



Published by and for the members of the
AIAA Delaware Section

October 2018

Shaping the Future of Aerospace

Delaware Section

FLIER



Message from the Chair:

Delaware Section Members –

The AIAA DE Section activities are in full swing for the 2018-2019 year! Last month, we held our first lunch and learn of the season, a “Why Join AIAA?” panel. The event was well received, and we had a new member Kyle Panariello join the section and council as a college liaison. Congratulations and thank you to Kyle for taking on this position! For this month’s lunch and learn, I will be discussing high power rocketry. For additional information, see our attached flier. Di Ena Davis has provided a recap of this year’s Regional Leadership Conference. A congratulations to our council officers, who won most of the available awards within the very small section category. Our Distinguished Lecture Dinner is in less than a week on November 1st, we hope to see you there. We will announce this year’s Delaware Section Engineer of the Year and enjoy a talk from Dr. Mark Lewis about hypersonics.

With the return of the school year, we will be supporting a multitude of STEM activities. With another new member, Katie Barbor, joining the section and council as the Young Professional liaison, we are striving to host more YP events as the year progresses! Her first endeavor is an impromptu happy hour and movie night out to see First Man.

As always, if there are any events or activities you would like to see, please don’t hesitate to reach out to the council members.

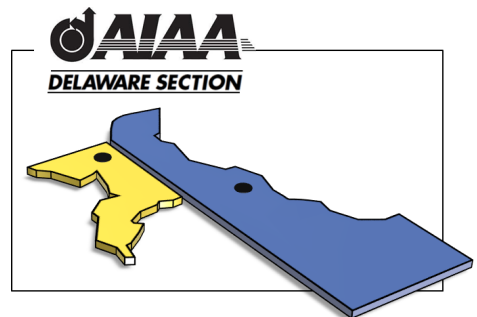
Clear Skies!

David Fox



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STEM Corner (Science, Technology, Engineering, & Mathematics)

Cecil County Public Schools Girls in STEM event

On September 29th, 125 middle school girls participated in a CCPS Girls in STEM event designed to introduce them to various STEM opportunities. Nearly 50 of the girls visited the AIAA/NGIS activity, which showed them how a water rocket flies and let them calculate the peak height the rocket achieved using some household items – and math. Katie Barbor, Elishabet Lato, Kelly Storrs and Breanne Sutton guided them through their calculations and the rocket launches. One student said, “Thank you so much, I love this event.”



Around AIAA, Industry, and Our Section

2018 Regional Leadership Conference



The AIAA Regional Leadership Conference is held annually to help connect regional and section officers from around AIAA. This year it was held at the Hyatt Regency in Orlando, FL following the 2018 Space Forum.

The Delaware Section sent section chair, David Fox, and college liaison, Di Ena Davis. The conference included one and a half days of presentations from multiple AIAA staff, board members, and national leadership. This was a perfect forum for section leaders to interact and share ideas about what can be effective to gather and maintain membership and further improve the section as a whole.

Various topics were covered during the conference, including: conveying AIAA's message, core values and national restructuring to more effectively service its members, obtaining and retaining volunteers, and how to integrate the generations to build a lasting organizations. The various presentations provided ideas to help our sections grow and improve. One specific area gathered interest was information about the AIAA Public Policy activities. The informational session detailed how local sections can participate and how the sections can be involved at the local level and how to set up events to get involved.



The entire day helped improve personal relevance to AIAA and its benefits to the professionals in our industry. Breakout sessions with the other sections that attended were formed to discuss activities, challenges, and events that work, have worked and what we could work. The numerous presentations and discussion opportunities also provided ways to improve our section in regards to event planning and member involvement. As a bonus session, after RLC workshops were over, David and Di Ena were able to attend a portion of An Evening of Astronaut Stories featuring Tony Antonelli and Chris Ferguson before the AIAA section awards ceremony. Overall, the conference was a great success and will be extremely helpful for the Delaware section. Thanks to AIAA for a great conference.

September Lunch & Learn - "Why Join AIAA?" Panel Recap

The September Lunch Lecture was held on Wednesday, September 26th in the Northrop Grumman G-29 Executive Conference Center. Veteran AIAA member Dave McGrath, and current Chair and Vice-Chairs' of the Delaware Section, Dave Fox and Breanne Sutton participated in a panel discussion regarding the benefits of being an AIAA member. Some of benefits highlighted included networking opportunities, technical committee participation, job promotion and advancement, and other ways to become more involved in the Aerospace Industry. The lecture had approximately 30 attendees.



