



AIAA
SHAPING THE FUTURE OF AEROSPACE



2022 AIAA ELECTION GUIDE

MEET THE CANDIDATES



ELECTION OPEN
[20 JANUARY - 11 FEBRUARY 2022]

VOTE ONLINE: aiaa.org/vote

ELECTION OPEN

[20 JANUARY - 11 FEBRUARY 2022]

The Council Nominating Committee has assembled an outstanding slate of candidates. Please carefully consider each candidate and select those who most closely reflect your values and your vision for the future of AIAA. All candidates are highly qualified, and all are anxious to serve.

COUNCIL OF DIRECTORS

REGIONAL ENGAGEMENT ACTIVITIES DIVISION

Region I
Region II
Region III
Region IV
Region V
Region VI
Region VII

INTEGRATION AND OUTREACH ACTIVITIES DIVISION

Aerospace Outreach Group
Business & Management Group
Integration Group
International Activities Group
Young Professionals Group

TECHNICAL ACTIVITIES DIVISION

Aerospace Design & Structures Group
Aerospace Sciences Group
Aircraft Technology Integration & Ops Group
Information Systems Group
Propulsion and Energy Group
Space and Missiles Group

For 2022, the election will be held from 20 January to 11 February 2022, and we will continue to vote electronically. Every member is urged to vote online via the AIAA website. We have taken steps to ensure the voting process is smooth and efficient. We are using the independent third-party vendor, Survey and Ballot Systems, who we have used in the past to monitor the process and the web-based voting system. Anyone who requests a paper ballot will receive one. Please use the electronic voting system if possible but if you need a paper ballot, please request one through Survey & Ballot Systems at 952.974.2339 or support@directvote.net (Monday-Friday, 0800-1700 hrs CST). All ballots must arrive at AIAA or be submitted online through the website, aiaa.org/vote, by 1500 hrs EST, 11 February 2022.

REGIONAL ENGAGEMENT ACTIVITIES DIVISION

Regions coordinate the activities of geographically related sections to facilitate cooperative efforts between the various geographical areas. A Regional Director shall lead each region. The voting members who belong to that region shall elect the Regional Director for that region. The Regional Director for each group shall be a member of the Regional Engagement Activities Division (READ) as well as a delegate to the Council of Directors. The term for Regional Directors shall be three years and there shall be a limit of the Regional Director serving two consecutive terms.

As a Member of the Council, a Regional Director's primary responsibility is to serve the Institute as a whole; a secondary responsibility is lead and support the Sections, Student Branches and Members in their Region. A Regional Director serves in several different capacities; voting member of the Council of Directors, voting member of the Regional Engagement Activities Division (READ), and chair of the Regional Advisory Committee (RAC). As the leader of the Region, the Regional Director must be dedicated and recognize the obligation implicit in filling the position and be willing to expend the requisite time and energy. Directors must be self-motivated and initiate actions as necessary and anticipate and resolve problems, as well as being an effective communicator, having the ability to relate to and communicate with people of varying status (from junior engineers to corporate executives). Directors should be organized and familiar with AIAA's organizational structure and procedures. The importance of strong leadership in this voluntary role cannot be overemphasized. All the Section Chairs within the Region, and the Deputy Directors look to the Regional Director for guidance.



LEARN MORE
aiaa.org/get-involved/regions-sections



Ellen Gillespie

AIAA ASSOCIATE FELLOW

A dedicated physicist and engineer with a passion for technical projects, I've been working in the Houston area for many years. I serve both AIAA and ASME at the local, regional,

and national levels to support professional, college, and K-12 programs. AIAA membership has allowed me to participate in technical and leadership activities that have helped others, enhanced my career and given me great personal satisfaction. AIAA programs are enlightening and inspiring. I hope to use my breadth and depth of experience to conduct AIAA Region IV operations that provide interesting events, timely needed topics, joint meetings, and career development with corroboration in a hybrid environment using a variety of communication tools.

BIOGRAPHY

I hold degrees in Physics, Aerospace Engineering, and Systems Engineering with certificates in Project Management and Data Science. I served as HPE Common Components Firmware Development Team Program Manager (Agile Scrum Master) in an international (remote) manufacturing environment (2014). I previously served as United Space Alliance Descent Mission Control Technical Lead (2003-2007), Deorbit/Entry/Abort-Once-Around Technical Group Lead (2007-2009), and Technical IT Lead (1996-2010). I hold Landing Analyst, Winds Coordinator, Deorbit Engineer, Entry Analyst, and Software Principal Engineer certifications. I received the Space Flight Awareness (SFA) Award in March 2008 (STS-123) for deorbit and entry technical leadership. I recently completed FAA private pilot (VFR) ground school.

