



Spring 2018 Newsletter

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Chi Mai, Editor

AIAA HQ ANNOUNCEMENTS

AIAA Engage

AIAA has deployed the AIAA Engage platform (<https://engage.aiaa.org/>), a member resource to connect to nearly 30,000 AIAA members. AIAA Executive Director Dan Dumbacher hopes it becomes a place where members can share “ask for advice, share your experiences, and build relationships with other passionate aerospace practitioners.”

AIAA members automatically began receiving daily digests in late January of the open-forum activities occurring on AIAA Engage.

In addition to the Open Forum community, the section webpage will transition from SharePoint to Engage over the summer.

Award Nominations

Nominations are open for several national AIAA awards and are due 1 July. For more information, visit <https://www.aiaa.org/OpenNominations/>.

UP FRONT

Distinguished Lecture

Dr. Mark J. Lewis

Hypersonic Flight: Progress and Challenges on the Way to High-Mach Systems

Monday, 23 July, 10:00 am CDT, Doolittle Institute

AIAA NWFL will host Distinguished Lecturer Dr. Mark J. Lewis for his talk on hypersonic flight, the technical challenges that have been solved, the research problems that remain, and the general applicability of hypersonic vehicles to a wide range of missions in the air and into space. View the [event flier](#) on our SharePoint site, and RSVP by visiting the [event web-site](#).

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 SharePoint site. Like us and contribute!

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

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UPCOMING EVENTS, DATES, AND DEADLINES

National

Award Nominations

Nominations Due: 1 Jul 2018

- Aerospace Software Engineering Award
- Children's Literature Award
- de Florez Award for Flight Simulation
- Diversity and Inclusion Award
- Dr. John C. Ruth Digital Avionics Award
- Excellence in Aerospace Standardization Award
- Gardner-Lasser Aerospace History Literature Award
- History Manuscript Award
- Information Systems Award
- Mechanics and Control of Flight Award
- Pendray Aerospace Literature Award
- Summerfield Book Award
- Sustained Service Award

AVIATION 2018

25-29 Jun 2018—Atlanta, GA

Propulsion and Energy 2018

9-11 Jul 2018—Cincinnati, OH

Manuscripts Due: 13 Jun 2018

Early Bird Registration: ends 18 Jun 2018

SPACE 2018

17-19 Sep 2018—Orlando, FL

Manuscripts Due: 16 Aug 2018

Early Bird Registration: ends 27 Aug 2018

SciTech 2019

7-11 Jan 2019—San Diego, CA

Abstracts Due: 11 Jun 2018

Early Bird Registration: 10 Sep - 17 Dec 2018

DEFENSE 2019

7-10 May 2019—Laurel, MD

Early Bird Registration: 23 Jan - 23 Apr 2019

Regional

Region II Student Conference

The next Region II Student Conference will be at Florida Institute of Technology in Melbourne, FL. The date has not yet been set, but the conference is typically in late March or early April.

Section

Executive Council Meetings

*Bamboo Sushi Bar & Hibachi Express, Niceville, FL
2nd Monday of the month, 11:30 am*

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.

Graduate Student Research Presentations

*Thursday, June 14 and 28, 4:00 pm CDT
Location TBD*

AIAA NWFL will host technical lectures from graduate students performing internships this summer through the AFRL Scholars program at the Air Force Research Laboratory Munitions Directorate. Topics to be presented will be from the student's research at their home institutions.

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RECENT EVENTS

Distinguished Lecture: The History of Hypersonics

Chi Mai

Due to increasing emphasis on the development of hypersonic vehicles and weapons, the AIAA Northwest Florida section hosted a distinguished lecture event with local AIAA Fellow Dr. Richard Hallion presenting "The History of Hypersonics."

Dr. Hallion had a distinguished career serving in multiple historian positions in NASA, the US Army, and the US Air Force with multiple historical publications. Dr. Hallion discussed a series of aeronautical and astronautical developments that led to supersonic flight and onto hypersonic flight, which started in the 1950s and continues today.

About forty people, both AIAA members and non-members, attended the event. Lunch was provided afterwards for an informal meet-and-greet.



Dr. Richard Hallion presents his distinguished lecture on the history of hypersonics.

Lunch-and-Learn: Air Force Test Center

Chi Mai

The AIAA Northwest Florida section hosted a lunch-and-learn event at the Air Force Research Laboratory Munitions Directorate with an overview of the Air Force Test Center (AFTC) by Dr. Betta Jerome, a member of the Senior Executive Service and AFTC's technical advisor for Armament and Weapons Test and Evaluation. In addition to an overview of AFTC, Dr. Jerome also discussed the role of AFTC's technical advisors, technical challenges facing the AFTC, and its relationship with AFRL.