AMERICAN INSTITUTE OF AERONAUTICS & ASTRONAUTICS
AIAA DELAWARE SECTION PRESENTS
CAREER ENHANCEMENT/EDUCATION
LUNCH LECTURE SERIES PROGRAM

**HIGH POWER ROCKETRY: AN EXACT
SCIENCE, BUT NOT EXACTLY**
Presented by **David Fox**

David Fox, currently a project engineer at Northrop Grumman Innovation Systems and AIAA DE Section Chair, will provide an overview of high power rocketry! What is it? How much does it relate to industry? Are these crazy rules of thumb related to sound engineering? From meeting Wildman Tim to earning his level 3 certification, and witnessing world record flights. David will share stories of his own experiences with high power rocketry and show some videos of more exciting moments in the hobby. You're certain to learn something about rockets you never knew before!



For AIAA Members, Guests and Prospective Members

WEDNESDAY, OCTOBER 31, 2018
12 NOON - 1 PM

Northrop Grumman/Elkton G-29 ECC

\$1.00 FOOD and DRINKS

WILL BE SERVED UNTIL WE RUN OUT!

For more information contact:

David Fox, Chairman	410-392-1349
Breanne Sutton, Vice Chair	410-392-1661
Ian Beringer, Secretary	410-392-1388
Noah Gold, Treasurer	410-392-1771



Around AIAA, Industry, and Our Section

Delaware Section Nearly Sweeps “Very Small” Section Awards

The 2017-2018 Section award winners were announced by AIAA on August 21st, 2018 with the Delaware Section placing highest in all categories, but one for the “Very Small Section”. The section awards honor particularly notable achievements made by member sections in a range of activities that help fulfill the Institutes’ mission. Additionally, some sections awards have a monetary prize which the Delaware Section will use to continue to expand and enhance our programs. Section Chair David Fox accepted the awards on behalf of the section at this year’s Regional Leadership Conference in Orlando, FL September 19-20. Congratulations to the council for a job well done!

For a complete list of section winners see: <https://www.aiaa.org/>

VERY SMALL SECTION AWARDS

Outstanding Section Award, First Place: David Fox

Outstanding Activity Award*: David Fox

Communication, First Place: Christina Larson

Membership, First Place: Noah Gold

STEM K-12, First Place: Elishabet Lato

Public Policy, First Place: Timothy Dominick

Young Professional: Daniel Nice



*David presented this award to Tim Dominick for organizing the ISS Downlink activity.

Public Policy in Action

As the world’s largest aerospace professional society, AIAA plays a key role in the national public policy debate. This section highlights current policy issues of importance to the Aerospace community.

Bill Streamlining Commercial Space Regulations Passes Senate Committee

On 1 August, the Senate Commerce, Science, and Transportation Committee passed the Space Frontier Act ([S. 3277](#)). Building upon the 2015 Commercial Space Launch Competitiveness Act, the legislation calls for streamlining of processes for licensing launches and reentries, as well as for licensing remote sensing spacecraft. More specifically, it establishes an assistant secretary for commercial transportation within the FAA, directs the department to reform existing launch regulations within a year, and urges it to use all existing authorities to speed up the process. It also extends the U.S. utilization and operation of the International Space Station from 2024 to 2030. The legislation now awaits consideration before the full Senate. A related bill, the American Space Commerce Free Enterprise Act ([H.R. 2809](#)), was passed by the House of Representatives in April.

Meanwhile, in late September, Representative Brian Babin (R-TX), Chairman of the House Space Subcommittee, introduced the Leading Human Spaceflight Act ([H.R. 6910](#)). The bill includes language that would extend the life of the International Space Station to 2030 unless a viable and less expensive commercial alternative was available sooner. The bill awaits committee consideration.



Join the AIAA DE Section in a Race to Escape!

**As the incumbent Young Professionals
Chair, Dan Nice, steps aside, he is
challenging his successor, Katie
Barbor, to a race of skill and wit!**

**Pick a side and come help the AIAA DE
Section determine if Katie has what it
takes to be YP Chair!**

**Join us as the AIAA DE Section battle of old
vs. new YP Chair goes down this winter!**

Let your captain of choice know you're interested.
More details to come. There will definitely be a
Happy (or sad) Hour to follow.
Choose your side wisely!

**Contact Dan for
details and reserve
your spot!**

Phone: 410-392-1311

**Email:
Daniel.Nice@ngc.com**



**Contact Katie for
details and reserve
your spot!**

Phone: 410-392-1595

**Email:
Katie.Barbor@ngc.com**

Who's side are you on?

