



HOUSTON SECTION
2012-2013 Executive Council Candidates

Jonathan Sandys – Chair-Elect

Biography

Jonathan Sandys is the great-grandson of Britain's wartime Prime Minister Sir Winston Churchill, and is an internationally recognised public speaker and freelance journalist.

Jonathan reaches out to students and adults alike, communicating the morals and values of his great-grandfather and those of that "*Greatest Generation*" in a vibrant and interactive way, bringing history to life in an exciting and vibrant way.

Though born ten years after his illustrious relative's passing, Jonathan very much credits his legacy as a major positive influence in his life. As a result, Jonathan found the *never never never give in* attitude of Churchill, was what made it possible for him to rise above the challenges of dyslexia and social isolation as a child and become a successful and happy adult.

Jonathan's life mission is to use both the experiences of his great-grandfather and his own to encourage and inspire people of all ages and walks of life to "Never Surrender"!

Jonathan currently serves on the Board of Opera Vista, and organisation dedicated to introducing young people to the world of modern opera.

Jonathan also serves as the President of the International Churchill Foundation, dedicated to educating the next generation and highlighting the importance of accurate historical knowledge, while tying the past to the present and reflecting on both as a guide to the future.

One of Jonathan's greatest passions, since moving to Houston in 2009, has been NASA, the Shuttle Program and the future of space exploration both in the public and private sector. "The future of mankind is beyond our atmosphere and if we don't start planning for it now, when our population has grown exponentially, we will not be in a position to expand our focus, colonise Mars, and travel further than man has gone before."

Candidate Statement

Jonathan's passion for NASA and the future of space exploration, has grown in the three years he has been in Houston, due to the many intelligent and wonderful men and women, who tirelessly serve to enable mankind to go beyond the barriers of our atmosphere, land on the Moon, design and develop and International Space Station, and stand as the founders of many common day products; including the use of velcro, satellite television and phones and treatments of many previously incurable diseases.

Jonathan's passionate defence of NASA and the vital role the organisation will play in the future of space exploration; has offered him the opportunity to represent AIAA at Johnson Space Center on several occasions, and he has often commented on the



wonderful abilities the NASA community has, and also, drawing attention to the urgent need for America to remain in space.

In 2011, Jonathan worked with a group of young students; tasked to create a plan for terraforming Mars, and taught them business and presentation skills, sourced from the lessons and example of his great-grandfather, to help them succeed and be determined to face any challenge with a NEVER SURRENDER! attitude.

“I very much enjoy speaking on behalf of AIAA, and would enjoy the honour of serving on their Board in a capacity where I may continue too support their mission in a more hands-on role.”

Satya Pilla – Vice Chair – Technical

Biography

Dr. Satya Pilla is the current Vice Chair - Technical, for the AIAA Houston Section. In this position he led the planning and execution of the very successful Annual Technical Symposia (ATS) for the section. From his team’s committed efforts, the ATS gained steady momentum and attracted increasing participation from the aerospace community.

Dr. Pilla is currently leading the stage-gate process implementation for integrating Boeing’s DDT&E effort for building the cryogenic stages on the NASA Space Launch Systems program for deep-space exploration. Prior to this, he led the Space Shuttle Integration Engineering for Boeing at the NASA Johnson Space Center until the end of the program. As the manager of Space Shuttle Engineering Integration team, Dr. Pilla provided oversight to the Avionics, Electrical, Structural, Mechanical, and Systems Engineering disciplines. His team at Boeing was responsible for executing the Design and Verification analysis, leading to the Certification of Flight Readiness for the Space Shuttle flights. His demonstrated leadership spans strategic planning, project management, technology integration, subcontractor management, risk management, and employee development.

A proven subject matter expert in establishing and certifying Quality Management Systems, Dr. Pilla served as Deputy Director with the Bureau of Indian Standards in New Delhi, and coordinated as a Special Officer for the Quality Assurance on the Technology Missions of the Department of Science and Technology. A lifelong practitioner for Quality Improvement, Dr. Pilla has Lead Auditor certification from the American Society for Quality (ASQ), as well as a Lean & Six-Sigma Black Belt from the Villanova University.

Dr. Pilla is also an adjunct Professor at the Embry-Riddle Aeronautical University, Houston Campus, where he teaches graduate level courses. He holds an undergraduate in Civil Engineering from the Andhra University College of Engineering, a Masters in Civil Engineering from Rice University, a Masters in Systems Architecture & Engineering from the University of Southern California, a Masters in Business Administration from



the University of Houston, and a Doctorate in Management from the University of Maryland. Dr. Pilla presented and published in many national and international forums, in the broad areas of engineering and management.

