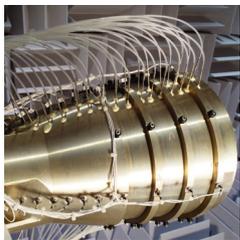




# 2020 AIAA ELECTION GUIDE



BALLOTS MUST ARRIVE AT AIAA  
**21 FEBRUARY 2020**

## Letter from 2020 Election Committee Chair

Dear AIAA Member:

On behalf of the Elections Committee, it is my great privilege to present our 2020 candidates for your consideration. Your participation in this year's election will help determine the direction of AIAA. Critical decisions await our leadership in almost every area of the Institute. Our Board of Trustees and Council of Directors are planning our way forward, and working closely with staff and members to fulfill these plans. I am continually impressed and grateful for the time and effort your elected leadership commits to the Institute and the AIAA Foundation.

The Council Nominating Committee has assembled an outstanding slate of candidates. We urge you to 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.

For 2020, the election will be held from 29 January to 21 February 2020, 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 will be 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 because it reduces our costs substantially. But if you need a paper ballot, then please request one through Survey & Ballot Systems at 952.974.2339 or support@directvote.net (Monday–Friday, 8000–1700 hrs CDT). All ballots must arrive at AIAA or be submitted online through the website, [aiaa.org/vote](http://aiaa.org/vote), by 1500 hrs ET, 21 February 2020.

As with all democratic elections, it is a privilege and responsibility to vote and make your voice heard. I encourage you to vote today! Thank you for your service and continued commitment to AIAA.

E. Allen Arrington  
Chair, Elections Committee  
Speaker, Council of Directors

## Summary of Goals

### Director–Aircraft Technology, Integration, and Operations Group

**RICHARD (RICK) MANGE**

Attract and retain members by enhancing our forums, and clearly communicating to members and decision makers the AIAA value proposition.

**RICHARD A. WAHLS**

Provide opportunities for our multigenerational membership to share their passion and technical expertise for the benefit of all.

### Director–Business and Management Group

**LES LAKE**

Advance the business and management aspects of the aerospace profession by promoting awareness and engagement to these areas of AIAA.

### Director–Region I

**STEVEN X. S. BAUER**

Strengthen the sections' and student branches' collaboration in Region I, advocate and represent their interests within AIAA.

### Director–Region II

**KURT POLZIN**

Improve the value of an AIAA membership by working with the sections of Region II to enhance membership benefits.

### Director–Region VII

**CEES BIL**

Present a strong value proposition to members and potential members in Region VII (International) in all stages of their career.

**ESSAM E. KHALIL**

Enhance collaborations, integration of international activities, and communications, increasing academic and industry visibility of AIAA and its products and services.

### Director–Space and Missiles Group

**CRISTIAN N. CALUGARITA**

Augment awareness of the resourceful value the group has to offer, thus significantly growing the number participants from universities and industry.

**WILLIAM (BILL) DEININGER**

Enhance interdisciplinary interactions within the TCs of the Space and Missiles Group and throughout AIAA; enhance and expand membership.

**LAWRENCE “ROBBIE” ROBERTSON**

Re-energize AIAA's involvement and role in the space community.

### Director–Elect–Young Professionals Group

**ASHLEE YOUNGPETERS**

Connect Young Professionals (YPs) to opportunities to get involved at local and national levels with a focus on increasing YP membership.

## Director–Aircraft Technology, Integration, and Operations Group



**Richard (Rick) Mange**  
(AIAA Associate Fellow)

AIAA has been a passion and an important part of my professional development for over 25 years. Our declining membership and struggle to retain members, particularly young professionals, is my foremost concern and addressing this issue my top priority. I have acted toward this priority in my AIAA role as Deputy Director –Aircraft Technology, Integration, and Operations (ATIO) Group and in my position as Chief Engineer of the F-35 program. My primary focus as Director, ATIO, is to attract and retain early career professionals to our group and our Institute. If not intentional in this effort, we will fail. I have a plan and I will be intentional.

We must clearly communicate to members and potential members the value proposition AIAA has to offer; particularly to young professionals to whom AIAA's professional development activities can be of great value. We must also clearly communicate to decision makers in government and industry the value proposition of enabling and encouraging young professionals to join AIAA and actively participate. Finally, we need to continue to enhance our forums, to improve our members' experiences, and attract new members. My experience working in and out of AIAA in conjunction with academia, industry, and government puts me in a unique position to help in this regard.