Eighteen AIAA members and non-members attended the event.



AIAA members and family members at the cookout at the Air Force Armament Museum.

OUTREACH

K-12

East Panhandle Region Science & Engineering Fair

Matthew Clay and Angela Diggs

The Robert Sheffield East Panhandle Science and Engineering Fair, which showcases student scientific and engineering research from Okaloosa and Walton Counties, was held on January 31 at the Northwest Florida Fairgrounds in Fort Walton Beach, FL. The AIAA NWFL Section continued its tradition each year of endowing special awards.

This year's winning special projects included artificial intelligence, sonoluminescence, electromagnetic pulses, and rotor sails. AIAA members serving as volunteers were Matthew Clay, Patrick Sullivan, and Eugen Toma.

Two students each were recognized at the junior and senior levels with cash prizes of \$100 and \$50 for the winners and runners-up in each level. The awards were presented at a ceremony held on February 6 at Saint Mary Catholic School in Fort Walton Beach, FL.



AIAA Member Dr. Matthew Clay presents AIAA special award certificates and cash prizes at the award ceremony for the Robert Sheffield East Panhandle Science and Engineering Fair.

OUTREACH (CONT.)

K-12 (cont.)

FIRST STEM Equity Grant

Angela Diggs

In July 2017, the Northwest Florida Section of AIAA was awarded a \$50k STEM Equity grant from FIRST LEGO League (FLL) to address STEM inequity in the Florida Panhandle. The section proposed to establish FLL Jr and FLL teams in Title-I schools in the 16 counties of the Florida panhandle. Title I schools have a high number of students from low-income families; this metric was used to identify schools with students at high risk of not receiving exposure to STEM otherwise. The grant proposal included funds for registration, LEGO materials, transportation and light meals at expos/qualifiers, substitute teacher fees, and training materials. The Northwest Florida Section managed all grant funds, purchases, and training through a team effort between professional members and dedicated educator associates.

During the 2017-2018 academic year, 40 new FLL Jr teams and 15 new FLL teams were established in Title I schools in all 16 counties of the Florida panhandle. FLL Jr and FLL teams have six and eight students each, respectively, resulting in a total of 320 Title-I students reached. Each team has two coaches, typically educators, and may have several mentors, typically parents or local STEM professionals. The Northwest Florida Section provided free training to all coaches and mentors to ensure team success and reduce the barriers for participation. FLL Jr teams received WeDo 2.0 kits and laptops. FLL teams received their choice of two EV3 kits or one EV3 and a laptop. Teams were required to participate in a FLL Jr Expo or FLL Qualifier as a condition of receiving the grant funds. Community leaders were eager to participate as judges to show their support.

At the conclusion of the season, coaches (typically educators) reported students having higher confidence, working better as teams, and exhibiting stronger communication skills. The Northwest Florida section of AIAA will use the remaining grant funds to register all current teams for the 2018-2019 academic year and establish several new teams, for a total of 60 FLL Jr teams and 25 FLL teams.



Two of the FLL Jr teams supported by the STEM equity grant.



A local mayor reviews an FLL Jr's team's expo presentation.

ABOUT THE SECTION

The Northwest Florida Section of the American Institute of Aeronautics and Astronautics, Inc. (AIAA NWFL) is home to over 280 members (as of May 2018): 125 professionals, 126 educator associates, and 36 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/>

SharePoint (to be discontinued Aug 2018):

https://info.aiaa.org/Regions/SE/NW_FL/default.aspx

Engage (under construction):

https://info.aiaa.org/Regions/SE/NW_FL/default.aspx

EXECUTIVE OFFICERS

Chairperson

Chi Mai chilnmai@gmail.com

Vice Chairperson

VACANT—Open for Volunteers!

Secretary

Angela Diggs angela.diggs.1@us.af.mil

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COMMITTEE CHAIRS

Program Chair

Eugen Toma tomaeugen@icloud.com

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Membership Chair

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Honors & Awards Chair

Michael Kelton michael.kelton.1@us.af.mil

Public Policy Chair

VACANT—Open for Volunteers!

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!

To set up, go to <http://smile.amazon.com>, and search for “American Institute Of Aeronautics And Astronautics Niceville, FL”.

Alternatively, use this direct link to set up: <http://smile.amazon.com/ch/59-3105873>

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