Candidates for office 2020

AIAA St. Louis Section

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- **Chair:** Establishes goals for the year, oversees section activities, hosts monthly Council meetings, leads the Section and keeps it on track within the bounds of its budget, coordinates with AIAA National, and prepares the Annual Report.
- **Vice-Chair:** Stands in for the Chair when necessary, leads special projects within the Section.
- **Treasurer:** Helps prepare the budgets, monitors budget performance, maintains the financial records of the Section, prepares the end-of-year audit, ensures Section Officers and Council properly authorize all expenditures, and maintains the sections bank account(s).
- **Secretary:** Prepares Council meeting agendas, maintains the Council meeting minutes and list of Action Items, keeps the Section permanent records.
- **Region V Representative:** Represents the Section at all meetings of the Region V Advisory Committee (RAC), brings concerns of the Section to the RAC, and relays items of importance from the RAC to the Section leadership.
- **Advisors (4 Total):** Provides continuity of purpose and effort from year to year as Council membership changes, acts as historians for past Section decisions and actions, helps focus Section activities in concert with the thrusts of the Institute, and leads special focus areas assigned by the Section Chair. To this end, the nominee is expected to have had past direct participation in Section activities in general, and the Council in particular.

Note that the Section Policies and Procedures were recently changed to allow Advisors to serve two-year terms, with two of the four Advisors being elected each year. Previously all four Advisors were elected annually. Accordingly, two of the Advisor positions this year are for one-year terms and two positions are for two-year terms.
• Name of Candidate:  Mark E. Kammeyer

• Officer Position:  Chair

• Brief Bio:

I am an Associate Technical Fellow with The Boeing Company, where I work in the Aero/Noise/Propulsion laboratories of the Test & Evaluation organization. In addition to being on the staff of the Polysonic Wind Tunnel, I support wind-tunnel test programs at other tunnels across the company and in outside facilities. My interests include wind-tunnel data quality and uncertainty analysis, statistical methods, force-measurement instrumentation, and test methods development. Before moving to St. Louis in 1996, I worked for 10 years at the US Navy’s Hypervelocity Wind Tunnel in Maryland. In my 30-year career I have tested in Boeing, NASA, Air Force, Navy, and international facilities covering the low-speed, transonic, supersonic, and hypersonic flow regimes.

I received a B.S. degree in Aerospace Engineering from the University of Oklahoma in 1984, and an M.S. in Aerospace Engineering from the University of Maryland in 1986. I earned my Ph.D. in Mechanical Engineering from The Catholic University of America in 1996; my dissertation studied the correlation between flowfield structures and wall-pressure fluctuations in turbulent boundary layers.

• Candidate Statement:

I have been a member of AIAA my entire career. Most of my involvement has been at the national level and the contacts I made across the industry have been invaluable, both professionally and personally. I only began attending St. Louis section events four or five years ago, and I quickly discovered that I had been missing another dimension of what AIAA has to offer, and that is interaction with people who love aerospace in my own community. When the opportunity came last year to run for Vice Chair, I realized that it was time for me to contribute to the organization that has contributed so much to me. We have an active and highly successful chapter, I am glad to be a part of it, and I will strive to build on that tradition as Chair.

• AIAA Specific Experience / Participation / Membership

I am an AIAA Associate Fellow. I joined AIAA as a sophomore in 1982 and have been a member ever since. For 20 years I have been a member of either the Ground Testing Technical Committee or one of its working groups. During that time I have chaired sessions at conferences and helped publish one AIAA Standard and one Guide on uncertainty analysis, and four Recommended Practices related to wind-tunnel testing. I am presently the Vice Chair of the St. Louis Section.
Name of Candidate:  Dr. Sanjay Jayaram

Officer Position:  Vice Chair

Brief Bio: (Career, Professional Interests, Education, etc.)

Career: Associate Professor and Program Coordinator of Aerospace Engineering  
Parks College of Engineering, Aviation and Technology  
Saint Louis University

Aerodynamics and Space Systems Design and Development

Education:  
BS in Mechanical Engineering, India, 1994  
MS in Mechanical Engineering, University of Central Florida, 1998  
Ph.D in Mechanical Engineering, University of Central Florida, 2004

Candidate Statement: (Why do you want to serve in this role?)

I have been in leadership position in aerospace engineering field, as Program Coordinator and having served as  
secretary, vice chair and chair of ASEE Aerospace Division.  
I believe in the mission of AIAA and I have pursued my career I areas that are close to AIAA technical divisions.  
I believe it is time that I give back to this organization which has provided me with so much support over the  
years.