### BIOGRAPHY

B.S., M.S., and Ph.D. in Aerospace Engineering from the University of Illinois at Urbana-Champaign (UIUC). 33-year career in the aerospace industry including 11 years at McDonnell Douglas and 22 years at Lockheed Martin (LM). Technical background focused on high-performance fighter aircraft programs, including aerodynamics, flight mechanics, stability & control, and systems Engineering. Served 8 years as the STOVL Aerodynamics Lead on the F-35 Joint Strike Fighter Program, 3 years as the Ship Captain for the first F-35 STOVL aircraft, and 5 years as a Program Manager within the F-35 Low Rate Initial Production Program. Currently serve as the F-35 Chief Engineer, responsible for ensuring the safety, airworthiness, and technical integrity of all F-35 Engineering products.

### AIAA ACTIVITIES AND HONORS

Active Member since 1994; Associate Fellow (2002); Currently Deputy Director for ATIO Group. Previously served as ATIO Deputy Director for Forum Coordination (2015–2018); 2018 AVIATION Forum Organizing Committee, Lockheed Martin Concept to Cockpit Coordinator (2017–2018); 2017 AVIATION Forum Co-Technical Chair (2016–2017); 2016 AVIATION Forum Deputy Technical Chair/ ATIO Conference Technical Chair (2015–2016); V/STOL Aircraft Systems Technical Committee Chair (2013–2015); V/STOL Aircraft Systems Technical Committee Member (2001–present); Served in a variety of positions including International Powered Lift Conference and V/STOL Short course Organizing Committees during my 18-year tenure on the V/STOL Aircraft Systems TC.

### OTHER ACTIVITIES AND HONORS

Outstanding Recent Alumnus – UIUC, Department of Aerospace Engineering (AE) (2007); Alumni Advisory Board Member – UIUC, Department of AE (2012–present); Aero Star Awards – Lockheed Martin Aeronautics Company (2003, 2009, 2018); Nova Awards (LM's highest honor) (2009, 2018).

## Director–Aircraft Technology, Integration, and Operations Group



**Richard A. Wahls**  
(AIAA Fellow)

AIAA's Aircraft Technology, Integration and Operations Group (ATIOG) is uniquely positioned to inform strategic direction and develop technical content, enabling the aviation community to adapt and further expand capabilities, knowledge, and skills in aircraft and airspace systems design and integration. As Director, I will work toward these goals by proactively addressing emerging societal, technical, and workforce trends affecting our profession. I will draw on my NASA and AIAA leadership experiences bringing people and organizations together at local, national, and international levels for mutual benefit. I have worked successfully throughout AIAA experiencing firsthand the quality and dedication of our members and staff working together to advance our profession.

As Director, I will provide opportunities for our members to share their passion and expertise to make a difference. Together we will ensure the growth and relevance of our aviation-oriented forums as we share the latest technical advances, challenges, and community-wide directions. We will provide opportunities to connect and share experiences across generations from students to retirees. We will develop and host relevant, value-added international technical workshops co-located with our aviation-related forums. We will ensure a strong, competitive recognition program to reward excellence and highlight accomplishments that inspire the current and future workforce. Together we will shape the future of aerospace.

### BIOGRAPHY

NASA Langley Research Center (1991–present) leader and researcher, multidisciplinary fundamental and integrated systems research of advanced transport aircraft and applied research and development of tools, technologies, and concepts for subsonic through hypersonic aircraft: senior strategy and technical advisor to Advanced Air Vehicles Program Director (NASA Headquarters, 2014–present), senior technical and strategy advisor to Subsonic Fixed Wing Project Manager (2007–2014), planning lead and chief technologist for Environmentally Responsibility Aviation Project (2008–2009), Assistant Head of Configuration Aerodynamics Branch (1997–2011), aerodynamics lead and researcher in multiple national programs (1991–2007); ViGYAN: Research Engineer (1989–1991); author/coauthor of 76 publications; North Carolina State University (NCSSU): B.S. (1984), M.S. (1986), Ph.D. (1989), Aerospace Engineering.