AIAA ACTIVITY AND HONORS

Associate Fellow Nominations Review Board (2021). Region IV Deputy Director Membership (2014-2016). Atmospheric Flight Mechanics Technical Committee (2014-2016). Houston Section Chair (2008-2010). Houston Section Vice Chair Technical (2006). Houston Annual Technical Symposium Committee (2006-2013).



Andrew Santangelo

AIAA ASSOCIATE FELLOW

I am honored to be nominated for the Director of AIAA Region IV, South Central, during these exciting times in aviation and space. I work in both Texas

and New Mexico, and I am excited for this opportunity to further serve my community and AIAA. As Director, I shall enthusiastically lead in coordinating the activities of our region; represent our region as one voice at AIAA, on the Regional Engagement Activities Division and the Council of Directors; and address our region's needs. Our community is experiencing rapid changes on many fronts, including commercial space, small satellites, U.S. Space Force growth, exciting NASA programs like Artemis, and the excellent work done in schools, colleges, universities, and research institutions in our region. I plan to support the AIAA leadership and members of our region's sections to meet the needs and challenges of the community.

BIOGRAPHY

I have worked in the aerospace, IT, and automotive industries since 1983 and served as a student member, Professional Member, and Lifetime Associate Fellow of AIAA since 1982. I was awarded a range of research grants for flight systems development for aircraft and small satellites, served as the principal investigator on numerous projects, including two successful space flights for the government, development of the innovative U.S. Aerospace Challenge rocket program for K-12 schools, and currently on the NASA Artemis Program. I am the Founding Chair of the Space Tethers Technical Committee (2001) and the Small Satellite Technical Committee (2013). Both technical committees provide a mechanism and platform to expand state-of-the-art astronautics and space systems as well as help increase AIAA membership and forum participation.

AIAA ACTIVITY AND HONORS

In an advocacy capacity, I have served as a public policy leader by supporting the creation and growth of Congressional Visits Day and the Public Policy Committee in their early days. I have served as Public Policy Representative and Deputy Director of Public Policy for both Regions III and IV. I revitalized the Michigan Section in 1997, during which time the body received numerous awards for innovations in public policy and educational outreach. For my efforts in public policy, education, TC creation, membership growth, and support of the aerospace community, I received the AIAA Sustained Service Award "For Years of Service to AIAA in the Aerospace Sciences and in Public Policy." I look forward to your vote as Director of AIAA Region IV.



James Guglielmo

AIAA ASSOCIATE FELLOW

Over the last 14 years, I have been fortunate and privileged to serve AIAA in multiple leadership roles at both the national and the local level, and now I would like your support to

continue serving AIAA as the Region V Director. AIAA sections are critical for providing local engagement and resources to both current AIAA members and future generations of AIAA members. As Director, I will look for ways to document and share best practices from across the sections within Region V, and to further strengthen our excellent STEM and K-12 scholarship programs to help instill the enthusiasm and curiosity many of us had when we first decided to pursue an aerospace career.

I am running for Region V Director because I truly believe in AIAA's goals, and in the benefits AIAA provides not only to its members but to future generations of aerospace engineers. AIAA provides many opportunities to share technical knowledge, to recognize individuals for their contributions to our profession, and to interact with and engage with others in our community. As Region V Director, I will work to strengthen AIAA's ability to provide these opportunities and services to its members.

BIOGRAPHY

B.S. and M.S. in Aerospace Engineering from the University of Illinois at Urbana-Champaign (UIUC). 26-year career at The Boeing Company, specializing in aerodynamics, wind tunnel testing, and multidisciplinary design analysis & optimization (MDAO). Led the development and application of a tactical-MDAO capability within the Advanced Air Dominance organization. Currently leading the model-based engineering MDAO technology domain within Boeing Research & Technology.