A long-term member of the institute, Dr. Pilla's is currently an Associate Fellow of AIAA. His contribution to Engineering excellence earned him several awards and recognition including, the nomination for the Rotary National Award for Excellence in Engineering Leadership, the NASA Public Service Award, the Johnson Space Center Director's Award for Superior Engineering Contributions, and the AIAA Award for Career and Workforce Development.

Candidate Statement

I will be honored to be on the team to pursue the goals of the executive committee. I will endeavor to help AIAA reach out to a broader aerospace technical community, as well as the people enthusiastic about the aerospace arena. Interaction with the community is invaluable for every professional for both learning and networking. I will be looking forward to serving the aerospace professionals in the Houston area.

Brian Banker – Vice Chair – Technical

Biography

I currently work for NASA at the Johnson Space Center as a Liquid Propulsion Systems Engineer where I am focused on research and development activities on future spaceflight propulsion systems, specifically liquid oxygen/liquid methane systems. I have been very active in the development of the Morpheus 1-G Vertical Testbed and propulsion subsystem on the Multi-Mission Space Exploration Vehicle (MMSEV). Before joining NASA full-time I was a co-op in the Nondestructive Evaluation group and Constellation Project. I've also interned with the Boeing Company as a sub-contractor on the Space Shuttle. I have been active member of AIAA for over eight years now and currently hold the position of councilor.

Candidate Statement

I believe the heart of an organization such as AIAA is technical excellence. We are fortunate to have an excellent, multi-disciplinary, technical community in the Houston area; however, we can do a better job of mobilizing this community and enabling them to work collaboratively to enable a better future for Aerospace in the Houston area.

While at JSC I have had the opportunity to work on many highly technical, multi-disciplinary projects as mentioned in my biography. These experiences and others have allowed me to form a very strong, though wide network with the top technical leaders at the Johnson Space Center which I will leverage to strengthen the technical committees and revitalize those which have grown weak. Furthermore, I plan to use my network bring new blood into the Section through the technical committees which will help revitalize involvement and the value of the lunch-n-learns and more importantly the annual technical symposium.



Michael Frostad – Vice Chair – Operations

Biography

Michael Frostad has been interested in Space Exploration since Middle School. As he read and grew older that interest became a passion and he followed it to the University of Washington in Seattle. There he studied and applied for the Aeronautics and Astronautics program. Once in the program he completed his Bachelors of Science in 2004 and went on to complete his Masters of Science in 2006 focusing on control systems. An interview later and he was on his way to Houston to support the Human Space Flight program at NASA's Johnson Space Center. Since that time he has served with ERC on the ESCG contract supporting the Engineering Directorate on both the Space Shuttle and now the Orion MPCV.

Candidate Statement

The Houston Section of the American Institute of Aeronautics and Astronautics just celebrated its 50th Anniversary as a section. This organization has served the Houston Aerospace community for that long by providing a forum for technical exchange, a place to connect with others of ones specific discipline, and a way to weave the many different disciplines together to help accomplish the mission of exploring space, the world around us and ourselves. It is my wish to continue this tradition and expand upon it and thus I submit my name for the Vice Chair of Operations. I have been a member the American Institute of Aeronautics and Astronautics since 2003 and most recently I have served as the Young Professionals Chair for the Houston Section (2010-2012). It is my hope to serve as Vice Chair of Operations for the Houston Section of AIAA and ensure quality communication, events, and structure for the Houston Aerospace Community. Thank you for your consideration.

Michael Martin – Vice Chair – Operations

Biography

Soon-to-be Dr. Michael Martin has been Chair of the Greater New Orleans AIAA section (2008-2010), a Senior Design Engineer on the Orion project with Lockheed Martin, and a Test Engineer at NASA Stennis Space Center. He achieved his Bachelors and Masters degrees in Mechanical Engineering from the University of New Orleans and will be graduating from Texas A&M University in December with a Ph.D. His research has included determining the ablation rate of HTPB hybrid rocket fuel using a particle image velocimeter and the interaction of plasma particles ejected by the VASIMR engine with spacecraft. His work in industry has included assisting in the testing of the TRW 650k Pintle engine and the Boeing – Lockheed Martin 250k Hybrid motor, construction of the Solar Dynamics Observatory (SDO) and experimental work in P-24 at the Los Alamos National Laboratory.

