activities and products to distinguish ourselves from competing offerings.
- We are implementing Web-based electronic tools that will facilitate collaboration and coordination among the TCs.
- The Administration may implement changes in the current International Traffic in Arms Regulations (ITAR) structure which would protect national technological interests without unduly hindering the competitiveness of U.S. industry.

# Threats in 2012

- Especially with government-directed travel reductions, we anticipate
  continuing constraints in organizational funding for member participation
  in technical activities until the economy stabilizes.
- The technology transfer restrictions of ITAR could require AIAA to limit conference attendance by those who are not U.S. nationals and initiate additional constraints on the exchange of technical information.
- Competing programs from related professional societies could negatively impact attendance.
- Changing priorities within the Obama administration may decrease funding for missile defense and/or space exploration.
- Inadequate technical oversight of co-sponsored conferences could negatively impact AIAA's reputation.

- Continue the development of Conference Planning Policies to enhance the
  value of our conferences, to maintain fiscal responsibility with regards to
  site selection and expense management, and to mitigate factors that could
  reduce attendance.
- Investigate and begin implementation of new event models providing a
  wider spectrum of content at our conferences. Focus on engaging a larger
  cross section of the aerospace community. Co-locate/consolidate smaller
  events with other AIAA conferences or associations, where appropriate.
- Develop an Aerospace Defense Forum to include our three legacy classified events as well as restricted sessions not possible at existing technical conferences in areas of guidance, propulsion, structures, etc.
- Improve planning for integrated events to provide more visibility to other AIAA programs such as Public Policy, Education, etc.
- Enhance the international component of events to include global perspectives and attract larger non-U.S. participation (speakers, attendees).
- Encourage the acknowledgment by TC/PCs of existing technical/ programmatic gaps and develop targeted business plans to address gaps in strategic technical areas.
- Develop a focus on Systems Integration, building this theme into our existing technical forums.
- Develop plans to affiliate with all aerospace-related government agencies.
- Focus the annual TAC workshop on specific opportunities that will add value through increased collaboration within AIAA.
- Improve marketing strategies to enhance the relevance of our collocated public policy and exhibit events to reach out to a broader group of attendees, not just those attending the conferences.
- Reevaluate focus of individual committees to ensure current relevance.
   Expand or establish committees in emerging areas (such as human factors/cognitive engineering) and simultaneously sunset areas that are no longer of interest to the membership.
- Through process and emphasis changes initiated by the new Managing
  Director of Sales and Market Outreach, enhance the exhibits program to
  provide better value for all exhibitors and to increase our outreach to small
  business.
- Establish and track measurable goals for TAC directors, to enable them to more effectively establish and track such goals for TCs and PCs. Establish common goals and metrics across TCs and PCs.
- Continue to deploy improved Web-based tools to better correlate technical activities and information.
- Deploy new communications vehicles to engage TAC members in achieving our goals, such as the new TAC Newsletter, webcasting conference keynote lectures, or webinars for committee sponsored short courses.
- Participate in community based collaborative activities to restructure ITAR.
- Focus on recruitment and retainment of YPs in our technical activities.
   Maintain five to ten active YPs on our TCs and PCs.

# **Publications**

#### Vision 2016

AIAA Publications will be the worldwide publisher of choice for all aerospace topics and will continue to be the primary source of global aerospace technical information and supporting materials for the aerospace community.

# **Progress in 2011**

2011 was an eventful year in Publications. With 15 titles licensed to our two Chinese partners, AIAA's publishing focus in China has moved from aggressive expansion to ensuring the quality of the translations. Following the completion of the current round of translations, additional licenses will be considered. 2011 saw a continued industry wide focus on public (or open) access publishing and the potential business model changes needed to meet our publishing mission. A series of AIAA web conferences was organized to educate and to share information and insights with fellow society publishers (e.g., ASCE, ASME, SPIE, AIP, and OSA). Publishing industry experts shared background on legislative and policy proposals, existing mandated and voluntary business models, and other emerging trends. Assessment of both immediate and longer-term financial implications for AIAA were considered. These activities were capped by a one-day workshop in May 2011, where a white-paper was begun which should be formally adopted early in 2012. Federal government pursuit and expansion of the issue continues with OSTP/NSTC actions seeking to ensure that publishers' perspectives are understood (both commercial and nonprofit) but also broadening the issue to possible inclusion of content other than peer-reviewed journals, such as conference papers and book chapters. This broader view presents additional concern for AIAA.

As the result of a competitive selection initiated in late 2010, AIAA selected Atypon as our technology partner to rebuild and host the AIAA electronic library with their Literatum product as the hosting platform. Requirements are being finalized for an integrated solution to bring together AIAA's core technical publication content (journals, books, meeting papers, standards, and archives of all) in a single electronic venue. At the launch in mid-2012, the content will be available in standard PDF, 'PDF plus', and HTML versions. Enhanced subscriber accessability, greater discoverability, improved search, and mobile access are key features. In addition AIAA can take advantage of the technology developments of a leader in content delivery, which will underpin future efforts to bolster the value of AIAA's publications and counter some of the risks of an open access publishing environment.

A final key accomplishment was the establishment of a Library Advisory Council (LAC) to advise, critique, and validate information and publication products, policies, and services. Targeted to meeting the needs of our Institutional customers, this formal feedback mechanism is chaired by a respected member of the Publications Committee from the MIT Library, and its members represent a broad swath of aerospace research interests serving academic, corporate, and defense organizations.

# Plan Changes for 2012

Significant changes were made for 2012 in recognition of rapidly changing business models created by technology and anticipated government implementation of new public access requirements.

- Complete the re-launch of the AIAA electronic library by mid-2012 to include rebranding and development of a long-term and relevant online publishing plan.
- Assessment of the books program to address long-term financial viability, long-term contributions to aerospace engineering research and literature, and member value.
- Strategy development and initiation of its implementation for e-reader optimized ebooks, e.g., for Kindle, Nook, iPad.
- Renewed focus on the Journal of Aerospace Computing, Information, and Communications (JACIC).

- Assessment of the aerospace engineering and research community's need for secure, curated data repositories.
- Strategic recommendations for AIAA's public access business models. Since this will fundamentally affect AIAA's publications business, such a focus is a crucial one.

# Strengths in 2012

- AIAA has a global reputation for high-quality and credible content in both books and journals.
- AIAA's peer-review process assures the integrity and technical value of the technical content published for the aerospace community and society at large.
- AIAA's editorial structure and processes involve some 500 dedicated members as well as significant numbers of nonmember scientists and engineers annually.
- AIAA publishes and maintains a backlist of competitively priced books that are in high demand.
- AIAA journals are viewed as being among the most cost-effective and technically influential in our professional community. Three AIAA journals are ranked in the top ten aerospace engineering journals for Impact Factor; two titles are in the top ten for Immediacy Index; five of the top seven positions for Eigenfactor Score are AIAA journals; and two are in the top ten for Article Influence Score.
- Aerospace engineering and related topics represent a niche market with few competitive players.

#### Weaknesses in 2012

- Our publications penetrate only a minority of our membership. Thirteen
  percent of members are individual subscribers of our publications and
  27% are engaged in research (11% in academia, 8% each in industry and
  government).
- We are slow to embrace changes in new media.
- We are slow to address the technical content involved in emerging markets.
   This equates with missed business opportunities for relevant technology content.
- The niche market nature of aerospace publishing limits the potential for broad growth.
- The lack of immediate return on investments may hinder bold action for innovative change in traditional publishing models.
- The new book author and title acquisition process is heavily dependent on AIAA staff efforts and may suffer from a lack of strong member insights.
- Declining investment in print collections, both by institutional customers and by individuals.
- Limited understanding of use, access, and functionality preferences and their influence on individual (member) purchase decisions of subscriptions and books (vs. library usage).
- It does not appear that Young Professionals /Early Careerists see the value of peer-reviewed content at this stage in their careers. This will have significant financial impact in the future and must be understood and addressed.

#### **Opportunities in 2012**

- Expanded availability and acceptance of electronic publishing, e-learning, and e-reading allows access to our products by a larger audience, enabling a more flexible range of product offerings.
- Our successful experience with technical paper and journal archives could be extended to all publications.
- Functionality of AIAA's new platform for the electronic library may provide a new suite of tools to expand product offerings, business models, and new means to create added value, particularly for members.
- Continuing to capture, publish and disseminate technical information on state-of-the-art and emerging aerospace technical areas.
- Adoption of social media tools in the workplace for collaborative work and learning.
- Potentially acquiring a new co-publishing partner focused on supplying content and not advancing its own brand.

# Threats in 2012

- The common misperception that electronic publishing is low-cost and that Internet-published products should be free may limit our pricing for materials viewed online or downloaded.
- The possibility of cannibalization of printed book sales by e-books continues.
- Especially in the recovering economy, price sensitivities for textbooks and limited library budgets may depress sales.
- Open access publishing models (including the federal government's open publishing requirements) may undermine the viability of our business model.
- The quick pace of information technology and social media evolution makes timeliness of technology investments critical. However, success of these investments is still a risk since all media will not be successful.
- Possible exhaustion of the institutional market for current online archive products.
- Altered federal budget priorities may impact research and development budgets, thus impacting scholarly research output necessary for new publications content.
- Ethical violations continue to plague scholarly publishing in general. AIAA
  is not immune. These cases consume valuable resources and, if unchecked,
  may undermine the reputation of AIAA's technical content.
- Continued reliance on a co-publishing partner that may seek to dominate the market space.
- Poor member loyalty to AIAA as a book publisher.