AIAA Specific Experience / Participation / Membership

Faculty Advisor for AIAA Student Organization at Parks College for three years

Faculty Advisor for the Rocket Propulsion Lab at Parks College

Reviewer for AIAA SciTech Conference

Currently Associate Member of AIAA
American Institute of Aeronautics and Astronautics
St. Louis Section Officer Nomination Form – 2020-2021 Council year

- **Name of Candidate:**
  Patrick Alexander Padilla

- **Officer Position:** Secretary

- **Brief Bio: (Career, Professional Interests, Education, etc.)**

  **Education:**
  B.S. Mechanical Engineering
  Florida International University 2019

  **Career:**
  Structural Analysis Engineer, Boeing 2020-Present
  Test Engineering Intern, GE Appliances 2018
  Product Design Engineer, AdMobilize 2017

  **Professional Interests:**
  Aeronautics, Vehicle Design, Structural Design, Unmanned Systems, Propulsion

- **Candidate Statement: (Why do you want to serve in this role?)**

  During my time in college, I had the opportunity to participate in several competitions through my university’s AIAA Student Chapter. I enjoyed building rockets, making RC planes, hosting educational outreach events, and ultimately serving as our chief engineer to manage our team’s entry to the 2019 SAE Aero Design Competition. After my competition season and graduation, I continued to mentor the next generation of students in our chapter and I have been delighted to watch them design, build, and fly their own plane at their competition this past March.

  As I enter the professional world, I would like to continue to pursue the leadership opportunities I began in college. I attended a couple of the St. Louis Section’s meetings and already have networked with professors from local universities and technical experts across Boeing. I believe that serving as the Secretary for the St. Louis AIAA Section will give me the opportunity to build leadership experiences, network with the regional and national aerospace communities, as well as make key connections to last a lifetime.

- **AIAA Specific Experience / Participation / Membership**

  AIAA Member 935538 (2018 – Present)
  Florida International University AIAA Student Chapter Member (2017 – 2019)
  FIU AIAA Student Chapter Chief Engineer (2018-2019)
  Attended 2018 AIAA Space Forum
• Name of Candidate: Abigail Sevier

• Officer Position: Secretary

• Brief Bio: (Career, Professional Interests, Education, etc.)

I have worked at Boeing Research and Technology for the past 2.5 years on the Integrated Vehicle Technology Demo Team. I’ve served primarily as a systems engineer on small, electric UAVs but I’ve also been lucky enough to work on some aerodynamic performance analysis. I attended Case Western Reserve University in Cleveland, OH for school for both my Masters and Bachelors in Aerospace Engineering. For grad school, I conducted research at NASA Glenn Research Center in their 15 x 15 cm supersonic wind tunnel as a precursory study for implementing magnetic suspension. My long term professional interests are to work in a chief engineer role focusing on sustainable and low emission technology and platforms.

• Candidate Statement: (Why do you want to serve in this role?)

I would like to serve as secretary because I believe it would help me take a more active role in section meetings and the council. I believe I’d be a good fit for this role since in my current job I often facilitate meetings, maintain an action item log and prepare and compile meeting notes and other documentation.

• AIAA Specific Experience / Participation / Membership

I’ve been a member of AIAA since 2015 where I started as a graduate student. I joined the St. Louis section in 2017 and began serving as newsletter chair in December.
Name of Candidate: Colin Thiele

Officer Position: Secretary

Brief Bio: (Career, Professional Interests, Education, etc.)

I am currently a Senior at Saint Louis University, graduating in May of 2020 with a Bachelor of Science in Aerospace Engineering. Upon graduation I will begin working as a Flight Test Engineer with The Boeing Company in St. Louis, on the new T-7A Advanced Pilot Trainer. This past summer I was a Flight Test Engineer Intern with Boeing in St. Louis, where I worked on the T-X aircraft. Last summer I was an Intern with the Boeing Aerodynamics, Stability and Control team, and in previous summers I have worked as an Assistant Manager and Lifeguard at the Platteville Family Aquatic Center.

At Saint Louis University I serve as the Vice President and Event Coordinator for the Parks College AIAA Student Branch. During the school year, I am an Intramural Administrator where I supervise, teach, lead, and work with intramural officials. I also officiate basketball for the NCAA as an independent contractor in multiple Division III conferences and in the Great Lakes Valley and Mid-America Intercollegiate Athletics Association Division II conferences.