### AIAA ACTIVITIES AND HONORS

Fellow (2014); member since 1981; Deputy Director, ATIOG (2014–present); International Cooperation Award (2017); Sustained Service Award (2017); Forums Advisory Committee (2018–present); Emerging Technologies Committee (2018–present); National/Council Nominating Committee (2016–2018); AVIATION Forum General Chair (2015), AVIATION Forum Integration Chair (2014); Applied Aerodynamics Conference Technical Chair, Aerospace Sciences Meeting (ASM) (2003); Green Engineering Technical Chair, Joint Propulsion Conference (2012, 2013), ASM (2013, 2014); Applied Aerodynamics TC (1999–2003, 2012–2019); Green Engineering Program/IOC (2011–present); Certification/Qualification by Analysis Community of Interest (2017–present); Drag Prediction Workshop Organizing Committee (2000–present); Fluid Dynamics TC (1991–1994); Hampton Roads Section Council (2007–2010, 2013–2016).

### OTHER ACTIVITIES AND HONORS

Royal Aeronautical Society: Fellow (2018), Aerodynamics Conference organizing committee (2019–present); NASA agency-level medals: Exceptional Achievement (2018), Outstanding Leadership (2014, 2011), Exceptional Service (2006); International Civil Aviation Organization: Independent Expert Integrated Technology Goals Review Panel (2016–2019); SAE: Business/Economics TC (2009–2019); NCSSU Mechanical and Aerospace Engineering Alumni Hall of Fame (2017), Advisory Board (2018–present).

## Director–Business and Management Group



**Les Lake**  
(AIAA Senior Member)

Aerospace is the passion, foundation, and motivation that fuel my professional career. Since beginning my career in 1981, I have been blessed with a very successful and diversified professional career, serving a variety of space programs in different roles.

AIAA has opened new chapters of my career, offering the opportunity to serve the industry in a more meaningful way that benefits a larger spectrum of the industry. Over the past few years I have learned that serving on the AIAA leadership team is more than just advancing personnel growth, it's about advancing and promoting the profession and the industry itself.

### BIOGRAPHY

Presently serving as the Market Leader for RS&H Aerospace Practice, responsible for development of new business and strategic solutions for the firm. Working with both the federal and commercial sectors of the industry, established collaboration with industry leaders to develop innovative and effective solutions within our rapidly changing market. Earlier career positions included Program Manager and Principal Investigator for Raytheon, working across multiple NASA centers to develop strategic solutions and innovations in NASA's Constellation/SLS and Commercial Crew programs. Prior to this position, served as a Site Test Conductor for Lockheed Martin on the Shuttle Program. Executed test operations duties associated with the preparation, assembly, test, launch, and recovery/SCA operations at Kennedy Space Center (KSC) and Edwards AFB for more than 100 missions. My professional career began as a Ground Support Engineer at KSC responsible for design and sustainment of various shuttle program equipment for Orbiter, External Tank, and Solid Rocket Booster elements. Received a B.S. in Aerospace Operations, and a M.S. in Aerospace Technical Management from Embry-Riddle Aeronautical University.

### AIAA ACTIVITIES AND HONORS

AIAA Senior Member (2019); active member since 2014; Director, IOD Business & Management Group (BMG); Council of Directors; previous Deputy Director of the BMG; IOD Liaison to the Council Innovation and Initiatives Committee (CIIC); Economics Technical Committee

### OTHER ACTIVITIES AND HONORS

ASTM F47 Executive Committee for Commercial Space; ASTM F47 Propellant Standards Committee; Commercial Spaceports Committee for the Commercial Spaceflight Federation; Co-Chair – Spaceport Infrastructure Funding Group, Global Spaceport Alliance; past president - NMA Florida Spaceport Leadership Association at KSC.

## Director–Region I



**Steven X. S. Bauer**  
(AIAA Associate Fellow)

I have had the privilege of serving AIAA in various capacities, locally, regionally and nationally, and I ask for your continued support for the AIAA Region I Director position. I would like to continue visiting as many sections and student branches as possible to increase the collaboration and promote discussion and connections. I would also promote STEM activities in the surrounding communities to increase membership involvement.

In addition to improved communication between sections and student branches, I will continue to work to enhance communication with industry, academia, government, and other professional organizations located in Region I. AIAA membership enhances management and leadership skills and promotes technical

collaborations that benefit the aerospace community.

### BIOGRAPHY

I have over 36 years of computational fluid dynamics (CFD) and experimental (wind-tunnel testing) research experience. I began my career with the design and characterization of hypersonic waveriders followed by supersonic research. I was the aerodynamic lead for the Ares I-X Flight Test Vehicle followed by the chair of the Aero Panel for Ares. I am currently the Chief Engineer for Aerosciences, Research Directorate, NASA Langley Research Center. B.S. in Aerospace/Aeronautical Engineering from the University of Missouri Rolla and an M.S. in Fluid Mechanics and Thermal Sciences from the George Washington University.