# Strategic Actions (2012 to 2016)

- Continue to identify and address the content needs of the aerospace professionals, educators, and researchers who develop the technology and of the leaders of industry and academia.
- Continue to provide affordable, high-quality technical content.
- Extend and expand AIAA's technical and scientific constituencies into emerging technology areas and related entrepreneurial markets: specifically addressing our Strategic Imperatives.
- Enable the efficient development and dissemination of content in the most appropriate media. Identify, explore, and as appropriate, embrace new business models/strategies, such as:
  - o Electronic-only content delivery.
  - ° Multiple format/media content delivery.
  - ° E-first publication for journals.
  - Use of the latest electronic technologies to integrate and offer customizable access to content, e.g., custom bundled packages for individual customers.
  - Reduce the time from submission to publication for journals and books.
  - Develop marketing and sales strategies and techniques to encourage and incentivize customer adoption of electronic-only journals.
- Organize and archive all published content electronically to allow production of custom-bundled collections or custom publications, both for sale and as a member benefit where appropriate.
- Expand international consortia sales for online archive products.
- Determine the best means of making AIAA's content available to emerging economies without threatening its financial value and contribution to the Institute.
- Focus the effort of the non-technical aspects of the Library of Flight to
  foster aerospace awareness of the nontechnical audience, to complement
  or support aerospace workforce development, and to help restore AIAA's
  reputation of relevance and credibility. Explore potential collaboration with
  Technical Activities under their New Events Model.
- Introduce social media and ancillary content such as audio and video clips, simulation, and conference presentations for all journals and product lines as appropriate.
- Publish research data sets in conjunction with online versions of the journals.

- Develop a plan for online data archiving as related to published peer-review content and explore opportunities to support the aerospace research community's longer-term data archiving needs. Seek appropriate partners.
- Identify, develop, and leverage publishing partnerships with other associations.
- Increase volunteer involvement in book acquisition by identifying and recruiting editorial board members and new authors to contribute content related to our Strategic Imperatives and originating from international aerospace communities.
- Assess AIAA's textbook market position within the aerospace curriculum, modify marketing and sales strategies, focus acquisition strategies to address gaps, and modify product style and development guidelines to make them more attractive to educators and students.
- Focus efforts on establishing translation programs or partnerships where English-language knowledge and skills present a learning and market challenge.
- Investigate and develop an understanding of the possible publications value to the 87% of membership that does not subscribe to publications and the 73% not involved in research. Assess alternative methods to engage this majority of AIAA members.

# **Public Policy**

#### Vision 2016

AIAA will be a preeminent leader in aerospace policy formulation, sought out for our technical expertise, with our members broadly and proactively engaged in policy development.

# **Progress in 2011**

Public policy initiatives continue to gain traction throughout our activities as AIAA's technically oriented membership begins to understand the need to get involved in the policy aspects of our profession. In addition, recent focus group results from student and early career members revealed strong support for AIAA's aerospace advocacy on behalf of the industry and the profession. A high value was placed on improving the leadership and communications that seem to be lacking on behalf of the aerospace community. Our Congressional Visits Day activities are growing in numbers as well as in the improved quality of the interactions with policymakers. Our August is for Aerospace local section activities accomplished the previous 2013 goals during 2010, three years early. Further, the policy activities initiated during the past three years are gaining in popularity on Capitol Hill and our half-day symposia on topical issues are being well received by policymakers and their staffs. Progress was made in collaborating with other aerospace professional organizations toward promoting the importance of aerospace with a consistent community message.

# Plan Changes for 2012

The primary change for 2012 will be to appropriately support the new Institute imperative to restore AIAA's relevance and credibility with the nation's government and industrial leadership. In addition, since the August is for Aerospace goals for 2013 have been accomplished, that goal has been raised: to having 65% of the sections actively involved by 2013 (the original time frame for achieving 50%). While Inside Aerospace was revamped in 2011 and highlighted relevant topics and distinguished speakers, it failed to draw an adequate audience. No forum will be held in 2012 and there are no plans to continue in the future.

- There continues to be excellent support for public policy activities from both corporate and individual membership, the volunteer leadership, and the staff leadership.
- AIAA and the full-time public policy staff is very engaged with the Institute's members, is active on Capitol Hill, is knowledgeable about a broad

- spectrum of aerospace topics, and is utilized by government staff as a source for policy planning.
- AIAA's Congressional Visits Day (CVD) has become an established and recognized annual event. Membership participation has increased substantially in each of the past three years, exceeding key planning indicators.
- AIAA is addressing all critical aerospace policy issues, even highly controversial ones.
- Public policy forums at major AIAA technical conferences have become the norm, with the participation of highly respected speakers resulting in increasing attendance.
- Communication between the Public Policy Committee and AIAA's technical, program, and standing committees is improving through joint development of AIAA's Key Issues and Public Policy Information Papers,
- AIAA's August is for Aerospace program has encountered significant growth, exceeding the previously established 2013 target.

- While increasing significantly in each of the past three years, membership participation in CVD and other grassroots activities remains limited.
- Involvement of AIAA technical and international committees in Public Policy activities still remains limited.
- Participation by Public Policy Committee members is sporadic, and coverage of key aerospace issues is often inadequate.
- The weak economy (and consequent limited travel funds) continues to constrain participation in events such as CVD.
- As new aerospace issues emerge, staff and volunteers continue to be challenged by limited time and resources.
- Staff resource limits have become greater and more evident due to the deferral of replacing departing public policy staff.

# **Opportunities in 2012**

- With major changes in Congress, seek opportunities to gain long-term influence in aerospace and in science, technology, engineering, and mathematics (STEM) policy.
  - Educate elected officials and their staff on aerospace issues, especially through AIAA members working as staff support to relevant committees.
  - Seek out and publicize legislators' positions on relevant issues, inviting their participation in AIAA forums.
  - Network and collaborate with other science and technology professional societies.
  - Recognize legislators' favorable efforts in accomplishing aerospace goals, especially those brought forward by AIAA advocacy.
- Build on recent CVD successes to influence aerospace policy at the national level.
- Through the growing interest in policy objectives, motivate and empower section grassroots efforts to influence aerospace policy at the Region and Section levels.
- Become a stimulus and a resource for organizing and spearheading development of public policy topics with other professional organizations with interests in aerospace.
- Coordinate major public policy initiatives with the Technical Activities Committee to apply the expertise of Technical and Program Committee members in position formulation.
- Use the coming Technical Activities Committee restructuring of the Institute's technical conferences to embed Public Policy activities into the new format and pursue member involvement.
- Emphasize and maximize the use of our membership as the body constituting the national repository of U.S. aerospace intellectual capital and technical knowledge.
- Begin a public outreach program aimed at educating the public and decision makers in both government and industry on the topic of "Why Aerospace?"

#### Threats in 2012

- Stricter interpretation of ethics rules on Institute interaction with members
  of the Executive and Legislative branches may limit AIAA's ability to
  advance aerospace issues of concern.
- Competing aerospace special interest groups may reduce the impact of AIAA positions through quick reaction, and highly focused and coordinated policy-influencing activities.
- The weak economy, decreasing federal budgets, and directed travel reductions may continue to constrain participation in AIAA public policy events.

- Inform AIAA members on aerospace public policy: In collaboration with TAC and RSAC, plan for and implement regular public policy workshops and prominent conference sessions for sections and at aerospace conferences on public policy issues, status, and strategies. Develop points of contact within the Technical and Program Committees for expeditious use of collective intellectual and technical knowledge, acting as an honest broker for public policy issues. Use AIAA's new website and communication tools to enhance our ability to keep our members informed.
- Become a sustained, primary source of technical support for government
  policymakers: Establish AIAA as the key resource for aerospace technical
  information for both the executive and legislative branches of the
  government. Increase AIAA's Capitol Hill visibility through participation
  in and leadership of collaborative efforts with other aerospace oriented
  professional and state organizations towards development of public policy
  topics, symposia and panel discussions oriented to relevant legislation, and
  other aerospace needs and opportunities. Develop at least eight annual
  public policy events by 2013 (fully or partially sponsored) and lead at least
  one high visibility outreach event in support of the Institute imperatives.
  Become more effective at media interaction to gain visibility in support of
  this strategic goal.
- Proactively advocate positions on key issues: Take a lead role in highlighting
  issues and events and consequently advocate legislative action in areas
  of importance to the aerospace community such as our two Strategic
  Imperatives. This responsibility should be shared by volunteer and staff
  leadership.
- Involve the Institute's professional membership: Build on recent CVD success to continue to realize greater member participation in CVD. Also, provide structure and guidelines to sections to drive greater local Regional and Section involvement in "August is for Aerospace" and other local policy activities
- Coordinate Public Policy Initiatives with TAC for credibility: Assure that
  information obtained from AIAA on aerospace issues is accurate and
  reliable and is not tainted by individual company or program specific
  agendas. Apply AIAA's core strength of the expertise of Technical, Program,
  and Educational Activities Committee members to development of issue/
  position formulation on special topics and white paper needs. Coordinate
  with PPC for understanding and responding to the tight turnarounds
  needed for effective support of policymaking schedules.
- Coordinate Public Policy and International Activities Committee planning
  for policy-related events with international impact: Obtain a cross section
  of national and international views at major AIAA conference policy events.
  Utilize the international reach of AIAA to better inform our members and
  government officials regarding aerospace public policy issues and policy
  options.