AIAA ACTIVITIES AND HONORS

Active Member since 1995, Associate Fellow (2012). Active in local AIAA St. Louis Section, including Chair, Vice-Chair, Region V Representative, Advisor, Newsletter Editor, and Webmaster. Multiple leadership roles within the Applied Aerodynamics Technical Committee (2007-2015), including Chair, Webmaster, and Ground Test Technical Committee Liaison. Additional national level leadership roles: 2017 AIAA AVIATION Forum Chair, 2016 AIAA AVIATION Deputy Forum Chair, and 2010 Applied Aerodynamics Technical Conference Chair. Currently the Technical Activities Division Liaison to the Honors & Awards Committee. Received the St. Louis Young Professional Award (2003), and the AIAA Outstanding Section Award (2020).



Merri Sanchez

AIAA FELLOW

As Region V Director, I will advocate for sections and members. I will provide leadership to strengthen and leverage sections to bring exceptional value to members. I will increase section

and region communication, sharing what works in membership outreach and activities. I will convey the value and importance of AIAA to professionals and their management. I will leverage past successes to enhance programs, activities, and products that benefit our members.

Our challenge is attracting, maintaining, and engaging members. My strategic goals are professional and student member growth, retention, diversity, and engagement. These require focus and innovation in demonstrating AIAA membership value by bringing activities, benefits, and services to our members. AIAA can enrich the opportunities for professional growth through the attraction and cross-pollination of multiple disciplines.

I am deeply dedicated to AIAA, having previously served from section to national level as VP, Regional Director, and Section Chair. As Region V Director I will focus my experience on helping sections and members engage in all AIAA has to offer, represent the region, and form partnerships between industry, government, and academia to continually develop our professional and student membership and bring value in key areas of skill including leadership, technical, and networking.

BIOGRAPHY

B.S., Aerospace Engineering, Texas A&M; M.S., Physical Science, University of Houston; Master, Mechanical Engineering and Ph.D., Industrial Engineering, University of Houston. Currently Aerospace Corporation Technical Fellow. Previously: AF Space Command Chief Scientist, Sierra Nevada Senior Director, NASA Liaison to AFSPC/NORAD/NORTHCOM/STRATCOM, International Space Station Increment Manager, X-38 Experimental Crew Return Vehicle Deputy, Astronaut Office Technical Assistant, other NASA roles.

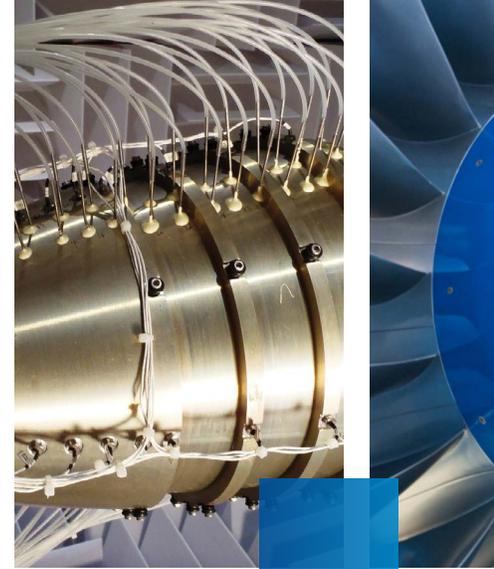
AIAA ACTIVITIES AND HONORS

Fellow, lifetime member, since 1983. Distinguished Service Award, Special Service Citation and Sustained Service Awards. Rocky Mountain Section Chair (2019-2020), Board of Directors (2007-2014), VP Member Services, VP Education, Region IV Director, Houston Section Chair. National committees: Executive, Institute Development, Aerospace America Advisory, RSAC, EAC, Finance, Compensation, Professional Member Education, Membership, Student Activities, Academic Affairs, Student Activities, PreCollege Outreach. ABET evaluator. General Chair, World Space Congress 2002 Educational Activities. Author of several papers.

TECHNICAL ACTIVITIES DIVISION

Technical Groups coordinate the activities of related technical committees to facilitate cooperative efforts between the various technical disciplines. A Technical Director shall lead each Technical Group. All voting members shall elect the Technical Directors. The Technical Director for each group shall be a member of the Technical Activities Division (TAD) as well as a delegate to the Council of Directors. The term for Technical Directors shall be three years and there shall be a limit of the Technical Director serving two consecutive terms.

