



Spring 2019 Newsletter

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Angela Diggs and Chi Mai, Editors

WELCOME TO THE STEM EDITION!

Educator Associate Memberships

Did you know that AIAA memberships are **free** to K-12 educators? AIAA values your contribution to the future of the aerospace profession and therefore offers significant opportunities to you at no cost. Some of the membership benefits include:

- Access to *Aerospace America Online*—a monthly magazine that offers engaging articles for you and your students
- STEM K-12 Outreach—a website with online resources, including aerospace micro-lessons, information about careers in aerospace, and more
- STEM grants—annual opportunities to apply for \$500 towards aerospace-related classroom materials
- Recognition—opportunities to be recognized as the AIAA Foundation Educator of the Year
- AIAA Engage—an online forum that connects you with other educators and engineers across the world
- Local section opportunities—including STEM lessons in the classroom, field trip opportunities, FIRST Lego League and FLL Jr support, local Teacher of the Year awards, and more!

What are you waiting for? Join today!

<https://www.aiaa.org/Educator/>

UP FRONT

AIAA Foundation Grants

Several local educators applied for this year’s AIAA Foundation grant, which award up to \$500 for projects that inspire and advance the future of aerospace. Congratulations to all of our winners!

Requests must have a clear connection to STEM with an emphasis on aerospace and applicants must be AIAA Educator Associates to apply (it’s free!). Grant requests are evaluated based on clarity, relevance, scope, impact, structure, and originality.

The next grant submission period is expected to open in October 2019, and more details can be found here:

<https://www.aiaa.org/ClassRoomGrants/>

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UPCOMING EVENTS, DATES, AND DEADLINES

National

[AIAA Announces its 2019 national election results](#)

AIAA President-Elect

- Basil Hassan, Sandia National Laboratories
Director—Aerospace Outreach Group
- Tucker Hamilton, United States Air Force
Director—Integration Group
- Peter Hartwich, Boeing Engineering, Test & Technology
Director—Information Systems Group
- Allan “Terry” Morris, NASA Langley Research Center
Director—Propulsion and Energy Group
- Joaquin Castro, Aerojet Rocketdyne

[AVIATION 2019](#)

17-21 June 2019—Dallas, TX

Early Bird Registration ends 27 May 2019

[Propulsion & Energy Forum 2019](#)

19-22 August 2019—Indianapolis, IN

Early Bird Registration ends 28 July 2019

AIAA SPACE sessions will be held at this forum

[70th International Astronautical Congress](#)

21-25 October 2019—Washington, D.C.

Early Registration ends 30 June 2019

Regional

[AIAA NEXT GEN Technical Symposium](#)

9-10 September 2019 —Huntsville, AL

The Greater Huntsville Section is hosting its annual regional technical symposium with technical sessions, keynote speakers, panel discussions, and workshops.

If you're interested in presenting, abstracts are due July 19, and no paper is required. Senior professionals are needed to volunteer as session chairs, judges, and mentors.

Section

Executive Council Meetings

2nd Monday of the month, 11:00 am

Bamboo Sushi Bar & Hibachi Express, Niceville, FL

If interested in attending, please let us know by e-mailing nwfl.aiaa@gmail.com so that we can inform you of any changes to the meeting.

Professional Development Lunch & Learn Series

AIAA, ASME, SWE, and AFWiSE have teamed up to host monthly lunch-and-learn lectures for career enhancement and professional development.

14 June, Dr. Janet Wolfson, AFRL/RW, ASME

1130-1200, Doolittle Institute, Niceville, FL

Work-life balance is a constant struggle for busy professionals. Join us as Dr. Wolfson presents some strategies for managing both!

July - open for topics—contact us if you'd like to speak or have a request for topics.

15 August, Ms. Shere Tuckey, AFRL/RW, AFWiSE

1130-1200, Doolittle Institute, Niceville, FL

With so many demands on our time in various areas of work and home, how do you say “no” to keep things manageable?

Do you have a professional development topic you'd like to present or would like to see presented? Contact nwfl.aiaa@gmail.com with your suggestions.

Distinguished Lecture: Eugene Fleeman

11 June, Doolittle Institute, Niceville, FL

11:30 am—12:30 pm: “Missile Design, Development, and System Engineering” technical lecture

1:30 pm— 3:00 pm: “Soda Straw Rocket Science Design, Build, and Fly Competition”, hands-on STEM activity open to professionals as well as middle and high-school students!

STEM TEACHER OF THE YEAR AWARDS

The NWF AIAA, in collaboration with Doolittle Institute, presented the STEM Teacher of the Year awards during the East Panhandle Regional Science and Engineering Fair Awards Ceremony. The award recognizes those teachers at the elementary, middle, and high school level who show outstanding accomplishments and achievement in STEM education. AIAA recognizes the value of our STEM teachers to growing the next generation of scientists and engineers. Each educator received a certificate and a check for \$100.

Elementary School Division

Jodi Russell, Oriole Beach Elementary

Ms. Russell teaches STEAM (STEM+Arts) to all K-5 students at Oriole Beach Elementary. The students attend the STEAM lab once every 7 days, and Ms. Russell has been instrumental in developing the curriculum. She also uses LEGO and Sphero robotics in her gifted classrooms to encourage students to explore solutions to problems.