# **Member Services**

#### **Vision 2016**

AIAA will be recognized as an essential part of the professional life of individuals working in the aerospace community. This will be characterized by the following:

- Recruiting, retaining, and recognizing the highest-potential individuals in the aerospace community.
- Providing and promoting exceptional value to members through all phases of their career from young professionals through retirees.
- Ensuring that all activities and initiatives are implemented with a focus on diversity, both in membership and in program outreach.
- Providing exceptional opportunities to access AIAA products and services both in person and via electronic means through coordination of Institute activities.

# **Progress in 2011**

• AIAA's professional membership declined 1.9% during 2011 (to 27,591). The economy and lingering effects of the dues increase (for the first time in a decade) is still having an effect on member and non member decisions. Compared with other professional societies, AIAA membership is holding up well in a difficult economic situation. A series of focus groups targeted at students and young professionals were conducted to understand how best to engage this generation. The research identified a number of opportunities for us to pursue to improve the retention rate of those transitioning from college to their first job. In 2011, the Associate Fellow program saw the highest number of nominations in any given year, emphasizing that AIAA membership is seen as increasingly valuable recognition but also making the selection more difficult. The Young Professional Committee began implementing some new types of programs to help this demographic make the desired face-to-face connections.

# **Plan Changes for 2012**

• No major changes are foreseen from the 2011–2015 Strategic Plan. The results of the Membership Survey will continue to be used to more fully engage members at all levels and to build awareness of the benefits of AIAA professional membership. The results of the focus group research will augment the survey results and help us to more fully define our value proposition for the students and young professional such that we can better engage this demographic. Emphasis will be placed throughout the Institute to provide a more balanced approach between the social and professional experiences and programs that we offer to our Generation Y members. We will develop a process to recognize AIAA member's achievements to their management.

#### Strengths in 2012

- AIAA provides unique offerings of aerospace products and services critical to careers in aerospace. This is particularly true of conferences, courses, and publications.
- A broad range of targeted activities is provided locally through section activities that are implemented by an enthusiastic leadership.
- Notable people in aerospace are active members of AIAA and strive to be accessible in a peer group or mentoring environment.
- Despite the lack of an understandable value proposition, more than 80% of professional members renew their membership annually, providing a steady base of support.

# Weaknesses in 2012

- The value proposition for members is unclear.
- Students and young professionals' membership drops off at an alarming rate when they complete school or transition into the workplace.
- Section activities are not fully integrated with other Institute activities.
- There is no current process in place to recognize AIAA member achievements to their management.

# Opportunities in 2012

- Student branches provide the opportunity to engage young engineers at an early point in their career.
- We should utilize our notable active members to inspire them and articulate the big picture of where the industry is headed.
- As AIAA's Content Management System becomes fully operational, we should quickly evolve to built-in Web-based solutions that provide more effective ways for members to receive products and services.

#### Threats in 2012

- A wave of older members is about to retire. Without targeted and recognized member benefits, a mechanism to remain involved and contribute, and an appropriate dues structure, they could discontinue their involvement.
- As technology stimulates changing modes of interaction between individuals, without appropriate socializing, education, and other perceived opportunities provided by AIAA, the membership, particularly the younger members, will migrate where those opportunities are perceived to exist.

- In conjunction with the Corporate Membership Committee, develop a process to recognize deserving AIAA leaders' achievements to their management.
- Articulate and promote the value of AIAA (to members and non-members) in a way that will engage the Generation Y membership.
- Develop experiences, programs and services that are relevant to those just beginning their careers.
- Engage Engineering and Science Departments at leading universities
   (coordinating with Education Committees) to advocate AIAA membership
   and active participation (technical papers, conference attendance) to
   undergraduate and graduate students. Explore possible leveraging of AIAA's
   publications strength in textbooks as a possible mechanism.
- Actively engage with industry leadership to ensure support of the young professionals.
- In collaboration with other areas, expand our current products and services
  into media that will make them more available to interested members who
  are unable to travel for face-to-face participation (e.g., events and forums
  over the Internet, technical committee or Community of Practice chat
  rooms, Internet-based networking tools).
- Work closely with Corporate Members to target new hires and young professionals for membership.
- Conceptualize and implement activities of interest to specific targeted diversity groups (e.g., racial or ethnic minorities, age affinity groups). This may be career-oriented rather than our usual technical emphasis.
- Strengthen the connection between local sections and technical conferences hosted in their geographic locations.
- Utilize our Board and other notable members to articulate to our members (particularly students and young professionals) the big picture of where the global industry is headed.

# **Standards**

#### Vision 2016

AIAA will be the standards development organization (SDO) of choice among aerospace professionals:

- Anticipating, promoting, and meeting industry needs for standards.
- Advancing the benefits of standards utilization.
- Stimulating increased aerospace community participation in AIAA standards activities.
- Influencing future workforce appreciation of the benefits of standards utilization.
- Maximizing member access to AIAA standards.

# Progress in 2011

With staff stabilization and a supplemental ANSI audit completed in late 2010, the standards program returned to business in 2011. Standards Program Procedures were updated to strengthen the initiation and execution of standards development. The data base of standards activities was refreshed, and published AIAA standards are undergoing periodic reviews. The program is maintaining close ties with ANSI, supporting our accreditation as an SDO (Standards Developing Organization).

# Plan Changes for 2012

Having established a strengthened infrastructure, the standards program is focused on increasing the scope of standards activities through broader membership on the SEC, direct engagement with AIAA's Technical and Program Committees, outreach to international emerging aerospace nations, and the development of a central plan for standards pursuits.

# Strengths in 2012

- · AIAA has a community-wide reputation for excellence.
- AIAA has demonstrated competence as an ANSI-accredited SDO.
- AIAA members actively participate in Committee on Standards (CoS) activities.
- AIAA has solid relationships with key aerospace "players" like NASA, the Air Force, the FAA, NRO, and others.
- AIAA is a recognized leader in the international standards community.
- AIAA is the domestic market leader for space standards.

#### Weaknesses in 2012

- Standards activities have been narrowly focused on space, with little aeronautics/aviation oriented activity.
- The Institute's governing board for standards, the Standards Executive Council (SEC), needs an infusion of energy and vision.
- The current reactive approach to standards development lacks a "central vision or plan" for standards development.
- Industry awareness of and participation in standards activity is conspicuously absent.
- Weak membership and staff awareness of the value of standards.
- We have limited interaction with key customers, procuring authorities, and users.
- Historically, our limited-scope contractual efforts with NASA and the Air Force have provided the only external revenue for standards activities (i.e., other than internal transfers).

## **Opportunities in 2012**

The emerging Commercial Spaceports community has a need for standards
for their users, to ensure commonality of operations at all spaceports.
Although they are also in discussion with other SDOs, AIAA has an
opportunity to participate in a standards leadership role in this market. This
situation improved in 2011 with the political appointment of a former AIAA
Vice President and Fellow as the Spaceport Director for one of the leading
spaceports supporting standards development.

- An opportunity may be emerging due to Industry recognition that the gap created by the cancellation of military standards has resulted in loss of standardization, inefficiencies, and increased risk in the development of complex aerospace systems.
- Synergistic activities with other AIAA elements, such as young professionals, publications, student programs, and professional development may provide opportunities for raising the profile of our standards activities.
- Identifying and developing value-added products such as professional development courses, publications, and mixed-media products, based upon standards may provide opportunities for raising the profile of our standards activities, and generate revenues. Standards could be bundled and marketed with other related AIAA products and services.
- Improved integration of CoS and TC planning and activities could create a focal point for a "central plan for standards."
- High profile recruitment for the SEC, especially from corporate member ranks, could attract energetic, dynamic members.
- We can forge new ties with other associations and reinforce existing relationships among SDOs.

#### Threats in 2012

- A slow recovery from the global economic recession of 2008–2009 will
  probably cause industry to react conservatively and has hampered the
  ability of members to actively participate in standards activities.
- Providing standards at no cost to individual members has resulted in a negative revenue stream.
- Mistaken perception by some CoS members and others that development of standards by AIAA under contract means that the sponsoring organization has implemented our standards and standards processes.
- Competing SDOs (e.g., AIA, SAE, ASTM, IEEE) may view space standards as a growth area and may initiate a meaningful competitive thrust in that area.
- The continuing lack of industry participation may demoralize current volunteers, potentially causing a loss of momentum, and possibly unrecoverable stagnation.
- In the international arena, the European Space Agency (ESA) is operating
  unilaterally, supporting a Eurocentric agenda in standards development,
  and cooperating only selectively with U.S. and other non-European
  agencies.