As a Member of the Council, a Technical Director's primary responsibility is to serve the Institute as a whole; a secondary responsibility is lead and support the committees and members in their directorate group. A Technical Director serves in several different capacities; voting member of the Council of Directors, and voting member of the Technical Activities Division (TAD). As the leader of the Group, the Technical Director must be dedicated and recognize the obligation implicit in filling the position and be willing to expend the requisite time and energy. Directors must be self-motivated and initiate actions as necessary and anticipate and resolve problems, as well as being an effective communicator, having the ability to relate to and communicate with people of varying status (from junior engineers to corporate executives). Directors should be organized and familiar with AIAA's organizational structure and procedures. The importance of strong leadership in this voluntary role cannot be overemphasized. All the directorate's committee chairs, and the Deputy Directors within the group look to the Technical Director for guidance.



LEARN MORE
[aiaa.org/get-involved/committees-groups/
technical-committees](https://aiaa.org/get-involved/committees-groups/technical-committees)



Stephen Blanchette

AIAA ASSOCIATE FELLOW

Now is the time. The power of information systems in aerospace is breathtaking: it enables amazing new missions that previously had

been the stuff of science fiction, but also has been at the root of air disasters with staggering loss of life. It brings us powerful computational and data management capability, but also permits increasingly frequent breaches of personal information. It provides tools to automate the mundane, difficult, and dangerous, but little of the wisdom needed to do so responsibly.

In an aerospace world driven by information, AIAA must reach out in every direction, and the Information Systems Group (ISG) must be the ambassador. Together, we must collaborate with sister societies to learn from their technological advancements while helping them understand the special challenges of the aerospace domain. We must engage with academia to adapt aerospace curricula where information technologies traditionally have been downplayed or forgotten. We must advise and influence policymakers regarding aerospace information systems, for the betterment and safety of society. And we must ensure that the disciplines we represent are respectable and respected as professions. It's a big lift but, working together, we can achieve it.

Now is the time for information systems to take a seat at the table across the aerospace industry, and ISG can lead the way. I look forward to working with you to achieve that vision.

BIOGRAPHY

BSCS, Embry-Riddle; M.A., Diplomacy, Norwich. Director, Software Systems and Acquisition, The Aerospace Corporation, working across the space enterprise. Previously, Deputy Director, Client Technical Solutions, CMU/SEI. 35 years developing and managing software-reliant systems for national defense and intelligence programs at McDonnell Douglas, Stanford Telecommunications, and United Defense. Senior member, IEEE; member, ACM, AFCEA, NDIA. Author/coauthor of 33 publications plus numerous technical reports.

AIAA ACTIVITIES AND HONORS

Associate Fellow (2010–present); member since 1984. Deputy Director, Information Systems Group (2021–present); Software TC (member: 2008–present, Vice Chair: 2010–2012); Aerospace Cybersecurity Working Group (2015–present); Netcentric Operations PC (2004–2012); AIAA SciTech (Forum Technical Chair 2019, Deputy 2018); Program Committee, Software Challenges in Aerospace Workshop (2015–2017); Technical Area Chair, Infotech@Aerospace (2015); Co-chair, Cyber Systems, AIAA DEFENSE (2015); Co-chair, Software, Infotech@Aerospace (2013).



Michel Ingham

AIAA ASSOCIATE FELLOW

I am seeking your vote for Information Systems Group (ISG) Director. The ISG is at a critical junction. It is front-and-center on two strategic Institute initiatives in cybersecurity and

autonomous systems, which aim to increase AIAA's impact in these increasingly critical areas. Our industry is challenged to keep pace with advances in artificial intelligence, communications systems, ubiquitous sensing, human-machine teaming, high-performance computing, cyberdefense, and digital engineering. The ISG TCs are chartered to tackle these and other pressing issues in aerospace information systems, but our volunteers will increasingly come from non-traditional backgrounds, and we face stiff competition for members from other non-aerospace professional societies. Drawing in this diverse membership will require unprecedented drive, focus, and passion, which I always bring to the job.

My goals as ISG Director will be to 1) raise the profile of ISG within AIAA, by ramping up interactions between our TCs and other committees, and establishing a stronger ISG presence at forums; 2) increase the footprint of AIAA within the information systems community, by engaging other professional societies with similar interests and convening workshops to draw in these adjacent communities; and 3) strengthen the ISG TCs, by focusing on recruitment to fill gaps from underrepresented communities and dynamic, high-growth disciplines like those mentioned above. I look forward to applying my knowledge, experience, professional network, and energy to lead the ISG into its next phase of growth.