Public Policy in Action

Congress Passes Defense Appropriations Bill and Continuing Resolution Prior to New Fiscal Year

For the first time in nine years lawmakers on Capitol Hill passed the annual defense spending bill on time. The \$674.4 billion bill, which is \$19.8 billion more than the fiscal year 2018 enacted level, contains \$96.1 billion for research and development, the largest R&D budget in the Pentagon's history, adjusted for inflation. More specifically, it allocates \$43.0 billion for the procurement of military aircraft, \$617 million to support and accelerate offensive and defensive hypersonics research and prototyping efforts, \$417 million to develop enhanced offensive and defensive space capabilities, and \$306 million to expand and accelerate cyber research across the department.

The [spending package](#) also included a continuing resolution that keeps several departments and agencies operating at the previous year's funding levels. Those agencies include the FAA, NASA, NOAA, and NSF. Congress must revisit the remaining appropriations bills after the mid-term election and prior to a self-imposed deadline of 7 December.

Agency	FY18 Enacted	President's FY19 Request	FY18-FY19 Difference	House Committee	FY18-FY19 Difference	Senate Committee	FY18-FY19 Difference
NASA	\$20.7 B	\$19.9 B	-3.9%	\$21.6 B	+4.4%	\$21.3 B	+2.9%
NOAA	\$5.9 B	\$4.6 B	-22%	\$5.2 B	-11.9%	\$5.5 B	-6.8%
NSF	\$7.8 B	\$7.5 B	-3.8%	\$8.2 B	+5.1%	\$8.1 B	-3.9%
FAA	\$18 B	\$16.1 B	-10.6%	\$17.7 B	-1.7%	\$17.7 B	-1.7%

President Signs FY2019 Defense Authorization Act into Law

On 13 August, President Trump signed into law a \$716 billion defense policy bill ([P.L. No. 115-232](#)). The authorization sets new authorities for the Department of Defense to deter and respond to attacks in cyberspace, including establishing the first U.S. policy on cyber warfare. It directs the department to assemble a strategy articulating its science and technology priorities, goals, and investments, while offering recommendations on the future of the defense research and engineering enterprise. Moreover, it charges the department to develop a plan that establishes a separate, alternative process for space-related acquisitions; instructs the defense secretary to pursue a strategy that includes reusable rockets in national security launches; and requires the Air Force secretary establish a plan to increase and improve the number and quantity of space professionals. While the legislation does not create a Space Force or Space Corps, it does call for the creation of a U.S. Space Command within USSTRATCOM to carry out joint space warfighting.

Administration Announces Plan to Establish a "Space Force"

A [report](#) issued on 9 August lays out several sweeping organizational changes the Pentagon will immediately take in an effort to create a fully independent Space Force as soon as 2020. More specifically, Defense Department officials will first establish an independent unified combatant command for space, a new joint agency for space procurement and technology development, and a new "Space Operations Force" that would bring together expertise from all four services branches and the contractor community, as well as name a civilian to the post of assistant secretary of defense for space. The department is expected to submit a legislative proposal requesting the authorities necessary to establish fully the Space Force to Congress in February 2019. While department leadership can carry out the initial steps outlined in the report, only Congress can create a new military service branch by amending Title 10 of the United States Code.

Space Weather Forecasting Bill Passes House Committee

The House Science, Space, and Technology Committee, on 24 July, approved an amended version of a previously passed Senate bill, known as the Space Weather Research and Forecasting Act ([S. 141](#)). The legislation tasks the National Space Council with establishing national priorities for space weather and creating a National Committee for Space Weather Observation and Forecasting. That body would then be charged with establishing a plan for delineating responsibilities for space weather activities. The bill also calls for the formation of a pilot program for acquiring commercial space weather data. S. 141 must now be considered by the entire House of Representatives and entire Senate.

2018-2019 Council Members

Chair David Fox, Northrop Grumman; (410) 392-1346 David.Fox@ngc.com
Vice-Chair Breanne Sutton, Northrop Grumman; (410) 392-1661 Breanne.Sutton@ngc.com
Treasurer Noah Gold, Northrop Grumman; (410) 392-1771 Noah.Gold@ngc.com
Secretary Ian Beringer, Northrop Grumman; (410) 392-1388 Ian.Beringer@ngc.com
Education Di Ena Davis, Northrop Grumman; (410) 392-1194 DiEna.Davis@ngc.com
Honors & Awards OPEN
Career Enhancement Tim McCardell, Northrop Grumman; (410) 392-1560 Timothy.McCardell@ngc.com
Young Professionals Katie Barbor, Northrop Grumman, (410) 392-1311 Katie.Barbor@ngc.com
STEM/K-12 Outreach Elishabet Lato, Northrop Grumman; Elishabet.Lato@ngc.com
Public Policy Tim Dominick, Northrop Grumman; (410) 392-1069 Timothy.Dominick@ngc.com
Communications Christina Larson, Northrop Grumman; (410) 392-1138 Christina.M.Larson@ngc.com
Membership Christina Larson, Northrop Grumman; (410) 392-1138 Christina.M.Larson@ngc.com
Programs Entire Council
RAC Representatives David Fox and Breanne Sutton