- Strengthen the Institute's human infrastructure for the standards program.
  - Actively recruit and engage energetic, dynamic members for the SEC, providing increased diversity of represented organizations.
  - Evaluate staff roles and responsibilities to ensure the ability to implement strategic objectives.
- Raise the appreciation for the value of standards in government and industry.
  - Aggressively reach out for industry participation through Aerospace America.
  - Seek opportunities to showcase our best work, such as publishing case studies demonstrating benefits of standardization in *Aerospace America* and highlighting these in technical forums.
  - Enhance and expand the "ABCs of Standards" model to educate all members concerning the benefits of standards utilization.
  - Seek opportunities to partner with K-12 and post-secondary education groups to demonstrate the value of utilizing standards to future aerospace practitioners.
  - Develop an outreach campaign to student sections and/or the academic side of our membership to integrate standards into the university aerospace curriculum.
  - Encourage the use of standards as an element of student design competitions.
  - ° Highlight the value of standards obtained at no cost by our membership.
- Reinforce AIAA stature as the SDO of choice for aerospace applications.

- Develop a strong, comprehensive (but flexible) "central plan" for standards development to function within and conform to a collaboratively drawn U.S. position on aerospace standards.
- Tap expertise within the AIAA TC/PC structure to identify and act on unfilled standards gaps in aeronautics and in the development and integration of complex aerospace systems.
- Support formation of a single ISO TC for space. AIAA already operates secretariats for existing SC13 and SC14. Their merger would solidify our position and increase the visibility of AIAA's role.
- Reinforce the reputation of excellence of AIAA's standards program.
  - Promote and advertise the openness and balance of our consensus process to dispel faulty perceptions about contracted standards.
  - Maintain ANSI accreditation.
  - Maintain and expand relationships with key aerospace standards "players" like ASME, SAE, and IEEE.
  - Strengthen ties between CoS and TCs by nurturing integrated activities. TCs incubate new ideas and technologies. Encourage TC members to use standards as a tool in program/process development.
- Investigate and capture standards revenue sources.
  - Develop standards to bolster the AIAA aeronautics library by identifying and pursuing niche areas of technology in aerospace programs/procedures.
  - Develop new products and services based on standards professional development courses, publications, multi-media support materials, etc.
  - Develop new technology standards/technical papers and promote them through a subscription-based business model.
  - ° Form standards development/approval conferences (like SAE's).

# **International**

#### **Vision 2016**

AIAA will be the primary society representing U.S. aerospace professional and technical interests in a collaborative, global technical forum.

#### **Progress in 2011**

The most significant progress in the international arena during 2011 was the expansion and continuing implementation of relationships with Chinese aerospace professional societies. In 2010, AIAA had signed a Memorandum of Understanding (MOU) with the Chinese Society of Astronautics (CSA). Following a successful Fall 2010 AIAA Corporate Member delegation visit to Beijing and Shanghai for a week's worth of meetings and visits with officials in the Chinese space industrial base, another successful AIAA delegation to China succeeded in establishing an analogous MOU with the Chinese Society of Aeronautics and Astronautics (CSAA), representing the aviation industry. This brings the number of AIAA MOU's with non-U.S. aerospace societies to a total of nine. AIAA now has agreements with both key European and Asian aerospace industrialized nations, and is formulating plans for interchange with additional aerospace countries in Europe, Asia, and South America. Furthermore, early in FY2012 an AIAA delegation conducted a 10-day trip to visit their aviation counterparts in the Chinese aviation industrial base. With back to back executive visits with China's space and aviation leaders, the potential for continuing collaboration with this expanding global aerospace nation appears solid.

# **Plan Changes for 2012**

Significant changes are planned beginning in 2012 to emphasize greater engagement internationally in the wake of very successful agreements with aerospace societies of other countries. Further, evolution is planned to a "functional" (i.e., aerospace-sector) based approach to better serve countries with rapidly advancing industrial capabilities in either aviation or space. This will better position AIAA to foster international membership growth, especially in countries that do not have their own aerospace society.

# Strengths in 2012

- International Membership: AIAA has an active international professional, student, and corporate membership that expands the diversity of the Institute and contributes significantly to broadening our range of ideas, approaches, and activities.
- Partnering with International Associations: AIAA has a strong global reputation and credibility due to its role in international organizations. AIAA represents American viewpoints in the International Council of the Aeronautical Sciences (ICAS) and the International Astronautical Federation (IAF). As such, AIAA traditionally supports the annual IAF Congress and the biennial ICAS Congress. AIAA is also the Secretariat for several international organizations, including the SpaceOps Organization and the Consultative Committee for Space Data Systems (CCSDS).
- Bilateral Agreements in Western Nations: Strong bilateral agreements and activities are in place with sister societies in France, Germany, and the UK (3AF, DGLR, and RAeS respectively) as well as the Council of European Aerospace Societies (CEAS). Collaboration in these agreements centers on specific activities on a case-by-case basis, usually around technical focus areas such as Aircraft Noise and Emissions Reduction or Energy Optimized Aircraft Systems and Subsystems. Agreements are also in place with other countries (e.g., CASI in Canada), although without current specifically defined activities.
- Bilateral Agreements in the Pacific Rim: Agreements are in place with sister societies in Japan, Korea, and China (JSASS, KSAS, CSA, and CSAA) based on joint activities including reciprocal technical exchanges. We also have a presence in Australia, having two sections there and cosponsoring some conferences.

#### Weaknesses in 2012

- Aerospace Communities without Sister Societies: AIAA does not have a
  strategy to align with significant aerospace communities in countries such
  as Brazil and Russia without aerospace societies of their own. Furthermore,
  the relative costs of membership (in relation to per capita income) and
  lack of participation in AIAA activities may limit involvement from other
  countries.
- Emerging Aerospace Communities: AIAA does not have a meaningful presence in, nor any agreements implemented yet with our counterpart associations in Argentina, Brazil, India, and Russia, due to constraints in the ability to invest in such collaboration at the national level. Moreover, some additional constraints exist in specific countries due to U.S. policy. Further, a geographically focused effort for international engagement may not be effective without a portfolio focus such as targeting either the aviation or space workforce, and their respective young professionals.
- Specific Activity Content of Agreements: Even in countries where we
  have agreements, they are often generic, that is, we do not have specific
  activities defined to stimulate growth in events, individual membership, and
  corporate membership. Additionally, the existing scope of the agreements
  may not address the particular current needs of the partner society and
  its country aerospace objectives and must be complemented by direct
  discussions or plans specific to the workforce there.
- Organizational Challenges: AIAA has a standing International Activities
   Committee (IAC). However, actual international activity is integral and
   pervasive throughout all AIAA committees and most activities of the
   institute. IAC liaisons identified throughout the institute have yet to develop
   and implement suitable tactical plans with respect to their assigned areas.
   In addition, AIAA's Board of Directors has five internationally oriented
   positions: VP-International, Director of Region VII, and three Directors—at-Large with geographic international charters. The three Director—at-Large
   positions do not have specific responsibilities, and thus do not make use of
   these potentially valuable resources.

# **Opportunities in 2012**

- Emerging Aerospace Communities: As the international aerospace
  community continues to grow, AIAA has a tremendous opportunity to
  develop and cultivate alliances leading to a win-win situation for all AIAA,
  the local association, and the international members. AIAA's credibility
  and reputation in international relationships will ensure that the Institute is
  positioned to actively engage when a specific opportunity arises.
- International Outreach Programs: Building on our nine current
  partnering agreements with sister societies, AIAA is poised to establish a
  substantive global technical interchange by serving distinct communities
  such as aviation professionals, space professionals, or students and early
  career professionals. Defining specific responsibilities for Directors-atLarge could be an opportunity to implement possible approaches.
- Organization: Defining the roles of International Directors and coordinating their activities (as well as those of their supporting liaisons within the AIAA) provides an opportunity to implement new functionally and/or demographically oriented approaches.

#### Threats in 2012

- Competition: Other associations are also focusing on having a global impact. AIAA needs to leverage and enhance these efforts, without competing for the same pool of individuals as new members or event attendees.
- American (vs. International) Image: Uncertainties of the Institute's
   "American" image often contribute to a perception that international
   members are second-class citizens within AIAA. This perception must be
   countered by specific policies and by the example of AIAA's volunteer and
   staff leadership.
- Resources: With the breadth of our global interests, there is a real danger
  that AIAA will be unable to sustain the desired level of activities as we
  continue to expand our collaboration with new societies and countries of
  interest. This is a staff, volunteer, and financial concern.
- Financial: With current international activities focused primarily on
  coordination of other Institute products and services, the international area
  does not generate any explicit revenue. This may create the perception that it
  is not a viable business area when in reality it is where our principal growth
  is expected. Accordingly, we must also monitor our MOUs and other
  contractual arrangements with international organizations to assure that
  our expenses and resource costs are covered, or else plan to use investment
  resources.