BIOGRAPHY

I am the Chief Technologist of the Systems Engineering Division at NASA/JPL. Throughout my career I have juggled research (in model-based systems engineering and spacecraft autonomy) and mission work (Project Software Systems Engineer for the Europa Clipper mission and Autonomy systems engineer for the Mars Science Laboratory rover). I received my ScD and SM from MIT, and my BEng from McGill University.

AIAA ACTIVITIES AND HONORS

I have been very proud to serve as a Deputy Director for the better part of a decade. I previously served on the Intelligent Systems Technical Committee, which I chaired from 2009 to 2011, helping to grow it into one of our most active and productive TCs. My deep and consistent commitment to AIAA is evidenced by 20 years of contributions, for which I was honored with the 2021 Sustained Service Award. Highlights include serving on the Autonomous Vehicles and Systems Task Force, membership in the Digital Engineering Integration Committee, organizing InfoSys tracks at ASCEND/SPACE, and serving as Technical Program Chair for Infotech@Aerospace.

DIRECTOR

Propulsion and Energy Group



Steven Gorrell

AIAA ASSOCIATE FELLOW

Throughout my 32-year career in both industry and academia, I have sought to share my passion for aerospace by training, encouraging, motivating, and mentoring the next generation to join

and be part of the aerospace profession. An integral part of the aerospace profession is being an AIAA member.

My prior AIAA leadership experience and committee membership combined with regular participation in AIAA conferences and forums gives me a unique background to help direct the Propulsion and Energy (P&E) Group. As Director, I would work to continually improve AIAA, so it is the recognized leader and desired professional society of those that work in aeronautics and astronautics.

To accomplish this, we must keep the P&E technical committees relevant, valued, and visible at forums such as AIAA SciTech Forum and AIAA AVIATION Forum. Activity and engagement of the entire AIAA community should be promoted. Education, technical committees, student branches, local sections, peer recognition, and competitions are more ways AIAA members can be engaged in addition to forum attendance. Online content and virtual participation should be taken advantage of to enable more activity.

BIOGRAPHY

Professor, Mechanical Engineering, Brigham Young University (BYU) (2020–present); Research interests in experimental and computational fluid dynamics, turbomachinery, design space exploration, and engineering education; Author or co-author of 107 technical publications; Associate Professor, BYU (2007–2020); Senior Aerospace Engineer, Air Force Research Laboratory (AFRL), Propulsion Directorate, Turbine Engine Division (2006–2007); Aerospace Engineer, AFRL (1989–2006); B.S., BYU (1988); M.S., Virginia Tech (1990); Ph.D., Mechanical Engineering, Iowa State University (2001).

AIAA ACTIVITIES AND HONORS

AIAA member since 2004; Associate Fellow (2007); Author or co-author of 44 technical publications presented at AIAA conferences and forums; Vice President – Education (2013–2016); AIAA Foundation Board of Trustees Member (2013–2016); Technical Discipline Chair, AIAA SciTech Forum (2018); AIAA Propulsion and Energy Forum Organizing Committee (2015); Chair, Professional Member Education Committee (PMEC) (2008–2011); Member, Gas Turbine Engine Technical Committee (2008–2015); Member, Air Breathing Propulsion Technical Committee (2004–2008); Certificate of Appreciation (2016); Fluid Dynamics TC Best Paper (2015); Special Service Citation (2012).



Rusty Powell

AIAA ASSOCIATE FELLOW

AIAA faces significant challenges as it evolves in a changing aerospace industry. To thrive, our Institute must offer a positive value proposition to our members. As Director–Propulsion and

Energy (P&E) Group, I will work to actively improve membership value, be a voice for our members, and support the P&E community.

We must continue to work together to develop and expand exciting new forum content and programs, while ensuring affordable involvement and a financially viable Institute. To this end, one of my primary goals is to fully integrate and expand P&E content in our forums and other AIAA events, ensuring the relevance and viability of the P&E Community notwithstanding the sunset of the AIAA Propulsion and Energy Forum.

I am committed to ensuring AIAA's position as the premier aerospace professional organization. To achieve this, we must work across the Institute to maintain its relevance and viability. I have actively participated in committees, organized conferences/symposia, and currently serve on the Council of Directors. If elected as P&E Director, I will bring my experience and passion in P&E and the aerospace industry as a voice on the Council.