### AIAA ACTIVITIES AND HONORS

Chair, Vice Chair, Secretary, RAC Representative, Council Member (10 years), Membership Committee Chair (3 years), Programs Chair, and member of various other committees since 1986 in the Hampton Roads Section. For Region I, I have been a member of the Associate Fellow Committee (AFC) for over a decade and the Region I AFC chair for 3 years. Former member of the Applied Aerodynamics TC (2003–2006) and the secretary of the Space Transportation TC (2014–2018) and a member of the Space Exploration Integration and Outreach Committee since 2011. Recipient of the AIAA National (2001), Region I (2000), and Hampton Roads Section (2000) Engineer of the Year Awards. AIAA Membership Award, Second Place, Very Large Category Membership Chair for Hampton Roads Section (2003). Currently the Region I Director (Member of READ and the Council of Directors).

### OTHER ACTIVITIES AND HONORS

Authored over 75 publications, 3 Aerodynamic data books (used for flight control system of Ares I-X, Ares, and SLS), and 7 patents issued (and 36 invention disclosures filed). Have received the Hornet Certificate of Appreciation (Boeing), Certificate of Achievement (Dept. of the Navy), Boeing/Navy/NASA F/A-18E/F Super Hornet Collier Award. Over 70 Certificates of Appreciation for Science Fair Judging at School, Division, Region, and State Science Fairs. Co-coached FLL (First Lego League) teams since 2007. Tutored in science and math and participated in Engineers Week activities since the 1980s. From NASA, Exceptional Service Medal, Exceptional Engineering Achievement Medal, NASA Engineer of the Year (2003), numerous Group Achievement Awards, Certificates of Recognition, Performance Awards, and Richard T. Whitcombe Aerospace Technology Transfer Award.

## Director-Region II



**Kurt Polzin**  
(AIAA Associate Fellow)

My goal has not changed since I was first elected to this position 3 years ago. I still believe that if AIAA is to grow and thrive, we at the regional and section levels must improve the value proposition for our members and prospective members by increasing professional opportunities and benefits associated with being an AIAA member.

Over the past three years, in addition to working through the national restructuring of the Institute, I personally visited every section in Region II at least once and met with student and faculty members at their universities to better understand the widely-varying issues and situations encountered by different sections and student branches in the Southeastern Region. One of the many things we've done to address the issues

of membership and member involvement was to spend time identifying aerospace institutions and entities in the region. With this list in-hand, we will in the coming months and years bring the story and value proposition of AIAA participation to all potential partners that have interest in a healthy, thriving aerospace industry and community. We shall work in my second term to make the case that involvement in AIAA can help create growing, better connected, more beneficial and responsive aerospace communities, and that this significantly improves the membership value proposition by increasing opportunities and benefits for individual members and their organizations.

### BIOGRAPHY

B.S. (1999) in Aeronautical and Astronautical Engineering, Ohio State University. M.A. (2001) and Ph.D. (2006) in Mechanical and Aerospace Engineering, Princeton University. Presently Space Systems Team Lead of NASA Marshall Space Flight Center's (MSFC) Advanced Concept Office. Previously a Propulsion Research Engineer at NASA MSFC. Adjunct Professor of Physics and Mechanical and Aerospace Engineering, University of Alabama in Huntsville (2007). Author or co-author of over 100 technical publications.

### AIAA ACTIVITIES AND HONORS

Associate Fellow. Life Member. Region II Director (2017–2019). Greater Huntsville Section, Region II; YP Core Group (2008–2010), Honors and Awards Director (2013–2014), Section Vice Chair (2014–2015), Section Chair (2015–2016). AIAA Outstanding Section, Communications, Membership, Public Policy, Young Professional Activities [first], Career and Professional Development [second], STEM K–12 Outreach [third] (as Section Chair, 2016). Greater Huntsville Section's Martin Schilling Award (2016) and Earl Pearce Professional of the Year (2018). Electric Propulsion Technical Committee (2006–present). 46th AIAA/ASME/SAE/ASEE Joint Propulsion Conference Session Organizer (2010).

### OTHER ACTIVITIES AND HONORS

IEEE Senior Member. Joint Army-Navy-NASA-Air Force (JANNAF) Spacecraft Propulsion Subcommittee mission area co-chair. International Electric Propulsion Conference (IEPC) technical chair (2013), technical committee (2015, 2017). IEEE Transactions on Plasma Science guest editor (2015). NASA Awards for Group Achievement (2005, 2013) and Special Service (2008). National Defense Science and Engineering Graduate Fellow (2001–2004). Tau Beta Pi (1998). Sigma Gamma Tau (1997). Eagle Scout (1989).