# Strategic Actions (2012 to 2016)

- Maintain the Existing Base of International Activities: Continuing our legacy approach of being the U.S. representative in multilateral international organizations and executing bilateral agreements with existing national aerospace societies, sustain and expand the exchange programs successfully executed the past two years.
- Three-Pronged Outreach Supporting Increased Relevancy: improve AIAA's global engagement by: (1) launching an innovative membership services model to the international aerospace community; (2) advocating and fostering standardization or harmonization of aerospace technical services, products, and capabilities; and (3) proactively collaborating with other professional societies to leverage the talents of the global workforce to support the development of next-generation professionals.
- Collaboration with Other Institute Activities: Serve as a facilitator for TAC, RSAC, and other elements of AIAA to ensure that AIAA events, products, and services consider AIAA's international membership's needs and interests, as well as the needs and interests of potential future international members.
- Manage by Functional Area, instead of Geography: Develop and
  implement an approach to serve the aerospace workforce by aligning with
  major functionally oriented sectors, such as aviation or space, and/or
  addressing the evolving needs of the next generation workforce, i.e., young
  professionals and students.

# Education

#### Vision 2016

AIAA will lead and integrate the aerospace community's efforts to stimulate technical excellence and lifelong interest in aerospace professional careers. These efforts will fulfill current and future workforce needs through three separate but complementary components: STEM K-12 Outreach, Student Programs, and Professional Development. Each of these three components has a distinct target constituency and associated strategies.

# Progress in 2011

AIAA's Education Committees continued to modify existing programs and develop new opportunities to support member educational activities. Focus areas include integration of K-12 outreach activities with college student activities through new educator programs. AIAA education activities touched over 20,000 students and teachers in 2011. Increased web resources for educators and aerospace professionals help enable engineers to participate in outreach activities, and help connect educators with aerospace informational materials. The STEM K-12 Program formed new partnerships with Project Lead the Way to provide educators access to Section and AIAA resources. AIAA's Engineers as Educators program provides members with age-appropriate materials ready for classroom use by guest lecturers. Regions and Sections working with local educators are touching increasing numbers of students. Classroom grants provide funding for teachers to present engineering activities in their K-12 classrooms. At the university level, Education's new freshman/ sophomore competition category and STEM outreach conference activities accounted for 25% of regional conference activities, serving as catalysts to engage with engineering students early in their university experience and to meet today's student desires to be involved in volunteer outreach activities. After a review of all our offerings, the Professional Member Education Committee emphasized on-site courses and experimenting with alternate fee structures. This has created a more favorable return on AIAA's education investment.

# Plan Changes for 2012

The primary change in the Strategic Plan for education is an increased focus on K–12 STEM outreach activities through educators and the early introduction of these activities into the University level activities. In Professional Development and University level efforts where progress has been made, modifications were incorporated to consolidate and maintain the improved position.

# **Professional Development**

#### Vision 2016

AIAA will be the leading provider of professional development/educational programs for the aerospace community.

#### Strengths in 2012

- AIAA offers diverse and unique subject matter taught by expert instructors.
- The AIAA brand identification on courses is perceived as a strong recommendation.
- There is a synergy between Professional Development (PD) activities and technical activities.
- AIAA staff has diverse skill sets, and can share resources to gain efficiency and to enhance program development.

#### Weaknesses in 2012

- Aerospace engineering is the smallest market among the engineering sectors; therefore, the number of course attendees is lower than for other sectors.
- Course costs are perceived as being expensive (when compared to the course fees of several other engineering associations).
- PD Programs do not attract many industry-leading experts as instructors due to limited benefits.
- Lack of demand for professional certification may imply there is no need to attend AIAA courses.

- AIAA courses cover very specific content and only appeal to a small number of individuals in specialty areas.
- The majority of PD courses are taught at conferences. This limits the number of students taking courses and can result in higher costs as compared with our other course delivery methods.

#### **Opportunities in 2012**

- We can seek other ways to use the AIAA brand itself, since members are familiar with and committed to AIAA products and services.
- We can use our numerous communication vehicles with our constituencies to enable piggyback marketing of PD activities.
- There is an increase in the number of technical committees that are sponsoring and/or supporting short courses.
- There is an increased interest in on-site courses from government agencies and companies.
- Several organizations have an interest in the AIAA Education Partner Program.
- The Instructor-led courses provide networking and business opportunities.
- There are numerous new, emerging potential delivery and instructional methods that may increase course availability and participation.

#### Threats in 2012

- There is increasing competition from universities and other professional associations offering similar courses.
- Overall course attendance is dependent on external factors not in AIAA's control. Industry and government funding fluctuates based on federal government spending and upcoming budgets. In response to the challenging economy many training budgets have been reduced or eliminated.

#### Strategic Actions (2012 to 2016)

- Partner with other organizations offering complementary course products in areas that are not unique to aerospace careers.
- Identify and offer new courses in hot topical areas.
- Increase the number of courses offered on-site.
- Evaluate and incorporate promising additional delivery and instructional methods.

#### STEM K-12 Outreach

#### Vision 2016

AIAA will generate passion in future generations by providing educational-outreach experiences to K-12 students to encourage an increase in STEM careers, and by assisting aerospace professionals in working with students.

#### **Strengths in 2012**

- There is significant support from Technical Committees, Regions, and Sections for STEM K-12 programs.
- The committee consists of dynamic members from diverse fields through the aerospace community and the educational enterprise.
- The Engineers as Educators program is fully funded under the Institute's new Endowment Usage policy through FY2013.

#### Weaknesses in 2012

- There is no collaborative web presence available to meet the needs of maintaining and retaining active Educator Associates.
- The STEM K-12 Committee depends heavily on sponsorship and funding from the Institute and Foundation to provide K-12 outreach programs.
- Funding for two STEM K-12 Foundation programs was eliminated for 2012 due to budget shortfalls.
- Educator Associate benefits need to be re-examined to encourage new members and provide value to existing members.

#### **Opportunities in 2012**

- Increased usage of online media (podcasts, videos, blogs, etc.) may create mechanisms and opportunities to reach next-generation professionals.
- Increasing partnerships and sponsorships with other associations, companies, and agencies will provide increased member benefits and provide better outreach programs.

With the staff addition of a Managing Director of Sales and Market
 Outreach, opportunities to pursue and engage Educational Foundations
 (such as the Ford and Gates Foundations) and investments from
 government agencies (like OSTP and DOL) may be identified and pursued,
 resources permitting.

#### Threats in 2012

- The STEM K-12 Committee programs depend heavily on corporate sponsorship and funding from the Institute to provide K-12 outreach programs.
- Other companies and organizations provide similar training opportunities and benefits to K-12 teachers.
- Severe budget cuts for 2012 due to the declining value of the Foundation portfolio will significantly impact the viability of ANY new or continuing STEM K-12 programs.

#### Strategic Actions (2012 to 2016)

- Develop an Internet presence for educators and aerospace professionals interested in working with K–12 students by providing a website containing educator resources, outreach materials, and other supplementary classroom materials.
- Develop an "AIAA Educator Academy" and other hands-on experiences to provide STEM Curriculum Modules to Educator Associates and aerospace professionals interested in inspiring K-12 students to pursue STEM careers.
- Continue to work with the Institute's Regions and Sections Activities Committees to stimulate involvement at the local level, including the use of Master Teachers to conduct outreach activities with K–12 students.
- Encourage educator participation by providing exemplary resources, lessons, and supplementary materials.
- Seek out partnerships with companies and agencies to provide increased member benefits and provide better outreach programs.
- Engage the Student Activities Committee (SAC) with STEM outreach programs.

# **Student Programs**

# Vision 2016

AIAA will be the primary resource encouraging and stimulating students who are pursuing their degree and contemplating a career in aerospace.

#### Strengths in 2012

- Many AIAA members are university faculty members with the ability to mentor and stimulate students.
- We have many challenging opportunities for scholarships, design competitions, and student conferences.
- Student conferences stimulate student activities.
- The AIAA Design/Build/Fly competition stimulates student involvement in a team-oriented problem-solving environment representative of our profession.
- We have an ongoing relationship with PEGASUS for student outreach in Europe within Region VII.

# Weaknesses in 2012

- Student branches, advisors, and students are not familiar with all that AIAA has to offer.
- Students are not aware of AIAA's value as they embark on their career.
- AIAA is not perceived as a must-join society.
- We have no student activities in the Pacific Rim or Asian countries other than the student conference.
- AIAA Student Journal is not well known.
- We do not encourage high school student involvement in student branches.

#### **Opportunities in 2012**

- Increased usage of online media (blogs, wikis, forums, podcasts, groups, etc.) may create opportunities to reach next-generation professionals.
- There is high visibility in Congress and the general public of the challenge of increasing enrollment in STEM-related subjects.

- The Freshman/Sophmore Category added to the Regional Student Conferences will spark more interest among this constituency.
- The Branch/Community Service category added to the Regional Student Conferences may help foster a relationship between precollege and college students.
- Partnership with Project Lead the Way may provide opportunities to create high school clubs to incite more involvement in Freshman and Sophomore levels in the University environment.

#### Threats in 2012

- · Other activities compete for students' time on campus.
- The Internet meets many needs regarding exchange of information that might otherwise encourage students to join AIAA.
- The challenging economy and financial markets may impact enrollments as well as Foundation sponsored student activities.

