

Aerospace Frontiers

October 2019

National AIAA Leadership Visit

Please join our section in welcoming AIAA CEO Dan Dumbacher and COO Angelo Iasiello to the Florida Space Coast on Tuesday, November 5. We will be hosting Networking Night from 6-8 PM at Rising Tide Tap & Table (523 Glen Cheek Dr, Port Canaveral). about institute-wide Learn initiatives. network with fellow AIAA members, meet fellow aerospace students & professionals, and enjoy some free appetizers!



Dinner and drinks are available for purchase. Head over early to enjoy Rising Tide's Happy Hour from 3-6 PM. This event is free for Student & Professional AIAA members and just \$10 for non-members and guests. Suggested attire is business. Please RSVP by Nov 3, 2019 on Eventbrite here. Send any questions to aiaacanaveral@gmail.com

Save the Date: Holiday Potluck!

Our annual holiday party is just around the corner on Saturday, December 7! Join us for a family-friendly evening of food, games, and fun as we celebrate the 2019 holiday season. Keep an eye out for more details soon, including how to sign up for the potluck.

Section Members to be Inducted as AIAA Associate Fellows

AIAA announced the class of 2020 Associate Fellows in an October 1 press release. Two Cape Canaveral Section members will receive this honor: Mr. Philip Henderson of L3Harris Technologies, Inc., and Dr. Brian Kish of Florida Institute of Technology. Formal induction will occur at the upcoming AIAA SciTech Forum in January.



Phil Henderson is the Advanced Programs Engineer for the Space Antennas and Structures Business Area of L3Harris Technologies' Space and Intelligence Segment, and is

a member of the AIAA Spacecraft Structures Technical Committee. He is the engineering team leader supporting space system prime contractor customers with systems engineering and conceptual design of precision deployable structures and unfurlable mesh antennas for space systems. Phil has 42 years of experience in design and development of large space and has worked structures in system engineering, space systems integration and testing, thermal analysis, structural analysis and mechanical design. At Harris, he has led numerous studies and technology development efforts of unfurlable antenna reflectors, deployable solid reflectors, solar concentrators, and other large space structures. He led the successful adaptation of the unfurlable mesh antenna technology from government heritage programs into commercial markets resulting in the Harris' Commercial Reflector Enterprise.

Phil has earned degrees from Florida Institute of Technology (BS, Mechanical Engineering) and the Ohio State University (MS, Mechanical Engineering). He is a licensed Professional Engineer in the State of Florida. In his spare time, he and his wife organize and lead medical teams to impoverished areas in Ecuador.



Dr. Brian Kish spent the first 20 years of his career in the United States Air Force. His Ph.D. dissertation at the

Air Force Institute of Technology was on Optimal Control of Sensor Threshold for Autonomous Wide-Area-Search Munitions. As a graduate of the Air Force Test Pilot School, he led flight test programs on the NT-33, RU-38, F-15D, T-38C, YAL-1 (Director of Operations, Airborne Laser Test Squadron) and E-8C (Joint STARS Test Force Director). He was an Instructor and the Vice Chair of the Education Department of the Air Force Test Pilot School, where he impacted over 150 students over six classes from 2005 to 2008. The students chose him for "Instructor of the Quarter" in 2006. In 12 years of flying as a Flight Test Engineer, he accumulated over 1300 hours in 49 aircraft. After retiring from the Air Force, Dr. Kish began teaching at Florida Tech in 2012. He chairs the only traditionaluniversity, non-military Flight Test Engineering Master's Degree program in the world. He has

grown the program from one to four aircraft, brought the program to three states, expanded Flight Test course offerings from three to nine, and executed over \$2M of funded research and grants. The students chose him for "Academic Professor of the Year" in 2016. The FAA is changing its Part 23 certification requirements based on his research of low-speed aircraft handling qualities. He's been a member of the AIAA Flight Test Technical Committee since 2016. He brings his real-world experiences to the classroom every day and inspires the next generation of Aerospace Engineers. He's made it his mission at Florida Tech to provide an opportunity for every Aerospace student to fly in a real aircraft.