## Director–Region VII



**Cees Bil**  
(AIAA Associate Fellow)

Increase awareness of AIAA and its value to members in Region VII (international). Create alliances with other societies where all can benefit through collaboration or complimentary activities. Focus on students and young professionals who are seeking professional development, opportunities for networking, career advice, etc., and ensure there is a sense of belonging to the AIAA community and lifelong engagement.

### BIOGRAPHY

Currently at RMIT University as a Professor (since 2018); Associate Professor (1998); Senior Lecturer (1995). Worked at Delft University of Technology, The Netherlands as a Research Assistant (1982) and an Assistant Professor (1988). Was a Research Associate at Lockheed (Marietta, USA; 1981). I have a M.Sc. (Aero), Ph.D. (Aero) and GradDip (Education) from Delft University of Technology in the Netherlands. Joined RMIT University in Melbourne, Australia, in 1995.

My main passion is aerospace systems design and teaching students the art and science of creating new products that serve the community in a sustainable way. My research interests are multidisciplinary design optimization, air traffic flow optimization, unmanned systems and product life-cycle analysis. I have been involved in many projects with industry and defence.

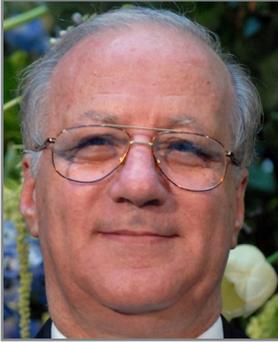
### AIAA ACTIVITIES AND HONORS

International Member, Aircraft Design Technical Committee since 2009. Deputy Director–Education, Region VII since 2010. AIAA RMIT University Student Branch Faculty Advisor since 2005. AIAA Member/Senior Member since 1986; AIAA Associate Fellow since 2012. Deputy Technical Program Co-Chair and a Technical Discipline Chair for the 2015 AVIATION Forum. 2nd Prize Design, Build and Fly Competition, RAeS/AIAA (2003); 3rd Prize AIAA Student Design Competition (2003); 3rd Prize AIAA Student Design Competition (2006); 1st AIAA Student Undergraduate Design Competition (2016); 1st AIAA Student Graduate Design Competition (2017). AIAA Special Service Citation (2009). Co-chair, AIAA Student Conference Region VII-AU (2007–2011); Co-chair, AIAA Student Conference Region VII-AU (2016–2017). Reviewer, Design, Build and Fly Competition (2016, 2018, 2019). Member, Student Activities Committee (2010–2019). AVIATION Forum Technical Program Co-Chair (Aircraft and Atmospheric Sciences Group) (2016). Discipline Technical Chair, Aircraft Design, SciTech Forum since 2015. Director–Region VII since July 2018. Member, AIAA Regional Engagement and Activities Division (READ) since July 2018. Member of the Council of Directors since July 2018.

### OTHER ACTIVITIES AND HONORS

Member of Council RAeS Australian Division; Member of RAeS Melbourne Branch. President, International Society of Transdisciplinary Engineering since 2015. Member of Programme Committee – International Council of the Aeronautical Sciences (ICAS); Australian Council Member - International Council of the Aeronautical Sciences (ICAS); Chair, 28th Congress of the International Council of the Aeronautical Sciences (ICAS). Chair, Asia-Pacific International Symposium on Aerospace Technology (APISAT) (2011, 2015, 2019).

## Director–Region VII



**Essam E. Khalil**  
(AIAA Fellow)

I enjoyed serving as Region VII Deputy Director from 2004 to 2016, and have been an active member of the Thermophysics and Terrestrial Energy Technical Committees since 2003. I joined AIAA in 1988, became an Associate Fellow in 1990, and was elected Fellow in 2008. I have made sustained efforts to contribute through active participation at conferences and through mutually beneficial technical exchanges with researchers and engineers.