Middle School Division

Dawn Pack, Destin Middle

Ms. Pack runs a variety of STEM programs at Destin Middle, including the Joe's Bayou Project, in which teams of students monitor water quality once a month, the SPASE club for students interested in aerospace engineering, and the Giving Tree where students plant and monitor trees throughout the year.



High School Division

Heather Stewart, Paxton School

Ms. Heather Stewart's passion is transforming student's view of science from a stale textbook subject to an engaging active experience. She has been instrumental in pairing Paxton School to Embry Riddle's Gaetz Aerospace Institute to offer high school students an opportunity to receive up to 12 hours of university credit. She also engages students of all ages through Paxton School's Science Night, held in conjunction with a home basketball game.

REGIONAL SCIENCE FAIR—AIAA AWARD WINNERS

The Northwest Florida Section would like to congratulate the East Panhandle Regional Science and Engineering Fair participants, and we extend special congratulations to those who won AIAA's special award, which recognizes those projects that show excellence in aerospace engineering. NWF AIAA recognizes a first- and second-place winner in both the senior and junior divisions, with each first-place winner awarded \$100 and each second-place winner awarded \$50.

AIAA K-12 STEM Outreach Chair Judith Sherrill coordinated volunteers to judge the AIAA Special Award, shown at right with NWF Chair Chi Mai and Beth Hanning. AIAA Member Matthew Clay also judged and presented the AIAA Special Awards, shown below.

NWF AIAA also recognizes and thanks other section members who were category judges and judged other special awards.

Junior Division—1st Place

Sophia Cafarelli
Can Polystyrene Fly?

Junior Division—2nd Place

Joel Dotter
Does Adding Tubercules to a Wind Turbine Affect the Energy Output?

Senior Division—1st Place

Michael Panarisi
A Prop-o-sition: Cut the Drag

Senior Division—2nd Place

Maura Liles
Bigger Badder Pulse: Recycled Flux Device



PAXTON SCHOOL SCIENCE NIGHT

January 2019

John Fay & Karen Sledge

AIAA Northwest Florida section members John Fay and Karen Sledge supported Paxton School's Science Night with Straw Rockets and Telescope Viewing. Students participated in over 500 activities, and the NWF section sponsored the night's raffle prize—a BB-8 Sphero robot!

(top to bottom) John Fay shows students the telescope, Karen Sledge and students watch a straw rocket launch, the Sphero raffle winner displays her prize, and students set up for a straw rocket launch.



MEET A MEMBER

Judith Sherrill

In this newsletter, we meet Judith Sherrill, our section's Pre-College (STEM K-12) Outreach Chair since September 2018.



What is your current organization and primary job responsibility?

I work for the Air Force Research Laboratory Munitions Directorate as a program manager for the modeling, simulation, and analysis group.

How did you get started in aerospace?

When I was little, I wanted to be an astronaut (still do) but life had other plans.

What are you excited about in aerospace's future?

The commercialization of space travel. I believe it will allow us to explore space at a faster pace.

What's the best thing about being a FIRST LEGO League coach?

Seeing what my students can come up with in terms of both a project and a robot design. It's amazing.

What do you like to do in your free time?

Read and travel for new experiences.

Education:

B.S.: Auburn University, 2010 (Aerospace Engr.)

M.S.: Auburn University, 2013 (Aerospace Engr.)

ABOUT THE SECTION

The Northwest Florida Section of the American Institute of Aeronautics and Astronautics, Inc. (AIAA NWFL) is home to 289 members (as of Apr 2019): 124 professionals, 141 educator associates, and 24 students.

The section spans 24 counties across northern Florida from Pensacola to north of Jacksonville. These counties are: Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, Bay, Jackson, Calhoun, Gulf, Gadsden, Liberty, Franklin, Leon, Wakulla, Jefferson, Madison, Taylor, Hamilton, Suwanee, Lafayette, Columbia, Baker, and Nassau.

Most of the aerospace-related activities in the AIAA NWFL section are at military installations in the western panhandle.

Officer/Chair E-mail:

nwfl.aiaa@gmail.com

Facebook:

<https://www.facebook.com/groups/NWFL.AIAA/>

Twitter: [@AIAANWFL](https://twitter.com/AIAANWFL)

Engage (under construction):

<https://engage.aiaa.org/northwestflorida/home>

EXECUTIVE OFFICERS

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COMMITTEE CHAIRS

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VACANT

Communications Chair

Daniel Bradley danLbradley@outlook.com

AIAA NWFL Facebook Group

AIAA NWFL has transitioned from a Facebook page to a Facebook group! We hope this is a more engaging way to communicate than e-mails and the Share-Point site. Like us and contribute!

<https://www.facebook.com/groups/NWFL.AIAA/>

AIAA NWFL is now on Twitter!

Follow us at <https://twitter.com/AIAANWFL>

AmazonSmile and AIAA NWFL

Shop at Amazon.com? Try AmazonSmile with your Amazon.com account and 0.5% of the price of eligible AmazonSmile purchases can go to AIAA NWFL!

<http://smile.amazon.com/ch/59-3105873>

AIAA Celebrates Engineers Week

The AIAA NWFL section celebrated National Engineers Week with a cake at the Doolittle Institute during a Th!nk Thursday event focused on recognizing and preventing burnout.



AIAA NWFL STEM Outreach Chair Judith Sherrill cuts the cake