Candidate Statement

I will continue to support the incredible work being done by our volunteers in reaching out to members, the public, and college students. I plan to expand the website and attract more young professionals by assisting the YP officer with engaging tours of JSC and



nearby aerospace sites. I remember attending one such tour of the Apollo era Mission Control room many years ago and that, among other things, attracted me to this section. I want to restart this for our future members. I will also help our section advertise using new media sources with the experience I gained as Public Relations officer for a recent conference.

Robert Plunkett – Secretary

Biography

Robert Plunkett is a Lead Payload Integration Engineer working for MEI Technologies, Inc. in the Department of Defense Human Spaceflight Payloads Office, Johnson Space Center, Houston, Texas. His role is to lead the integration, launch, and on-orbit operations of multiple DoD experiments and payload complements. Previously, Robert served 8 years in the United States Air Force, culminating in rank as a Captain before an honorable separation. Robert's last Air Force assignment was as a Payload Manager with the Space Test Program at JSC, performing the government responsibilities for the high priority DoD Payloads on NASA human-rated missions. Robert was born in Houston, Texas on 8 February 1980. He attended Texas A&M University earning a Bachelors of Science in Aerospace Engineering while completing ROTC through the Corps of Cadets. He subsequently earned a Masters of Science in Aerospace Engineering from North Carolina State University in December 2009. He was commissioned in the Air Force in March 2004 and was first assigned to the 341st Space Wing, 341st Maintenance Group, Malmstrom AFB, Montana. At Malmstrom AFB, he served in a variety of positions, including Assistant Officer In Charge of Technical Engineering and Officer In Charge of the Missile Maintenance Operations Center and Plans and Scheduling. Robert is a member of the Knights of Columbus, American Institute of Aeronautics and Astronautics, National Eagle Scout Association and spends time mentoring and promoting educational opportunities for local schools. His military awards include the Joint Service Commendation Medal, the Air Force Commendation Medal, the Air Force Achievement Medal, the Air Force Outstanding Unit Award with one device, the National Defense Service Medal, the Global War on Terrorism Service Medal, the Air Force Longevity Service and the Air Force Training Ribbon.

Candidate Statement

I have spent a short amount of time as a councilor in the Houston section and have had some time to get to know the section and work with the EC. I want to continue contributing to our AIAA society and section. I firmly believe community service is a key component of any professional career and personal life, and I want to now lead efforts to give back to AIAA and the community. I want to make our chapter stronger through volunteering my time and talent to tasks that need the efforts, and will step up when needed to make things happen. I would be honored to serve the Houston Section as the Secretary and welcome the challenges that will come with the responsibility.



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Clay Stangle – Treasurer

Biography

Clay Stangle attended Purdue University and graduated with a B.S. in Aeronautical Engineering in 2005. Upon graduation, he started working on the ISS for Boeing in Houston. He has since worked several programs including the 787, 747, and now docking systems for the ISS.

Candidate Statement

As the current treasurer of the AIAA Houston Section, a position I took over in August of 2011, I believe I can continue to be an excellent steward of the section's finances. I have gotten a debit card to provide easier transaction to and from the section. I facilitated the change of the section's fiscal year to match Nationals to avoid reporting conflicts. I have successfully held 90% of this year's functions maintaining a positive margin including being able to find extra money to help celebrate the Houston Section's 50th Anniversary.

Shirley Brandt – Councilor

Biography

Shirley had worked in Robotics for Jacobs Technology. She has served as Program Chair of AIAA, Houston Section, as well as of AIAA, Long Island, New York Section. Shirley has actively retained a seat as Councilor on both of these sections. Additionally Shirley was elected as Chair Elect and subsequently is a Past Chair of the AIAA Houston Section.

Currently, she is the Deputy Director for Honors and Awards for Region IV. Also, Shirley is on the National Associate Fellow Committee and a member of the National Systems Engineer Technical Committee, where she serves as Secretary.

Candidate Statement

I want to serve as a Councilor because I would like to share with the section, my experience that I have on the local level, as well as Region and National level.

Larry Friesen – Councilor

Biography

I received my bachelor's degree from the University of Kansas in 1967, with a double major in physics and math. I earned a Ph.D. at Rice University in 1974 in space physics and astronomy. I spent a year of post-doc work at the University of Georgia 1974-75. I began work for Johnson Space Center contractors in 1976, first for McDonnell Douglas, then for Lockheed Martin, with brief intervals of employment with other contractors, until I was laid off in 1998. I have taught as an adjunct instructor at Galveston College (teaching physics) 1998-99, then at the University of Houston at Clear Lake starting in 2000 (teaching physics and astronomy).