BIOGRAPHY

30 years of aerospace and engineering experience including aircraft maintenance, propellant chemistry analysis, and hypersonic propulsion/vehicle testing and development. Currently, VP & GM, Space Development & Integration, Axient. Notable other positions include: Chief Engineer, Space & Cyber Systems, Millennium Engineering; Associate Professor, Department of Engineering Mechanics (DFEM), USAF Academy; Chief, Launch and Range Programs, Operationally Responsive Space Office; B-1B Lead Engineer, 28th Bomb Wing (BW); High-Speed Systems Engineer/Manager, AFRL Propulsion Directorate. B.S. ME, Colorado State University; M.S. AeroE, Air Force Institute of Technology; and Ph.D. Engineering, Colorado School of Mines.

AIAA ACTIVITIES AND HONORS

AIAA Associate Fellow, 2015. AIAA Propulsion and Energy Forum Technical Deputy Co-Chair (2021). Region V Director (2019–present). Axient corporate member liaison (2019–present). Member (2012–present), Honors & Awards (H&A). Chair (2013–2018), High Speed Air Breathing Propulsion Technical Committee. Chair (2018–2019), Southern Vice Chair (2016–2017), H&A Chair (2014–2016), Rocky Mountain Section (RMS). Technical Chair (2014), RMS Annual Technical Symposium. Member (1999–present).

INTEGRATION AND OUTREACH

ACTIVITIES DIVISION

Integration and Outreach Groups coordinate the activities of related Integration and Outreach Committees to facilitate cooperative efforts between the various professional areas. An Integration and Outreach Group Director shall lead each Integration and Outreach Group. All voting members shall elect the Integration and Outreach Directors, except for Young Professional Group Director-Elect who is elected by the professional members who are less than 36 years old at the time of the election. The Integration and Outreach Director for each group shall be a member of the Integration and Outreach Activities Division (IOD) as well as a delegate to the Council of Directors. The term for Integration and Outreach Group Directors, except for the Young Professional Group Director-Elect, shall be three years and there shall be a limit of the Integration and Outreach Group Director serving two consecutive terms. The Young Professional Group Director-Elect shall serve one year as the group director and is not renewable.

As a Member of the Council, an Integration and Outreach Director's primary responsibility is to serve the Institute as a whole; a secondary responsibility to lead and support the committees and members in their directorate group. An Integration and Outreach Director serves in several different capacities; voting member of the Council of Directors, and voting member of the Integration and Outreach Activities Division (IOD). As the leader of the Group, the Integration and Outreach Director must be dedicated and recognize the obligation implicit in filling the position and be willing to expend the requisite time and energy. Directors must be self-motivated and initiate actions as necessary and anticipate and resolve problems, as well as being an effective communicator, having the ability to relate to and communicate with people of varying status (from junior engineers to corporate executives). Directors should be organized and familiar with AIAA's organizational structure and procedures. The importance of strong leadership in this voluntary role cannot be overemphasized. All the directorate's committee chairs, and the Deputy Directors within the group look to the Integration and Outreach Director for guidance.



LEARN MORE

[aiaa.org/get-involved/committees-groups/
Integration-and-Outreach-Division-Committees](https://aiaa.org/get-involved/committees-groups/Integration-and-Outreach-Division-Committees)



Kevin Burns

AIAA ASSOCIATE FELLOW

With long dedicated service to AIAA I have been a member of the History Committee for over 20 years; I helped start the Society and Aerospace Technology IOC and was an early

member of the committee; and I have worked closely with the Women of Aeronautics and Astronautics IOC. These are the three committees that comprise the Aerospace Outreach Group. While working at Northrop Grumman, I was a dues paying member of the Society of Women Engineers (SWE), and assisted the Women in Aviation International (WAI) San Diego Chapter. Thus I have tremendous experience with all three of the organizations within the Aerospace Outreach Group. Some of the goals I envision for the group are outlined in the AIAA paper presented at the 2022 AIAA SciTech Forum, "A Vision for the Centennial of the AIAA."