The grade of Associate Fellow recognizes individuals "who have accomplished or been in charge of important engineering or scientific work, or who have done original work of outstanding merit, or who have otherwise made outstanding contributions to the arts, sciences, or technology of aeronautics or astronautics." To be selected as an Associate Fellow an individual must be an AIAA Senior Member in good standing with at least twelve years professional experience, and be recommended by at least three current Associate Fellows. Nominees are subject to a rigorous review process, and a maximum of one new Associate Fellow may be named annually for every 150 voting AIAA members. For information on advancing your membership, or to nominate a member for Associate Fellow or other honors, please visit this link.

Florida Tech Student Branch Update

Written by Archit Srivastava President, Florida Tech AIAA Student Branch

The student branch of AIAA at Florida institute of Technology has had an outstanding semester with new events, workshops, and addition of three new competition teams!



The Florida Tech AIAA student branch hosted a "Young Professionals Panel", inviting recent college graduates,

professional AIAA members & Florida Tech alumni to share their secrets to success with club members.

The event hosted panelists from Embraer Executive Jets, Engineering Research and Consulting (ERC) and Northrup Grumman with a remarkably high audience turnout. This panel discussion provided members with an opportunity to network and learn from the experience of professionals who had recently walked in their steps before venturing into industry.

AIAA@Florida Tech expanded its portfolio of national competition teams by forming new teams to compete in the Annual NASA Robotic Mining Competition (RMC): Lunabotics 2020, NASA's Big Idea Challenge, and NASA's RASC-AL competition. In addition, the branch continues to field AIAA Design/Build/Fly and SpaceX HyperLoop teams. These competitions require interdisciplinary collaborations between

Aerospace majors and other Engineering disciplines and provide opportunities for new members to get hands-on, project and leadership experience.



For community service, student members hosted a booth at Florida Tech's Annual 'Treat or Treat' Halloween themed event where they interacted with kids from pre-K age and up. A "balloon rocket" demonstration was set up to spur an interest in kids about aerospace and STEM education. A full-scale mining robot was also on display by the NASA RMC team. Candies and candy-planes were distributed.

Officers at the Florida Tech student branch relentlessly work towards sharing skills and experience with our peers and to assist students to design, manufacture and test Racing Drones, Model Rockets & Hovercrafts through our interactive, hands-on "Workshop Series". The student branch invites professors and seniors with relevant expertise to give brief lectures and host weekly workshop seminars that go over the basics of how to build these models. This allows student members to apply their theoretical knowledge on to several month-long personal projects.

AIAA members at Florida Tech are excited and greatly optimistic and are eagerly looking forward to meeting professional members, industry elites and other student branch members at AIAA's SciTech forum in January!



Florida Tech AIAA Student Branch Officers 2019-2020

Council Member Spotlight



Hello AIAA community! My name is Naveen Sri Uddanti and I am the Education Officer at AIAA Cape Canaveral Section. My journey in the council started in

May 2016 as an Education officer and I served the panel in different positions for the last 3 years. I am pursuing doctoral studies in Aerospace Engineering, at Embry-Riddle Aeronautical University with a research focus on Hybrid Rockets. My motive for this role is to improve student participation in all the AIAA activities. As an Education Officer, I would like to coordinate and collaborate with the local AIAA student branches and create a strong bond between them. Everyone on the council is passionate about their roles. With the right drive and smart work, we can accomplish the AIAA mission!

⊗ Space Coast Games Coming to KARS Park

"Space Coast games is a yearly competition where space coast contractors team up to play games and perform challenges, in hopes of proving that their company rules the space coast." The event happens Saturday, Nov. 2 at KARS Park, featuring events like Kickball, Dodgeball, Frisbee, Relay Race and More. See the events page on Facebook.

AIAA Technical Committee Nominations due Nov. 15

Participating on an AIAA Technical Committee (TC) or Integration and Outreach Committees (IOC) is a great way to share your expertise with the worldwide professional community, to make new contacts in your field, and to gain recognition as a technical leader. Also note that both recently announced Associate Fellows for our section are TC members. The AIAA Technical Committee (TC) Nomination period is now open for nominations for terms beginning 1 May 2020. The Nomination Packet attachment includes instructions for completing nomination forms, a listing of the TC Chairs, and the 2020/2021 TC and Integration and Outreach Committee (IOC) Requirements.