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Candidate Statement

I have been a member of AIAA and the Houston Section since 1989. I am an Associate Fellow of the AIAA. I have served the Houston Section at various times as a Councilor, as Chair of the Astronomy Technical Committee, and most recently as Vice Chair for Operations. When Irene sent out her call for candidates, it occurred to me that it might be my turn once again to offer myself as a candidate for Councilor.

Sarah Shull – Councilor

Biography

Sarah Shull works at NASA's Johnson Space Center where she is presently Deputy Project Manager for the Advanced Exploration Systems (AES) Water Processing and AES Logistics Reduction and Repurposing projects. Prior to these roles, Sarah worked for 10 years in JSC's Mission Operations Directorate supporting Space Shuttle and ISS missions. Sarah holds a bachelor's degree in Aerospace Engineering from the University of Michigan and a master's degree in Aeronautics and Astronautics from the Massachusetts Institute of Technology (MIT). Over the past 10 years Sarah has been extensively involved with AIAA at both the local and national levels serving at the Houston Section YP Chair, Secretary and finally Chair in 2010-11 and as a member of the national Young Professionals Committee, Space Logistics Technical Committee and as the YP Liaison to the Board of Directors from 2008-2010.

Candidate Statement

I would like to opportunity to serve as a councilor to build upon my long-standing history of service to the AIAA Houston Section. I bring to the role a wealth of experience running the section as well as connections and exposure at the AIAA National level through my positions on the YP Committee, the Space Logistics Technical Committee and my past role on the Board of Directors. I am proud of the accomplishments of the Houston Section over the past 50 years and look forward to helping the section grow and evolve over the coming years.

Christopher Davila – Councilor

Biography

Christopher Davila had been interested in the aerospace industry since he was in middle school: his father was always intrigued in the Space Shuttle Program and his brother was (and continues to be) employed in the aerospace industry working in the area of Space Station Telemetry and Command. Outside of family influence on Christopher's space interest, he has generally been fascinated with human exploration beyond low-earth orbit and the advancing technologies, which will allow us to reach beyond our solar system. Christopher graduated from the University of Houston at Clear Lake in 2007 with a Bachelors of Science in Mathematical Sciences. Also, he was a member of the National Science Foundation chapter of the university. Shortly after graduation, Christopher found employment with Barrios Technology as a Space Shuttle Communication Instructor: this position provided him with proficiency in such skills as leadership, teamwork, situation-adaptability, and self-accountability. This position only further fueled Christopher's



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interest in human space exploration. With the end of the Space Shuttle Program, Christopher was fortunate that Barrios Technology allowed him to continue his aerospace career as a Consumables Engineer in the International Space Station (ISS) Program Office where he continues to make his contribution to the aerospace industry tracking critical consumables to sustain continued human presence on-board the ISS. For Christopher's efforts within the ISS Program Office, he recently received the Silver BEAR Award from Barrios Technology for outstanding performance and accomplishments. Outside of his career in the aerospace industry, Christopher has volunteered his time to organizations such as the Society of Women Engineers (SWE), Special Olympics, the Mars Rover Competition, and the Future Cities Competition, and he enjoys attending events such as aerospace-related lectures hosted by AIAA. Christopher is committed to provide his greatest effort in promoting aerospace and continued U.S. space presence.

Candidate Statement

I am honored to be considered for the role of councilor. I do not take the position lightly, and I will make my best efforts to contribute to AIAA programs, educational outreach, and professional development. I believe the experience and skills I have gained while employed in the aerospace industry will allow me to be a valuable asset to the AIAA Houston Section, and as I plan to continue my career for a long time to come, I plan to continue my efforts with AIAA.

Alan Sisson – Councilor

Biography

Alan Sisson is a relative newcomer to the Houston Section of the American Institute of Aeronautics and Astronautics, but he has been involved with AIAA for a number of years. In college, Alan served as an officer in the University of Texas (UT) student section of AIAA for three years; first as social chair, then treasurer, then vice-president. After completing his undergrad, Alan requested to join the AIAA Houston Section, and was appointed programs chair by section chair Sean Carter. As programs chair, Alan organized Nicholas Johnson's dinner meeting, Douglas Terrier's dinner meeting, the 50th Anniversary Celebration, and is currently organizing the end-of-year awards ceremony. Alan is deeply passionate about the field of aerospace, and is highly dedicated to AIAA; he hopes to be an active contributor to the organization for many years to come.

Candidate Statement

I have enjoyed my time as programs chair very much. I have worked hard this past year to ensure that the AIAA Houston Section's dinner events go well, and I have received numerous compliments and congratulations from attendees of every one of these events. This organization is very important to me, and I would like to continue to contribute to the AIAA Houston Section and its many future endeavors.