BIOGRAPHY

An AIAA Associate Fellow, retired after a long career in the aerospace industry working for companies such as Hughes Aircraft Company, Bell Aerospace, Calspan, General Dynamics, Computer Sciences Corporation, General Electric, and Northrop Grumman. Chair of the AIAA History Integration and Outreach Committee, completing my second two-year term; has served as Track Chair for the History Track of numerous AIAA conferences. Within the American Legion currently serves as the chair of the Aerospace Commission for the Department of California. Past Chairperson of the Society for Technical Communication's (STC) National Standards Council and served for a number of years as their representative to the National Information Standards Organization (NISO). Retired from the U.S. military, had the rare opportunity to have served with the aviation divisions of all four branches of the service.

AIAA ACTIVITIES AND HONORS

Served as Section Chair for numerous terms both in New York and California, and has served on Section Councils continuously for the last 30 years. Very active on both the local and national levels. Received two AIAA service citations and in 2021 was honored with the AIAA Sustained Service Award for "For sustained and dedicated service to the AIAA History Committee, San Diego Section, Niagara Frontier Section, AIAA conferences/forums, and decades of mentorship to students from universities across the country."



Thomas B. Irvine

AIAA ASSOCIATE FELLOW

If you've followed the decades-long research behind the mRNA-based COVID vaccines, you might recognize names such as Barney Graham (NIH), Katalin Kariko (UPenn), and Drew

Weisman (UPenn). As the coronavirus pandemic spread, these researchers gathered with fellow collaborators from around the globe through professional societies and trade groups to share research results and breakthroughs. Their success in developing vaccines based upon turning mRNA into medicine required technical abilities as well as outreach, business and management, integration, and the dedication and enthusiasm of a young and diverse medical research workforce. Their collaboration can serve as inspiration for AIAA as we work to address our industry's vexing challenges—from continuing the development of digital approaches and computational tools, implementing sustainable aviation, and minimizing aviation and space's environmental footprint, to developing novel applications such as on-demand aviation and commercial space. Aerospace professionals, collaborating through AIAA's Integration and Outreach committees and with many other parts of the Institute, will make this future possible. I appreciate and am honored to be considered to help guide AIAA's contribution to this exciting future for aerospace.

BIOGRAPHY

A consultant working in advanced aviation mobility and the integration of urban air mobility systems into the existing airspace. Previously, I was the Deputy Associate Administrator for NASA's Aeronautics Research Mission Directorate at NASA HQ, where I was responsible for the executive management of NASA's aeronautics research program. From 2014 to 2018, I was the Managing Director for Content Development at AIAA, where I led the identification of emerging societal trends, aerospace technologies, and adjacent business sectors that are of importance to the aerospace industry and profession. Bachelor of Science degree in Civil Engineering in 1980 and a Master of Science degree in Engineering Mechanics in 1982, both from the Ohio State University.

AIAA ACTIVITIES AND HONORS

Member Grade: Associate Fellow. Atmospheric Environments Technical Committee Member (1999–2002). Management Technical Committee Member and Chairman (2005–present). AIAA Professional Staff (2014–2018).



Chandru Mirchandani

AIAA ASSOCIATE FELLOW

The charter of the AIAA Integration Committee can be summarized as the cross-discipline integration across focus areas, ranging from the aerospace field, the digital engineering

field, directed engineering systems, energy optimized aircraft systems, and space and unmanned systems. I believe I have the experience and expertise to direct the research and cross-disciplinary synergism between the different facets of engineering, electrical, mechanical, thermal, and software, and also the level of interfacing between these disciplines to improve the efficacy of the new systems needed to meet the next generation of systems. With the advent of AI and ML, we must utilize these analytical skills to develop digital twins and replicatable models of systems that work and have tested successfully.

System engineering has many tenets and heuristics that span these areas; I plan to use my membership with the working groups within IEEE, INCOSE, and AIAA to improve and grow the state of the art in integration and interfacing.