Aerospace is a global industry. AIAA products and services provide significant benefit to members and to the international aerospace market, especially in Europe and Asia. My plan will focus on better awareness of the quality technical events offered by AIAA, foster enhanced technical exchanges and collaborations to benefit

the international aerospace community, and promote further international activities by AIAA. Specifically, my focus will be to:

- Foster international collaboration.
- Promote the products and services offered by AIAA in the international market.
- Promote international student and aerospace community membership in AIAA.
- Further enhance networking opportunities to strengthen the aerospace community internationally.
- Expand the creation of local international sections and student branches of AIAA.
- Promote AIAA to strengthen its position as the premier aerospace professional organization internationally, as it faces new challenges in the dynamic aerospace environment.
- Ensure quality and relevance of the services provided by AIAA for international members, students, and the aerospace community.
- Expand the number international workshops to benefit students, young professionals, and the aerospace community.

### BIOGRAPHY

B.S. (1971) and M.S. (1973), Mechanical Engineering, Cairo University; DIC (1976) and Ph.D. (1977), Imperial College, London University, U.K. Currently Professor of Mechanical Engineering, Cairo University, since June 1988. Over 48 years of experience in design and simulation of combustion chambers for terrestrial and aerospace applications. Published over 945 papers in journals and conference proceedings on combustion and energy. Developed and delivered advanced courses on heat transfer, gas turbine combustors, and terrestrial energy.

### AIAA ACTIVITIES AND HONORS

Region VII Deputy Director (2004–2016), focusing on increasing AIAA international cooperation with peer societies, academia, and aerospace professionals. Member, Thermophysics TC (2000–present); Member, Terrestrial Energy TC (2003–2008; 2011–present); and Member of the Steering Committee, International Energy Conversion Conference (IECEC). Technical Chair, IECEC 2009. Member, International Activities Committee since 2009. Energy Systems Award (2010), Sustained Service Award (2011). Member of Green Engineering Program Committee. Judge for AIAA Student Competitions.

### OTHER ACTIVITIES AND HONORS

Fellow ASME, Convener, ISO TC205WG2 on Energy Efficiency; Member, ISO TC163, CO Convener, ISO TC163 WG4; Fellow, ASHRAE; Distinguished Lecturer, ASHRAE; ASHRAE: Distinguished Services Award, ASHRAE (2010) and Sub Region A Chair (2011–2014). ASHRAE Exceptional Services Award (2016), ASHRAE Director at Large (2016–2019). Outstanding Achievement in Science Award, Cairo University (2005, 2019). ASME George Westinghouse Award recipient (2009) and ASME James Harry Potter Award (2012).

## Director-Space and Missiles Group



**Cristian N. Calugarita**  
(AIAA Senior Member)

AIAA is at the forefront of the aerospace science and engineering helm, as the premier national and international organization, promoting the interests and arts and crafts of its multi-talented membership, and the cutting-edge technology they command.

As Director of the Space and Missiles Group my priority will be to implement my “Retain and Grow Program,” which will both preserve the existing membership and also enlarge the membership base by offering attractive programs designed to respond to the membership’s needs and interests and increase member participation through effective and proactive communication channels, so everyone’s voice will be heard, creating the feeling of being part of the same genuine, transparent professional family.

My core goal for promoting the Space and Missiles Group is to augment awareness of the resourceful value the group has to offer, thus significantly growing the number of sponsors and participants from the universities and the student branches to the industry’s distinguished fellows and the leading corporations in the space and missiles technologies. I will develop this vital awareness from the grassroots level all the way to lobbying the Congress for creating and funding new programs to the benefit of our membership.

### BIOGRAPHY

MSME and alumni of UCLA and Cal State Dominguez Hills in specialized professional management programs. Led important programs such as Airborne Laser (high energy chemical oxygen iodine laser used to shoot down theater ballistic missiles in their boost phase), Trident II D5 (submarine-launched ballistic nuclear missiles), F22/Raptor and F35/Joint Strike Fighter military fighter aircrafts and many others. Lobbied Congress for the expansion of NATO in Eastern Europe, co-authoring the “Declaration of the Ten Countries Aspiring to NATO Ascension.” Designed the turboexpander used to testing the components of the missile ballistic shield of the Strategic Defense Initiative Program. Columnist, World Tech News of the “Science and Technology” Magazine (Europe).

### AIAA ACTIVITIES AND HONORS

Senior Member of AIAA, active in the Los Angeles Section. Participated in multiple programs, including the Mission to Mars book launch and banquet offered by AIAA in Los Angeles in honor of, and with the participation of, celebrated scientist and astronaut Buzz Aldrin. Co-chairman of the 10th Annual International Conference “Reinventing Space”(2013), Marina del Rey, California, Session III, Payloads, with the participation of Lockheed Martin, Harris Corp, Earth Observatory Group, SSBV Aerospace and Technology Group (Holland), and others.