#### Strategic Actions (2012 to 2016)

- Increase student membership via more directed outreach (promotion and branch visits).
- Increase student membership by providing consolidated student branch membership with Institute level student membership.
- Involve student members in a much greater way in regular AIAA activities through outreach efforts at the section level.
- Set up an active blog for student-to-student, student-to-mentor, and branchto-branch interaction.
- · Advocate mentoring of students by professional members.
- Expand popular design competitions to reach out to more students.
- Increase team prizes to match individual prizes, as the industry is headed more into a team environment.
- Partner with other societies to work together on the same goals.
- Get "high potential" students actively engaged in managing AIAA's student programs since they better understand student mindsets and perspectives.
- Establish college student mentors for high school students via the new student outreach category of the Student Paper Competitions.

# **Corporate Communications**

#### Vision 2016

AIAA will be recognized as the world's forum for aerospace leadership. This is due to continually strengthening internal and external communications, and increasing visibility and reach to industry, government, academia, and the public at large.

#### Progress in 2011

The next phase of our successful "When Did You Know?" campaign was launched. The original "When Did You Know?" campaign showed how an inspirational moment could spark an aerospace career. The current "How Far Can You See?" campaign looks to the future, to the important breakthroughs yet to come. We filmed more than 25 members at the Aerospace Sciences Meeting sharing their exciting visions of the future. We continued to make progress in the use of online and social networking tools; our audience on Facebook, Twitter and LinkedIn grew in numbers. A new offering in 2011 was livestreaming video from key events; more than 11,500 unique viewers watched a total of 426,000 minutes of video from three AIAA conferences. Our media relations program continues to reach more news outlets and provide greater visibility for AIAA. FY2011 marks the second straight year AIAA's name was mentioned in print more than 5,000 times. We also attracted a record number of reporters to the SPACE 2011 conference.

Significant resources in 2011 have gone toward the redevelopment of our website, www.aiaa.org. The new website (to be launched early in FY2012) promises new functionality, easy navigation, a more modern look, enhanced search, single sign-on, and many other features that will improve the user experience for members and others.

# Plan Changes for 2012

The new imperative added to this year's strategic plan, "Restore AIAA's Relevance and Credibility with the Nation's Government/Industrial Leadership" places greater importance on an institute-wide communications strategy. Challenges remain in exploring the meaning and applicability of the imperative to each VP area of responsibility and how it translates into action in a unified manner. Therefore the Strategic Communications Plan will be dynamic in 2012 as it expands and adapts to support and implement the imperative in each area. The corporate communications staff expects to work with many of the other product-line teams in implementing this new imperative

- We are widely recognized as a source of experts. The breadth and depth
  of knowledge in our membership makes AIAA credible in virtually any
  technical area. We are viewed as an honest broker.
- The importance of communications and image is recognized and acknowledged by both staff and the volunteer leadership.
- We have an engaged and networked membership.
- There is a strong international perception of AIAA credibility.
- As a result of several years of emphasis on our branding campaign, we now have a very consistent presentation of the AIAA brand.
- We have re-focused our communications approach(es) based on independent focus group comments from student and young professional members.
- We have a Web 2.0 strategy that is being implemented. With completion of
  the current website and CMS upgrade project early in 2012, the foundation
  will be established for future investments in social media applications
  relevant to our membership.
- Our website upgrade project is fully funded under the new Endowment Usage policy.

- We lack a comprehensive identity as a broad forum. Although we have made significant gains in this area over the past few years, we are still largely known to some as a publisher, to others as a conference organizer, etc.
- Different parts of the Institute do not know what other parts are doing.
- We lack a consistent, high level message deployed across all areas of the Institute.
- We are not aggressively addressing the communications platforms of the
  younger generation (video, mobile applications). However, survey results
  from a random sampling of AIAA members did not show overwhelming
  support for social media. There is concern about security, and many do
  not have access in the workplace. This is a fluid situation, and we must
  monitor these sentiments over time to determine how to engage the AIAA
  membership in an appealing manner to build a sense of community within
  this emerging area of future mainstream communications.

# **Opportunities in 2012**

- We have gained expanded visibility through our media relations program, which creates more opportunities to become an information resource.
- Redevelopment of the AIAA website includes a new Content Management System. Together with the implementation of the IT Association Management Software (AMS), this upgrade will increase the value of the website to members and other visitors.
- The next phase of the "When Did You Know?" campaign will re-energize our message and connect to members and nonmembers with a personal, forward-looking theme.
- Video and social networking is still in its early stages at AIAA. Early
  acceptance of new livestreaming of AIAA events is encouraging but must
  be followed up with investments encouraging the development of an AIAA
  community.
- The new "relevance" imperative creates a high level focus on developing a new message.

# Threats in 2012

- There is a general information overload of members, public, media, etc. that makes it hard to focus on issues of substance and consequence.
- Other associations are already well-established as a primary source in policy areas and in certain aviation and space segments. They have public relations and promotional structures in place.
- Unforeseen delay and/or problems with website deployment.
- We do not respond in a timely manner to the insights provided by students and young professionals.

# Strategic Actions (2012 to 2016)

- Increase the speed and effectiveness of communications and information sharing through expanded functionality of the AIAA website (e.g., use of video, interactive features).
- Position AIAA as a premier brand in the aerospace community through creative, disciplined branding including sustained, regular marketing and targeted messaging and image campaigns.
- Become the "go to" information source for issues relevant to the aerospace profession through improved media relations, better use of members' expertise, and associating AIAA with high-profile events.
- In support of our Strategic Imperatives, lead industry outreach efforts to educate the public on the economic and societal benefits of aerospace contributions through raising visibility of the impact of current programs.
- Make members aware of global aerospace issues and events and their relevance, as well as AIAA activities by use of current communications vehicles and through Web 2.0 technologies.
- Provide Institute-wide awareness of AIAA products, venues, and initiatives, leading to unity of action through an integrated communications program.

# Aerospace America

#### Vision 2016

Aerospace America is the voice of AIAA:

- The principal source for aerospace insights relevant to the profession, including discoveries, innovations, future trends, objective assessments, historical perspectives, and upcoming events.
- The all-inclusive source of information about AIAA membership activities.

# Progress in 2011

The *Aerospace America* website expanded with more video content from public policy events and is now evaluating the addition of aerospace bloggers to keep content relevant and timely. Advertising sales continued to meet with mixed success due to the continued economic stagnation. The business manager continued to explore alternative sales channels and bundling for 2011 and 2012, including a program insert for major AIAA conferences. Further, this year *Aerospace America* began to sell additional copies of the UAV poster to members and nonmembers. This new revenue stream has yet to be proven but demonstrates demand for the UAV poster and a potential contribution to production costs in the future. A survey indicated a willingness by student members to shift to "online only" access to *Aerospace America*, which has been successfully implemented. The *AIAA Bulletin* continues to incorporate more news and photos from members. In addition, the magazine is developing an app for the three major smartphone platforms, that would allow member access to the magazine, current events, blogging, etc.

# **Plan Changes for 2012**

The SWOT analysis and Strategic Action Plans were updated to reflect the progress made in 2010 with a focus on continuing to expand our online presence.

# **Strengths in 2012**

- Aerospace America reaches 100% of our membership, institutional subscribers, and members of Congress and the Administration (a total readership of 40,000).
- Aerospace America has an excellent reputation based on a strong editorial staff that has won numerous awards.
- Periodic, special inserts remain in demand.
- Acceptance of the Web version of the magazine has enabled us to reach international and student members at a substantially reduced cost, eliminating hard copy printing and mailing expenses

# Weaknesses in 2012

- Although beginning to improve, ad revenues continue at levels significantly below historical levels.
- Since Aerospace America is not intended to be a "must read to stay current" periodical, key audiences focused on current operations are not reached.
- The publication's efficiency is not optimal. We can further improve the
  integration, definition of roles, and other business aspects consistent with
  best practices in the periodical industry. We walk a fine editorial line
  between objectively examining issues and possibly upsetting corporate
  members.
- The Aerospace America Advisory Board does not reflect our membership diversity in professional and career interests. This is partially due to the difficulty of finding Advisory Board members willing and able to participate and contribute.

# **Opportunities in 2012**

- Increased impact and relevance.
  - Continue to develop an online version that complements (not replicates) the print version (e.g., videotaped award presentations might be linked to the Bulletin site).

- Ontinue to reach non-member audiences (with limited editorial content) through distribution of print editions, social networking, and an expanded Web presence. Continue to promote membership activities, human-interest items, and other content desired by the membership in the Bulletin.
- Invest in creation of a new mobile phone application for Aerospace America
  to increase distribution, diversify new advertising opportunities, and
  enhance online services.
- With AIAA's recent hire of a Managing Director of Sales and Market Outreach, we should see a significant change in emphasis to be more relevant, providing bundled products and services to those looking for branding opportunities. Greater penetration of the supplier community for Aerospace America ads should be achieved over the next several years.
- Rescope the Advisory Board to reflect changing industry dynamics.
- Provide universities with direct online access to Aerospace America and the publication's archives through a static IP address.
- Use the UAV insert to attract advertisers/sponsors and outreach to nonmembers.