I have always gazed skyward at airplanes, and in my free time, I read and research the latest on commercial and military aircraft. I enjoy traveling, and I am an avid points and miles enthusiast.

Candidate Statement: (Why do you want to serve in this role?)

I would be honored to serve in the role of secretary due to the valuable role it plays to the section and Council and to be able to continuously contribute to the St. Louis Section’s success. I want to continue to give back to the local AIAA section, while also building on my previous leadership and participation roles within the St. Louis AIAA area, and I see this role as a great way to be able to be involved. I also see this position as an effective way to continue to build key leadership skills, such as maximizing attention to detail, organizational skills, and to continue to meet aviation engineering professionals and those interested in the field, including building lasting friendships. I would be honored to be chosen to serve in this role.

AIAA Specific Experience / Participation / Membership

St. Louis Section History Officer 2018 - Present

- Investigate historical aviation milestones each month and publish in the monthly section newsletter
- Engaged with the Greater St. Louis Air and Space Museum for their co-sponsorship in a dinner event on the history of airpower in the First World War

Parks College Executive Board Vice President and Event Coordinator 2018 - Present

- Run monthly chapter meetings and support the agenda and actions of the section President
- Coordinate industry speakers and workshops on campus to enable students to have success in the industry
- Organized and ran the 2018 AIAA Region V Student Paper Conference where five universities successfully attended to present research in the aerospace field
• Name of Candidate: Alec Herzog

• Officer Position: Treasurer

• Brief Bio: (Career, Professional Interests, Education, etc.)

I am a graduate of Saint Louis University’s Parks College with a BS in Aerospace Engineering. Currently, I am employed at Boeing as a Guidance, Navigation, and Controls (GNC) Engineer on the T-7A (formerly T-X) program. My previous Boeing engineering positions include Systems Engineering and GNC on the F/A-18 program. Some of my personal interests include woodworking, R/C Aircraft, photography, and outdoor activities.

• Candidate Statement: (Why do you want to serve in this role?)

Having served as the section’s treasurer for the past 18 months, I have enjoyed being able to use my time and skills to contribute to one of our organization’s key roles. Working with the chair and vice-chair to assist each committee in setting and tracking their budget has given me the opportunity to become more involved all areas of our section’s activities. I feel that serving as the Treasurer for another term will provide the section with financial consistency that will assist us in offering more events and opportunities to our section members.

• AIAA Specific Experience / Participation / Membership

I served as the section’s Secretary in the 2017-2018 term when the elected Secretary left Saint Louis for a career opportunity. I was elected as the Secretary in the 2018-2019 term but transitioned to the Treasurer late in the term due to the elected Treasurer stepping down from the role. I have been serving in the 2019-2020 term as the elected Treasurer. I have enjoyed assisting with planning and volunteering for section events since sitting on the council – and I particularly love volunteering for STEM events.
Name of Candidate: Jim Guglielmo

Officer Position: Region V Representative

Brief Bio: (Career, Professional Interests, Education, etc.)

Jim is a graduate of the University of Illinois at Urbana-Champaign (UIUC), where he received both his Bachelor of Science (1992) and Master's Degree (1996) in Aeronautical and Astronautical Engineering. While at the university, Jim co-founded the UIUC Low-Speed Airfoil Test (LSAT) program, and performed wind tunnel tests on over 60 airfoils for model airplane and wind turbine applications. Jim's Master's thesis focused on experimental airfoil drag measurement techniques at low Reynolds numbers. Jim joined the Boeing Company in 1995 as an aerodynamicist supporting X-33 Single-Stage-To-Orbit (SSTO) proposal efforts, and then multiple endeavors in the High-Lift Aerodynamics Technology Division in Southern California. Jim transferred to the St. Louis site in 1998 to become a member of the F/A-18 High-Lift Aero/Performance group where he specialized in wind tunnel testing, flight test data analysis, and 6-Degree of Freedom (6-DOF) aerodynamic database development. From 2001 to 2010, Jim held several diverse engineering positions, from leading research programs within Boeing's Survivability, Design, and Integration (SDI) organization, to serving as the Boeing Defense Systems (BDS) Flight Function Tools Lead, to Lead Aerodynamicist for the 2,000 lb JDAM-ER weapons program. From 2010 to 2015, Jim was heavily involved with Multidisciplinary Design Analysis and Optimization (MDAO) efforts within the Advanced Air Dominance organization, leading the development of the Tactical MDAO (T-MDAO) model and executing MDAO studies across multiple Phantom Works programs. In 2015, Jim transferred to BR&T, and is currently leading the MDAO efforts within the BR&T Aeromechanics Flight & Vehicle Technology organization. Jim has been married to his loving wife Karen for 23 years, and is blessed with two sons, Dominic and Vito, as well as a little beagle named Max. Jim is also a professional drumset player and percussionist, and enjoys performing across the St. Louis area.