The AIAA Delaware Section

The Delaware Section is part of the American Institute of Aeronautics and Astronautics, the world's largest technical society dedicated to the global aerospace profession. The AIAA primary purpose is to advance the state of the art, sciences and technology of aeronautics and astronautics and to promote the professionalism of those engaged in these pursuits. The institute serves as the vehicle for focusing the energies and interests of its members in their own technical and professional development and service to society.

AIAA Website

The AIAA Web site (www.aiaa.org) continues to receive over 45,000 visits per month and serves as a point-of-purchase for memberships, meeting registrations and subscriptions. It also provides access to bibliographic data of AIAA meeting papers for the past five years as well as connections to web sites of individual AIAA section chapters.

Membership

We continue to be encouraged by the number of new or prospective members that have recently shown an interest in the Delaware AIAA. If you know of any prospective members, please have them call Chrissy Larson, to obtain an application. Also, if you wish to be upgraded to Senior Member, Associate Fellow or Fellow, contact Breanne for details and an upgrade application form.

ARE YOU HAVING A MEMBERSHIP OR SUBSCRIPTION PROBLEM?

If you are having a membership or subscription problem you can contact AIAA customer service at 1/800-639-2422 or via fax at 703/264-7657.

If the AIAA staff is not responsive, let your AIAA Ombudsman, John Walsh, cut through the red tape for you. John can be reached at 703-893-3610 or by writing to him at: 8800 Preswould Place, McLean, VA 22102.

Have You Checked out the AIAA Journal?

AIAA's journals are the best resource for students and professionals who want to stay current on the latest aerospace research and development. Reporting on the most important aerospace advances, AIAA's seven active technical journals feature original research papers spanning the spectrum of aerospace science and technology. They include methods of analysis, technical knowledge, exploratory development, and new applications. There are over 50 years of archives stretching back to the times of the American Interplanetary Society, predecessor to the American Rocket Society. We have provided a link below and hope you take some time to browse all the great information available to you. <http://www.aiaa.org/journals/>



Category of Membership	2016–2017
Associate Member, Member, and Senior Member Retired/ Return to Full-Time Study / Spouse / Unemployed (50% of member dues)	\$120 \$60.00
Associate Fellow Retired / Return to Full-Time Study / Spouse /Unemployed (50% of Associate Fellow dues)	\$131 \$65.50
Fellow Retired / Return to Full-Time Study / Spouse / Unemployed (at 50% of Fellow dues)	\$153 \$76.50
Full Time Student	\$25.00
Student to Professional Transition*	
2 nd year	\$30
3 rd year	\$60
4 th year - full member rate	\$90

AIAA DE Section Member Numbers

Professional Members	49
• Members	40
• Associate Fellows	7
• Fellows	2
Educator Associates	37
Student Members	7

If you know a [Young Aerospace Professional](#) in the first five years of professional practice, AIAA will cut their first year's dues in half! After the first year, regular membership rate applies. They cannot have been a member or student member previously. To apply, they will need to call customer service at 800-639-2422 and talk to them directly – it cannot be done online.

AIAA also offers [Free Educator Associate Memberships](#) for educators in grades Kindergarten through 12 that are interested in the development and application of science, mathematics, and technology for their educational curriculum. To recommend a friend or colleague as an Educator Associate, contact Breanne Sutton for an application.

[Membership Upgrades](#) - To request membership upgrade information or nomination forms, contact Breanne Sutton or go to AIAA customer service at 800/639-AIAA (or 703/264-7500), or visit the AIAA Web site at: <http://www.aiaa.org>. See the following link for more information: <http://www.aiaa.org/content.cfm?pageid=183>

[Student Upgrades](#) - Any student who is a member of AIAA in good standing at the time of graduation will automatically receive one free year of professional membership and the second year at half price

AIAA Delaware Section Social Media

The AIAA Delaware Section web site is active. Please visit <https://info.aiaa.org/Regions/NE/Del/default.aspx> or navigate there via the AIAA National web site at: www.aiaa.org. We invite you to visit your Section's web site and provide any comments or suggestions.

Also, please visit any one of our many social media outlets:



[AIAA DE on the WWW](#)

[@AIAA_DE on Twitter](#)

[AIAA DE on LinkedIn](#)

[AIAA DE on Facebook](#)