#### Threats in 2012

- There is competition for readers' attention, given the volume of other Web and print material.
- There is competition for ad content/revenues.
- There are ongoing cost threats (e.g., postal increases, paper prices).
- AIAA's internal organizational structure limits the financial benefit of bundling.
- The impact of deficit reduction on our industry coupled with the decrease in membership limits ad sales possibilities.
- Risk of losing touch with international and student members who are no longer receiving print.

# Strategic Actions (2012 to 2016)

- Editorially, continue to focus on new technology and new programs, while examining the policy implications involved. Maintain current *Aerospace America* editorial focus while continuing to control costs.
- In collaboration with the Institute's IT upgrade efforts, develop and invest in an online strategy for Aerospace America/Bulletin.
- Aggressively pursue ad sales under the new Managing Director for Sales and Market Outreach. Specifically bundle products and services to be appealing to customers. Target the supply chain that is trying to reach the prime contractor for aerospace systems.
- Integrate proactively with other outreach programs to organizations (i.e., Corporate Membership, Exhibits, and Sponsorships).
- Explore approaches (both online and print) to stimulate and facilitate dialogue on significant issues and drive people to the *Aerospace America* home page.
- Create a new layout for Aerospace America that targets a younger and more information gathering audience.
- Develop and build a new robust platform for distribution of the publication, such as an html version and mobile phone apps.

# **Partnerships**

#### **Vision 2016**

AIAA will be the first choice worldwide for partnerships involving the global aerospace business – in industry, academia, and government, and in association alliances

# Progress in 2011

Despite the economic climate of the aerospace industry, our partnerships have remained intact and our partnership activities retain the high profile and access to leadership that are viewed as a significant service to the profession.

- Corporate membership declined 2.1% from 97 to 95 members. Despite this
  decrease, the goal of reaching 130 members is still achievable by 2016.
- The breakthrough initial relationship established with the Chinese Society
  of Astronautics (CSA) in 2009 blossomed and also expanded into the
  aeronautics area (with CSAA, the Chinese Society of Aeronautics and
  Astronautics) very quickly. During 2011 AIAA organized two separate
  delegations to China, one focused on space and another on aviation. This
  initiation of communication between the commercial sectors of the two
  countries is expected to provide the foundation for long term collaboration
  throughout various areas of the Institute.
- Our new corporate event, Aerospace Today...and Tomorrow: An Executive Symposium, was successfully held the second time in June 2010 with an excellent program of executive speakers and met the anticipated executive level attendance goals. This will be an annual event.

In addition, the following corporate involvement should be noted for this year:

- AIAA hosted the NRO 50th Anniversary Celebration Gala at the National Air and Space Museum Udvar-Hazy Center.
- AIAA corporate member representatives had the opportunity to meet with senior leadership of USD(AT&L) to provide industry opinions on Independent Research and Development (IR&D) and to understand the DoD's current IR&D renewal efforts.
- The AIAA corporate membership committee chair testified before the House Subcommittee on Science, Space and Technology's Subcommittee on Space and Aeronautics, "A Review of NASA's Exploration Program in Transition: Issues for Congress and Industry."
- AIAA hosted the International Academy of Astronautics, Heads of Space Agencies Summit Breakfast, at which 25 heads of global space agencies were present.

# **Plan Changes for 2012**

The Strategic Plan for Partnerships is working well and remains essentially unchanged. An updated SWOT analysis and Strategic Action Plans reflect weaknesses being strengthened in addition to new opportunities arising. Despite periodic inquiries into initiation of a university partner program, there remain significant challenges in funding from the academic community due to current budget constraints and rising costs across colleges and universities. This will be re-examined with our new Managing Director of Sales and Market Outreach.

- We have a strong recognition and credibility throughout the global aerospace community. This is due to AIAA's unmatched breadth and depth of aerospace products and services.
- AIAA has strong recognition in executive ranks in industry, government, and academia.
- The Corporate Membership Committee is well established as a standing committee and continues to gain recognition and prestige.
- Our core aerospace industry corporate membership is stable. Although some minimal losses were experienced in 2011, they were struggling small businesses and did not impact revenues substantially. Continuing emphasis on value added to corporate members is well received.

- There is a clear value to AIAA and industry of corporate membership partnering relationships.
- Our efforts to attract small aerospace businesses continue to be extremely well received.
- Engagement of entrepreneurial companies in emerging markets, particularly commercial space, has gained traction.
- We have established alliances with over 40 organizations including international associations, other discipline or technology oriented associations, educational associations, and others.
- There are some ad hoc university affiliations in place (ADCA in U.S. and PEGASUS in Europe).

- Partnerships (with both industry and associations) reflect a 20-year-old
  marketplace focused primarily on U.S. government R&D. Little focus is seen
  in emerging dynamic areas of the marketplace (primarily mission focused)
  and the industry (e.g., UAVs, space tourism and other commercial space
  ventures, and earth observations).
- The engagement of small businesses across all areas remains limited.
- The engagement of the supplier community in both space and aviation markets is limited.
- The engagement of international companies is limited. European industry is represented in reasonable proportion to Institute membership. Pacific Rim, Australian, South American, Russian, Canadian, and Eastern European industries are not represented.
- Alliances with other organizations are ad hoc, not strategic. Most inplace alliances have little real professional content, focusing instead on administrative issues.
- We have no meaningful strategic partnerships with the university community. (ADCA and PEGASUS relations have administrative content, but no professional content.) No relationships exist in the Pacific Rim or other regions.
- We have no strategic partnership with government communities (although
  we have three government agencies as corporate members: ONERA in
  France, the Aerial Delivery Research & Development Establishment in
  India, and the National Aerospace Labs in the Netherlands).
- Our limited staff resources have successfully been focused on industry partnerships, but this has left strategic alliances without enough staff resources for substantive accomplishments.

#### **Opportunities in 2012**

- The industry leadership of key current U.S. based corporate members (e.g., Lockheed Martin, Boeing, Raytheon, Northrop Grumman) is actively trying to leverage AIAA relationships.
- The industry leadership of some current international corporate members (e.g., SAFRAN, Rolls-Royce, and EADS) wants to leverage AIAA relationships.
- With AIAA's recent hire of a Managing Director of Sales and Market
   Outreach, we expect greater penetration of the supplier community over
   the next several years within the corporate member ranks. This should also
   result in greater exhibits, sponsorships, and ad sales in those areas through
   provision of bundled products and services to those looking for branding
   opportunities.
- The volunteer leadership of association alliances in the UK (RAeS), Germany (DGLR), France (3AF), and Korea (KSASS) is eager to work actively with AIAA.
- With AIAA's recent hire of a Managing Director of Sales and Market Outreach, the possibility of a university partner program may be reevaluated.
- ADCA and PEGASUS leadership wants to collaborate more actively with AIAA.

- There may be an opportunity to develop professional content in conjunction with major air shows (e.g., Paris Air Show, Farnborough, Berlin, Dubai, Singapore). Other associations, such as SAE, IAF, and the DGLR, are interested in partnering in this endeavor.
- There is an expressed interest by the CSA in China and the 3AF in France in establishing and growing new professional exchange programs at the executive, young professional, and student levels.

#### Threats in 2012

- There is significant competition for aerospace thought leadership, recognition, and resources with over 100 aerospace oriented associations.
- Most active U.S. based marketing/sales/trade based associations offer viable competitive value in exhibits, sponsorships, ads, executive level networking, and visibility.
- Continued economic turmoil and uncertainty in the federal aerospace marketplace put pressures on efforts to sustain corporate memberships.

- Attain quantitative strength of partnerships demonstrating global aerospace leadership.
  - o Over 140 Industry Partners.
  - o Over 50 Association Partners.
- Sponsor frequent partnership exclusive "invitation only" informative programs and networking opportunities.
- Reduce Corporate Membership attrition through continued focus on adding value and gaining recognition of that value by AIAA Industry partners.
- Expand and institutionalize the content for the small business outreach initiative.
- Expand the small business initiative to appeal to emerging companies in highly entrepreneurial businesses (e.g., space tourism and other commercial space arenas).
- Develop and implement a supplier outreach program to position AIAA as a vehicle for suppliers to reach the major aerospace primes.
- In collaboration with VP-International, develop and implement a strategy
  to use upcoming partnerships with the IAF to expand our corporate
  membership. This includes the Global Lunar Exploration Conference in
  May 2012 as well as potential North American hosting of the International
  Astronautical Congress in future years.
- In collaboration with International, develop and execute an effective corporate membership outreach to international companies with specific targets of China, India, Japan, Korea, and Russia. This may require expansion of the investments available for international travel.
- Actively seek out, identify, and initiate "win-win" relationships for partnering with other associations without threatening our respective revenue streams. These should benefit the membership of both.
- Develop AIAA programs for international air shows as an outreach to international industry and foreign national associations. Do this both by ourselves and in conjunction with other associations with aerospace interests. Initiate this with upcoming opportunities in Germany with the 100th anniversary of the DGLR.
- Actively explore opportunities to integrate partnership programs into the emerging New Events Model under consideration by VP-TAC.
- Actively provide exposure and visibility for Partner accomplishments throughout the Institute.
- Create and identify opportunities for Partner engagement on targeted issues and programs of interest to government sponsors.
- Enhance recognition and communication opportunities for Partners.