Nominations are being submitted via the AIAA website. The online nomination form for TCs is located at this link, and for IOCs at this link.

The nominations are due by 15 November 2019. Section Honors and Awards Chair (and TC Member) Dr. Razvan Rusovic is available to help with the TC process. Contact rrusovic@fit.edu.

Take a minute to follow the AIAA Cape Canaveral Section on Facebook, Instagram, and Twitter at username @capeaiaa, or find us on Engage at engage.aiaa.org/capecanaveral/home

We want to hear from our members! Tell us what you think. Do you have a question you need answered? Do you need a guest speaker and/or volunteers for your event? Use these tools to ask your fellow section members for their help!

2019 - 2020 Cape Canaveral Section Council Members

Chair Elizabeth Balga Vice Chair Rachel Mocini

Secretary David Fleming

Treasurer Matthew Zuk

Programs Dennis Dali

Education Naveen Sri Uddanti

Honors & Awards Razvan Rusovici

Communications Jacob Shiver

STEM K-12 Melissa Sleeper

Public Policy Holly Petrucci

Career and Workforce Development

Dhuree Seth

Young Professional Ashley Scharfenberg

♥ Vacant Positions

The Executive Council currently has two vacancies – Membership Chair and Technical Officer – and we are looking for motivated, hard-working members to fill those positions for the rest of the 2019-2020 term!

Not ready to chair a committee? Consider supporting an existing committee chair – Programs, Education, Honors & Awards, Communications, STEM K-12, Public Policy, Career & Workforce Development, Young Professional – to help plan and execute events, initiatives, and more.

If interested, please contact Section Chair Elizabeth Balga at <u>aiaacanaveral@gmail.com</u>.



Announcements

Daily Launch

Want to receive a daily email summary from AIAA about all the latest aerospace news from Newspapers, TV, Radio and Journals? Sign Up for The AIAA Daily Launch. For member access to the AIAA Daily Launch, please log in to www.aiaa.org/MyAIAA, navigate to "Access Publications & Materials" and select "Daily Launch." The AIAA Daily Launch, distributed to AIAA members each weekday morning, is a digest of the most important aerospace news selected from thousands of sources by the editors of Bulletin Media. (The first few lines of a recent edition appear below)





dAIAA

Good morning David Fleming - Brought to You as a Benefit of Your AIAA Membership

LEADING THE NEWS



Blue Origin Partners With Lockheed Martin, Northrop Grumman On Lunar Bid

CNET News (10/22) reports that "Blue Origin has partnered with Lockheed Martin, Northrop Grumman and Draper to develop a Human Landing System for NASA's Artemis program, according to a release Tuesday."

CNBC (10/22) reports that in remarks at the 70th International Astronautical Congress in Washington, D.C., Blue Origin founder Jeff Bezos said, "We have put together a national team to go back to the moon." He added, "We could not ask for better partners."

Space News (10/22, Subscription Publication) reports that "executives with the four companies said the urgency required

by the goal of returning humans to the moon within five years led them to team up rather than pursue

AIAA Career Center

AIAA is pleased to provide members with a Career Center, with extensive lists of resumes and available



positions. A powerful and user-friendly search tool allows you to find the ideal job or candidate

Submit a Nomination for Engineer of the Year

The deadline is almost here to submit your nomination for Engineer of the Year! AIAA is accepting nominations through 1 November 2019. Surely there are some good nominees from among our local section. Please consider making a nomination using this form from AIAA.

Engineer of the Year is presented to an AIAA member who, as a practicing engineer, has made a recent, individual contribution in the application of scientific and mathematical principles leading to a significant technical accomplishment. This award carries a \$500 honorarium and will be presented at the AIAA Aerospace Spotlight Awards Gala.

intended The award is for а recent accomplishment, specifically within the last three years, with the intent to "capture the moment." Thus, both the individual's specific technical contribution and the recentness of the accomplishment need to be conveyed in the award write-up. Nominations will be evaluated on the significance of the contribution, the impact of the contribution to the aerospace community, and the quality of the references. Diversity in the reference pool is highly recommend.