### OTHER ACTIVITIES AND HONORS

Senior member of the American Society of Mechanical Engineers (28 years), serving as Chair of ASME Los Angeles Section (1997) and Director of the Fluid Machinery Division LA (1992–1998), Chair of ASME Region IX Special Projects, Government Relations Chairman, Director Heat Transfer Division, Los Angeles, Founder of the ASME Management Chapter in Los Angeles. Published tens of technical essays in the Mechanical Engineering publications in Los Angeles. Co-organized the International Congress of Mechanical Engineers (San Francisco, 1996) and the Regional ASME Conference (Honolulu, 1997). Recipient of the Honeywell Aerospace Star Award (2010) and Bronze Award (2007), as well as numerous engineering leadership awards from ASME.

## Director–Space and Missiles Group



**William (Bill) Deininger**  
(AIAA Associate Fellow)

Participating in AIAA has helped me build my career, enabled substantial professional development, and led to many lasting relationships around the world. If elected, as Director–Space and Missiles Group (SMG), I would like to ensure that AIAA and our technical committees (TC) continue to best serve our members by providing opportunities for technical collaboration and professional growth so new generations in new member areas can benefit as I have.

I have great respect for the diversity of work covered by the SMG TCs and will work to ensure the TCs are in good health, fulfilling their charters, have solid forums for highlighting their contributions, and work hard at attracting new members from the diverse and growing aerospace community.

AIAA serves many constituencies across the aerospace spectrum including students and scientific, technical, and management professionals in government, academia, and industry throughout the world. Aeronautics and astronautics, the core of AIAA, covers many areas, both technical and managerial. Real progress comes from cross-disciplinary teams working across boundaries. Interdisciplinary approaches are required to grow and diversify AIAA membership and leadership including within the SMG TCs. AIAA forums offer cross-disciplinary engagements for growth. I'll work with the SMG TCs to take advantage of these opportunities to highlight TC contributions and grow membership in new areas.

I would be grateful for the opportunity to work toward these goals.

### BIOGRAPHY

Senior Staff Consultant in Mission Systems Engineering at Ball Aerospace. I have broad experience in aerospace and spacecraft systems engineering and mission systems design (NASA, defense, international, and commercial customers). Started at Ball in 1998 and currently serve as the Ball Chief Engineer on the small spacecraft-based NASA SMEX Mission “Imaging X-ray Polarimetry Explorer” (IXPE). Previously, I served as the Project System Engineer for the small spacecraft-based NASA Green Propellant Infusion Mission (GPIM). Prior to Ball, worked at FiatAvio-BPD (now AVIO) for 9 years in Italy, small satellite system engineering and Manager of electric propulsion laboratory. NASA JPL, 8 years, electric propulsion group. Education includes: “Dottorato di Ricerca” (Ph.D.), aerospace engineering, Università degli Studi di Pisa, Pisa, Italy (1996); MS, physics, Colorado State University (1982); BS, physics, SUNY, Cortland, NY.

### AIAA ACTIVITIES AND HONORS

AIAA, (1985–present); Associate Fellow (1995); Senior Member (1991); AIAA Rocky Mountain Section Engineer of the Year (2017); Member, Electric Propulsion Technical Committee (1988–1994) (Member, Electrothermal Propulsion and Standards Sub-Committees); Peer reviewer for Region I 2020 AIAA Associate Fellows Committee (AFC), Region V (2019); Technical Reviewer, *Journal of Spacecraft and Rockets* and *Journal of Propulsion and Power*; Extensive AIAA conference leadership roles and participation.

### OTHER ACTIVITIES AND HONORS

SPRSA, Rideshare users group member (2017–present); ERPS (2000–present); IEEE (1997–present), Senior Member (2015); NASA Group Achievement Award, “IXPE Concept Study Team”, NASA (June 2017); NASA Group Achievement Award, “Kepler Spacecraft Team”, NASA (May 2010); Served on Technical and Program Committees, as Conference General Chair, as Working Group Chair, and as Conference Session Chair for numerous conferences and congresses, both for AIAA and other organizations.