Candidate Statement: (Why do you want to serve in this role?)

I have thoroughly enjoyed my last two years on the AIAA St. Louis Council, first as Webmaster, then Vice-Chair, and now as Chair. In my current role as Chair, I have tried to continue the high-quality programs that have been the trademark of our Section, while also looking for opportunities and areas for improvement. As an organization, I feel it is important to continue to adapt to the needs of our diverse membership, from university age students to retirees, and from academia to industry. I look forward to continuing my service to AIAA and our St. Louis Section in the role of Region V Representative, and helping our Section continue the excellent history it has already established.

AIAA Specific Experience / Participation / Membership

In the fall of 2003, Jim was honored as a recipient of the AIAA Young Professional Award. Jim served as the Chair of the AIAA Applied Aerodynamics Technical Committee (APA TC) from 2012 to 2014, was the APA TC webmaster, and the 2019 Applied Aerodynamics Conference Technical Chair. He also served as the Technical Co-Chair for the 2017 AIAA AVIATION Conference. Jim is an AIAA Associate Fellow, Liaison for the AIAA Technical Activities Division and Honors and Awards Committees, and the current Chair and Webmaster for the AIAA St. Louis Section.
Name of Candidate: Robert M. (Bob) Dowgwillo

Officer Position: Advisor One-year term

Brief Bio: (Career, Professional Interests, Education, etc.)
Bob has served as an applied aerodynamicist with McDonnell Douglas/Boeing for over 40 years. His experience and interests are wide ranging, from research, advanced design, project engineering, low speed and high speed wind tunnel testing, and flight testing. His particular professional interests include flow diagnostics, Design of Experiments, and air data systems.

Education:
B.S. in Aeronautical Engineering from Rensselaer Polytechnic Institute, 1975
M.S. in Aerospace Engineering from the University of Tennessee Space Institute, 1977
Year of graduate study at the Department of Aeronautics, Imperial College, London
Diploma in Aeronautics from the von Karman Institute of Fluid Dynamics, Belgium

Candidate Statement: (Why do you want to serve in this role?)
I have served in the St. Louis section in one capacity or another since joining McDonnell Douglas in 1979. I believe in the mission of AIAA and want to contribute to its success. I especially want to provide the opportunity for younger engineers to discover how a professional organization can help them continue learning beyond school, particularly things that they would not have nor will learn in a classroom.

AIAA Specific Experience / Participation / Membership
A member of AIAA since 1975.
Member of the St. Louis Section since 1979
Past Assistant Newsletter Editor, Treasurer, Secretary, Vice Chair, Chair, and Region V Rep.
Current Programs Committee Chair and Advisor
• Prof. David A. Peters

• Officer Position: Advisor (1 year)

• David Peters received his B.S. and M.S. degrees in Applied Mechanics from Washington University in St. Louis (1969 and 1970) and then his Ph.D. in Aeronautics and Astronautics from Stanford University (1974). He has worked at McDonnell-Douglas Astronautics Company, the Army Research Labs/NASA-Ames, the Georgia Institute of Technology, and at Washington University in St. Louis where he is the McDonnell Douglas Professor of Engineering and Associate Chair of his Department. Dave is a Regional Vice President and Member of the Board of Directors of the Vertical Flight Society (formerly the American Helicopter Society). Professor Peters has published over 350 technical papers and has served as Editor-in-Chief of the Journal of the American Helicopter Society. He has received the Pi Tau Sigma Gold Medal from the American Society of Mechanical Engineers, the Nikolsky Award from the VFS, the Reed Aeronautics Award of the American Institute of Aeronautics and Astronautics, the Spirit of St. Louis Medal from the American Society of Mechanical Engineers, and the Alexander Klemin Award of the VFS. He is a Fellow of the AIAA, the ASME, and the American Academy of Mechanics. He is both a Technical Fellow and an Honorary Fellow of the Vertical Flight Society.