BIOGRAPHY

An INCOSE Fellow, AIAA Associate Fellow, ESEP and IEEE Senior Member. Qualified System Architect and Principal System Engineering Lead in Reliability, Maintainability and Availability at Leidos, and SME in the Digital Engineering Center of Excellence. Developed and authored in-depth analysis for system reliability and resilience; innovative processes to distribute and allocate software faults to SW based on CPU usage, content, and environment. Concurrently, an Adjunct Professor at George Washington University teaching System Engineering. Technical chair for national and international symposia/conferences; authored over 40 papers in complex systems and optimization of system concepts; and reviewed technical papers. An MEEE (Rensselaer), M.S., Systems Engineering (University of Maryland), and a Ph.D., Systems Engineering (George Washington University); interests include research, design, and model development of complex systems based on reliability, performance, and cost; fault-tolerant systems; Bayesian processes and decision theory. Over 30 years as a Senior Staff Engineer (Lockheed Martin/heritage companies) in the research, development, design, and integration of VLSI-based telemetry systems at NASA Goddard Space Flight Center. Co-Principal Investigator on Intelligent Sensor and Satellite Networks for Earth Science and Exploration. Lead System Engineer and Architect on conceptual designs and concepts for Advanced Traffic Management Systems and Intelligent Vehicle Highway Systems.

AIAA ACTIVITIES AND HONORS

AIAA Associate Fellow. Member: AIAA Space Operations and Support TC, AIAA Small Satellite TC.

DIRECTOR-ELECT

Young Professionals Group



Bryan Kowalczyk

AIAA MEMBER

I have been active with the Young Professionals Group for the last two years. In this time, I have assisted each of the committees and have helped grow the group. I want to

continue this growth and help new young professionals get the most out of AIAA. Many YPs are not aware of all that AIAA has to offer and I would like to expand that to not just attending forums, but also to creating new networking events and working with recent graduates to help them transition from student to professional members.

I also want to have the YPG be a focal point for working with other AIAA groups, technical committees, and other professional organizations.

BIOGRAPHY

I am currently a Senior Researcher at the University of Cincinnati's Office of Research. Adjunct Professor for Aerospace Engineering. Adjunct Professor for Fire Science and Emergency Management. I received my B.S. in Aerospace Engineering in 2013 and M.S. in Aerospace Engineering in 2016. My research focus areas include Unmanned Aerial Systems, Advance Air Mobility, and Connected Automated Vehicles.

AIAA ACTIVITIES AND HONORS

Committee Chair, Communications Committee YPG (2021-present); Member, Young Professionals Group (2020-present); Faculty Advisor, UC AIAA Student Branch (2019-present).



Dominic Pena

AIAA SENIOR MEMBER

An AIAA leader should demonstrate an overwhelming excitement and passion toward broadening the field of aerospace to others. For me, I have become so captivated with this industry that I knew

at a very young age I wanted to be involved in it, and then expose the allure of aerospace to as many individuals as I possibly could. For this reason, I am running for the Young Professional Group Director-Elect position, to lead the group's vision moving forward. I believe I would be the best candidate for this opening because of my proven credentials to support aerospace outreach and professional development outside of day-to-day work.

Our industry is currently projected to face significant shortages in STEM-related manpower during the coming years. Studies have shown that we will be lacking pilots and aerospace engineers to fulfill the needs of tomorrow. Upon election, I will make it my personal goal to excite and connect others so that they may develop an internal desire to learn and push the boundaries of what is possible with a driving passion for aerospace. I believe that the young professionals in our industry are the most well-equipped to directly face and address the issues of tomorrow, and by exposing growth opportunities to our membership, we will be well set up for leading that next "giant leap in mankind."

BIOGRAPHY

I have been heavily involved with AIAA since being an inaugural member for my alma mater's first AIAA student branch in 2015. Not only did I help establish that initial connection with the Institute, I also created the first-ever AIAA Design/Build/Fly team at the Colorado School of Mines to compete, despite having minimal funding and no aerospace program on campus. Today, the competition is offered regularly as a Capstone Design program and inspires many undergraduate students to pursue an entry-level position in the aerospace field. Upon graduation in 2016, I joined Lockheed Martin Skunk Works and worked as an aircraft conceptual designer supporting over eight different aircraft programs and winning over \$15 million in new business. There, I again wanted to expose others to a different realm of aviation by leading a site-wide free Private Pilot ground school course for employees. Today, I am a part of Ball Aerospace's operational analysis group and am an active member of three other volunteer organizations in addition to AIAA, including the Experimental Aircraft Association, the Civil Air Patrol, and the Colorado Pilot's Association.

AIAA ACTIVITIES AND HONORS

AIAA Senior Member. Inaugural member for my alma mater's first AIAA student branch in 2015. Created the first-ever AIAA Design/Build/Fly team at the Colorado School of Mines.

ELECTION OPEN
[20 JANUARY - 11 FEBRUARY 2022]

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