## Director–Space and Missiles Group



**Lawrence “Robbie” Robertson**  
(AIAA Associate Fellow)

I’m devoted to bringing the “astronautics” back into AIAA. The space and missile domain has changed considerably over the last 10 years and AIAA’s technical activities area needs to be re-energized to reflect those changes. I will work to strengthen our current Technical Activities Division while reaching out to the AIAA membership to create new groups that reflect these new opportunities. I will also take the output from AIAA’s examination of the Technical Activities Area to determine how to reach out to our young professionals to meet their needs. AIAA will always be a place where professionals come together to share ideas, publish conference and journal articles and recognize outstanding contributions. Together, we need to take the best “lessons learned” from other technical areas, while looking for opportunities in new areas to shape the future of aerospace.

To accomplish these goals, I will utilize my many successful experiences within the AIAA community. I successfully organized the 2014 AIAA SciTech Forum through diligent efforts organizing over 1500+ paper sessions via close coordination with the technical communities. I was an Aerospace Sciences Deputy Director and did a number of quick studies to identify issues and create innovative solutions. I also organized the 2017 Forum 360 sessions for the AIAA SciTech Forum. Finally, I have published numerous journal papers, worked as both a member and a chair within several technical committees, and have been a tireless supporter of AIAA.

### BIOGRAPHY

Over 25+ years of experience in space systems in the military, civil, and commercial space sections. Experience includes: NASA Marshall contractor on innovative launch vehicle concepts; consultant to the Teledesic Corporation on a commercial SATCOM venture; and U.S. Air Force Program Manager for efforts in Missile Warning, Ballistic Missile Technology, SATCOM, Space Superiority, and GPS. Education includes a B.S., M.S., and Ph.D., Aerospace Engineering Sciences, University of Colorado at Boulder (1990, 1992, 1994). Also completed USAF War College by correspondence. Currently an AIAA Associate Fellow and a Senior Scientist, Lead Space Experimentalist for AFRL, which is a general-officer-level civilian position.

### AIAA ACTIVITIES AND HONORS

Deputy Director–Aerospace Science Group (2014–2017), Chair, Forum 360, AIAA SciTech Forum (2017); Chair, Aerospace Sciences Area, 2014 AIAA SciTech Forum (organized 1500+ papers); Member, Guidance, Navigation & Control Technical Committee (2000–2006) and Chair (2004–2006), Member, Structural Dynamics Technical Committee (2009–2012). Numerous other session chair, conference, and AIAA special working group positions.

### OTHER ACTIVITIES AND HONORS

AFRL Fellow (2018), Rotary National Award for Space Achievement (RNASA, Mid-Career, 2018). AF Scientific Advisory Board (Summer 2012), Air Force Science & Engineering Award (2005; note: AF Level Award). Many other local awards. Authored or co-authored 30+ conference papers and 8 peer-reviewed articles. One patent.

## Director-Elect-Young Professionals Group



**Ashlee Youngpeters**  
(AIAA Member)

Having been a member of the Young Professionals (YP) Group (formerly the Young Professional Committee) for a couple years now, I have been given the opportunity to participate in two of our three committees, so I am well versed in what we're trying to accomplish and I seek to continue and grow those efforts. Two projects that I am particularly excited about are more and more opportunities for YPs to participate in larger efforts around shaping the future of AIAA and its forums and increasing the number of university students who transition to professional memberships.

I first started as a member of the Membership and Awards Committee, participating in choosing awardees for various YP awards and creating an awards database. From there I helped to organize a couple of successful Rising Leaders in Aerospace (RLA) events at the 2018 AIAA Propulsion and Energy Forum and was asked to chair the Professional Development and Networking Committee earlier this year because of my past RLA involvement. As Committee Chair I hold regular meetings, communicate opportunities, and oversee the planning and execution of RLA events at the four forums. The YPG Director-Elect position is a natural step forward toward increasing responsibility for me.

### BIOGRAPHY

Currently with Pratt & Whitney, Supplier Quality Assurance Representative supporting first article inspections, audits, and quality escapes for the SW Ohio/Kentucky/Indiana supply base (2019–present). Previously with QuEST Global, Delivery Assurance Field Representative Team Lead (2017–2019) and Aero-Thermal Engineer (2013–2017). Bachelors in Aerospace Engineering, University of Cincinnati (2013).

### AIAA ACTIVITIES AND HONORS

Committee Chair, Professional Development and Networking Committee (2019–present). Member, Young Professionals Committee/Group (2017–present). College Outreach Chair, Dayton-Cincinnati Section (2016–present).

### OTHER ACTIVITIES AND HONORS

Communications Chair, University of Cincinnati (UC) College of Engineering and Applied Science (CEAS) Alumni Board (2016–present). Liaison to the Student Advisory Board, UC CEAS Aerospace Industrial Advisory Board (2018–present).