• Candidate Statement: (Why do you want to serve in this role?)

The AIAA has been an important part of my life for the past 45 years, and I enjoy being a participant in the important things that they do for our profession, our country, and young people coming into our field.

• AIAA Specific Experience / Participation / Membership

Member for 45 years.
Past President of St. Louis Section.
Fellow of AIAA.
Recipient of Reed Aeronautics Award.
• **Name of Candidate:** Dr. Srikanth Gururajan

• **Officer Position:** Advisor *(Select from Drop-Down List)*

• **Brief Bio:** *(Career, Professional Interests, Education, etc.)*

Dr. Srikanth Gururajan is currently an assistant professor of aerospace engineering at Saint Louis University, St. Louis, MO. He received his Ph.D. from West Virginia University, Morgantown, WV. His research interests are in the area of Unmanned Aerial Systems, including their design, fabrication and flight test evaluation. In recent years, he has also been using Virtual Reality and Natural Language interfaces for command and control of drones. His teaching interests are in the area of flight dynamics and control, and incorporating research from his lab into the class, particularly hands-on UAS flight testing into a course on flight dynamics and controls. Beyond the classroom, over the last five years, he has also been mentoring students team in his lab (AirCRAFT Lab, [https://sites.google.com/a/slu.edu/aircraft-lab/](https://sites.google.com/a/slu.edu/aircraft-lab/)) to participate in the AUVSI SUAS competition, which aligns with his philosophy of “educating the whole engineer” that UAS student competitions are ideal vehicles for undergraduates to expand their knowledge and skillset to appreciate the various interdependencies that go into a successful engineering design. With support from the St. Louis AIAA section, he is working on using UAS and Scratch programming interface for extending STEM education concepts to families of K-12 students in the greater St. Louis region.

• **Candidate Statement:** *(Why do you want to serve in this role?)*

In my role as an advisor over the last two years, I have had the opportunity to organize several technical presentations at my institution. This has provided my students an opportunity to hear from leading experts in the industry, as well as interact with peers from other regional academic institutions. Such opportunities, I believe is a pathway for a student’s growth. I would like to continue serving the community by continuing to serve as an advisor in the AIAA St. Louis section. My future plans include broadening participation of our section members (students and professionals) to include K-12 STEM activities, community engagement and outreach. I plan to accomplish this by organizing aerospace themed STEM camps, tours, presentations and meetings. I also plan to reach out to fellow faculty in other regional academic institutions and seek their help and participation in such activities.

• **AIAA Specific Experience / Participation / Membership**

I have been a member of AIAA since 2001 and am currently a senior member and belong to the St. Louis section. Over the last few years, I have been active in the section be serving as the historian for one year, and then as an advisor for the last two years. In my role as a historian as well as an advisor, I have strongly advocated for student participation in AIAA activities at my institution and have organized to host technical presentations at SLU.
Name of Candidate: Chris Tavares

Officer Position: Advisor Two-year term

Brief Bio: (Career, Professional Interests, Education, etc.)
I graduated from Wichita State University with a B.S. in Aerospace Engineering in 2004 and have worked for Boeing in St. Louis since. Other than being in the Engineering Skills Rotation Program, I have worked in the Aerodynamics Department serving a variety of programs in St. Louis and St. Charles, primarily in advanced design. I currently work in the Weapons Aerodynamic group as the lead aerodynamicist for Cruise Missile Systems as well as Phantom Works Advanced Missiles.

Candidate Statement: (Why do you want to serve in this role?)
I would like to continue to serve as an Advisor in order to provide service to our section and our local members. I believe in passing along the “tribal knowledge” to the newer section officers that I have learned over the past almost 15 years on the council. I am also still actively serving at the Institute level and believe that staying active in the local Section is important as well. The disconnect/gap between the Institute and the local Sections is starting to close, and I would like to continue to help close that gap.

AIAA Specific Experience / Participation / Membership
I am currently a Senior Member and have been a member of AIAA since 1999. I am also a Lifetime Member and AIAA Foundation supporter. I have served in a variety of roles within the AIAA St. Louis section and the AIAA Institute. Locally, I have served as the Secretary, Vice-Chair, Chair, Treasurer, and currently serve as an Advisor. At the Institute level, I have served on several committees such as Student Activities, Educational Activities, Young Professionals, Region V Council, and STEM/K-12. While serving on Student Activities, I led the Student Paper Conferences for a decade as well as chaired the committee for 5 years.