# **Information Technology**

#### Vision 2016

AIAA's Information Technology (IT) capabilities will enable efficient business practices for the Institute's customers and its volunteer and staff users for all business area applications including conference administration, publications, membership uses, and store customers. AIAA's IT solutions will be scalable and extensible for users and will routinely be upgraded to meet the expectations of the high-tech volunteer users.

# Progress in 2011

During 2011 AIAA's IT capabilities, especially the core infrastructure, were substantially stabilized and the necessary steps for elimination of outdated legacy code were taken to enable significant improvements in our customer facing website. The focus this year was both internal and external to provide the IT foundation necessary for the improvements that the institute would like to achieve in the coming years. We set ourselves up to retire legacy applications beginning in 2012 as well as reduce the need for costly and unnecessary software applications. Specifics include:

- Upgraded to netFORUM 2010 (AMS Software platform).
- JACIC was migrated to ScholarOne Manuscripts.
- Installed an upgraded telephone platform.
- Staffwide migration to a more portable and higher quality laptop.
- Developed a Sharepoint-based IT ticket tracking system.
- Honors & Awards functionality being re-built within the new content management system (CMS).
- Contracted a vendor to help us develop and implement a new AIAA website.
- Contracted a vendor to create a new shopping cart for the AIAA website.

# Plan Changes for 2012

With development of the new AIAA website, the IT focus for the immediate future is to finally retire legacy applications that are no longer needed as a result of implementing the new Content Management System (CMS). After the legacy applications have been retired, the subsequent focus will be to expand our use of the CMS's core capabilities. The overall IT vision remains the same. Activities in the next period of time include the following:

- Personalize the new AIAA website through utilization of CMS features.
- Retire the legacy Cold Fusion AIAA website.
- Retire the legacy Cold Fusion Conference Admin System (CAS).
- Retire the legacy Cold Fusion WriteTrack system.
- Complete the migration of the final AIAA Journal to the new Peer Review System, ScholarOne.
- Upgrade netFORUM to the latest version.

#### Strengths in 2012

- IT costs that have been historically funded out of Strategic Plan resources
  have been entirely absorbed into the Operations budget, eliminating our
  largest annual legacy investment expense.
- Our upgraded AIAA website allows staff to keep the information on the website more up-to-date and relevant.
- An improved shopping cart experience makes the AIAA buying experience more intuitive and less prone to bugs/errors. This allows more people to make successful transactions and reduces the burden on our Customer Support staff.
- By hosting more key applications off-site, external facing applications will have a higher up-time (e.g., Association Management System, Peer Review System, AIAA website).
- Since the Honors & Awards and Membership Upgrade capabilities are being re-built in the CMS, there will be fewer errors/issues when performing these high visibility activities.

#### Weaknesses in 2012

- The responsibility for updating the content on our AIAA website will now
  be on each department and not the IT staff (which is a new paradigm).
  This creates a significant risk about the ease with which staff will be able to
  update content.
- There may be a learning curve for volunteers to use the Membership Upgrade process, since this is the second new upgrade process in three years.

# **Opportunities in 2012**

- The implementation of a new Content Management System will give AIAA
  a more intuitive, relevant and usable website.
- The AMS can be more fully utilized. Each system has a wide array of functionality, and query/reporting capabilities. The COTS solutions in place allow the associated vendors to focus on software improvements, fixes and support. The IT Team can focus on AIAA specific needs without supporting the development of these systems.
- The in-house IT team has significantly upgraded capabilities. This team can now more readily recommend and implement solutions to improve service and access to relevant content for staff and members.

#### Threats in 2012

- After using the AIAA website for 7+ years, the volunteers/customers may not adjust as quickly as desired to the look, feel, and navigation of the new AIAA website.
- Frustration of customers, volunteers, and staff with IT processes and priorities of requested upgrades/changes could lead to morale problems or loss of business.

- Expand the implementation of the CMS by leveraging the personalization capabilities.
- Extend the baseline COTS products that have been implemented to provide a more feature-rich experience for AIAA customers.
- Continue to simplify hardware and operating system configurations.
- Provide basic disaster recovery capabilities. Assure currency of staff through regular participation in IT training.
- Continue to solicit input from staff and member volunteers. Include them
  in setting IT directions and goals as well as review of IT development
  solutions.
- Annually review IT technology trends and available COTS capabilities to assess compliance with the AIAA IT vision. Plan upgrades accordingly.

# 2011-2012 AIAA Board Members

#### PRESIDENT (2011-12)

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

# PRESIDENT-ELECT (2011-12)

Dr. Michael Griffin University of Alabama in Huntsville

# DIRECTOR-IMMEDIATE PAST PRESIDENT (2011–12)

Dr. Mark J. Lewis University of Maryland

# **VP-EDUCATION (2010–13)**

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

#### **VP-FINANCE (2009–12)**

Mr. A. Tom Smith Consultant

# VP-ELECT, FINANCE (2011-12)

Dr. Robert C. "Bob" Winn Engineering Systems Inc.

#### VP-INTERNATIONAL (2009–12)

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

#### **VP-ELECT, INTERNATIONAL (2011–12)**

Dr. Susan X. Ying The Boeing Company

# **VP-MEMBER SERVICES (2011-14)**

Dr. Merri Sanchez Sierra Nevada Corporation

#### VP-PUBLICATIONS (2009–12)

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

#### **VP-ELECT, PUBLICATIONS (2011–12)**

Dr. Vigor Yang Georgia Institute of Technology

#### VP-PUBLIC POLICY (2010-13)

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

#### **VP-STANDARDS (2009–12)**

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

# VP-ELECT, STANDARDS (2011–12)

Ms. Laura McGill Raytheon Missile Systems

#### **VP-TECHNICAL ACTIVITIES (2011–14)**

Dr. Basil Hassan Sandia National Laboratories

#### DIRECTOR-TECHNICAL (2009-12) AEROSPACE DESIGN & STRUCTURES GROUP

Mrs. Kathleen M. Atkins Lockheed Martin Aeronautics Company

# DIRECTOR-TECHNICAL (2009-12) AEROSPACE SCIENCES GROUP

Mr. David R. Riley The Boeing Company

# DIRECTOR-TECHNICAL (2011–14) AIRCRAFT & ATMOSPHERIC SYSTEMS GROUP

Dr. Neal J. Pfeiffer Consultant

# DIRECTOR-TECHNICAL (2011–14) ENGINEERING & TECHNOLOGY MANAGEMENT GROUP

Mr. Allen Arrington Sierra Lobo, Inc.

# DIRECTOR-TECHNICAL (2007–13) INFORMATION SYSTEMS GROUP

Dr. James Neidhoefer Aerotonomy, Inc.

# DIRECTOR-TECHNICAL (2007–13) PROPULSION & ENERGY GROUP

Dr. Ashwani Gupta University of Maryland

#### DIRECTOR-TECHNICAL (2011-14) SPACE & MISSILES GROUP

Dr. Trevor Sorensen Hawaii Space Flight Laboratory

#### DIRECTOR-AT-LARGE (2011-14)

Dr. J. Stephen Rottler Sandia National Laboratories

#### DIRECTOR-AT-LARGE (2009-12)

Dr. Robert E. Lindberg National Institute of Aerospace

#### DIRECTOR-AT-LARGE (2010-13)

Professor George A. Lesieutre, PhD The Pennsylvania State University

# **DIRECTOR-INTERNATIONAL (2011-12)**

Mrs. Mary L. Snitch Lockheed Martin - Washington Operations

# DIRECTOR-INTERNATIONAL (2011-14)

Professor In Lee, PhD Korea Advanced Institute of Science & Technology

# **DIRECTOR-INTERNATIONAL (2010-13)**

Dr. Shamim A. Rahman NASA Johnson Space Center

# DIRECTOR-REGION 1 (2011-14)

Dr. Ferdinand W. Grosveld Lockheed Martin Information Systems & Global Services

#### DIRECTOR-REGION 2 (2008-12)

Mr. G. Alan Lowrey Lockheed Martin Space Systems

# DIRECTOR-REGION 3 (2008–12)

Dr. Sivaram P. Gogineni Spectral Energies, LLC

# DIRECTOR-REGION 4 (2006-13)

Dr. James Walker Southwest Research Institute

#### DIRECTOR-REGION 5 (2010–13)

Ms. Laura A. Richard United Launch Alliance

#### DIRECTOR-REGION 6 (2006-12)

Mr. Bruce W. Wilson The Boeing Company

# DIRECTOR-REGION 7 (2007-13)

Mr. Juergen Quest European Transonic Windtunnel Gmbh

# YOUNG PROFESSIONAL LIAISON (2010-13)

Mr. Darin Haudrich Boeing Defense, Space & Security

# STUDENT LIAISON (2011-13)

Mr. Matthew Cannella University of Colorado at Boulder

#### AIAA STAFF LIAISONS

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



The World's Forum for Aerospace Leadership

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