Chesapeake Bay Roost Newsletter

March 2026

This Issue:

- The Discombobulator
- 2026 scholarship application process started
- Recent Lunch & Learns and Happy Hour Fun
- Upcoming Lunch & Learns

Scholarships Applications

Our Chesapeake Bay Roost awards scholarships to local high school students annually. The process for 2026 is underway. Submissions are due April 12, 2026. Please spread the word to any potential college-bound Science, Technology, Engineering, and Math (STEM) candidates that would be interested. The application can be found at https://www.microwavejoe.com/aoc/

2026 Upcoming Events

Technical Talks

March 19: MatLab for EMSO models and digital twins

April 23: Cognitive EW

July 30: Spectrum Control

Thanks to Our Chapter Sponsors!

Our chapter provides scholarships to local youth and chapter events for EW professionals. These activities quickly exceed what the chapter can achieve simply on AOC national chapter funds. We are truly thankful for Axillon Aerospace (previously Parker Meggitt), Annapolis Micro Systems, and Keysight Technologies for contributing financially in support of these endeavors. Please consider working with them for your product needs.

AXILLON AEROSPACE

https://www.axillonbaltimore.com/
Previously Meggitt Baltimore, Inc.
3310 Carlins Park Drive, Baltimore, MD 21215

Annapolis Micro Systems

https://www.annapmicro.com/
190 Admiral Cochrane Dr Ste 130, Annapolis, MD

KEYSIGHT TECHNOLOGIES

www.keysight.com
1900 Garden of the Gods Road, Colorado Springs, CO

We are seeking financial sponsorship to support our club activities and scholarship benefits we provide to the community. Please contact the board at AOC.ChesapeakeBay@gmail.com for reasonable rates.

Note: The content of articles is taken directly from open source, unclassified materials cited below each article for the purposes of stimulating relevant EW discussions between chapter members. All sources are assumed to be valid, but no specific fact checking has been applied to the content of the cited articles. Articles compiled by Chapter Secretary, Joe Sluz.

The Use of the 'Discombobulator' in Venezuela

"President Donald Trump has lauded the effectiveness of the so-called "Discombobulator," a mysterious new weapon he said was deployed when elite U.S. forces swept into Venezuela earlier this month. "I'm not allowed to talk about it," Trump said during an interview with the New York Post. The so-called "Discombobulator" made Venezuela's military kit "not work," Trump said. "They never got their rockets off. They had Russian and Chinese rockets, and they never got one off." "We came in, they pressed buttons and nothing worked," the president added.[1]

Readers familiar with the practices of the Old Crows likely see a lot of similarity of that description with that of Electromagnetic Spectrum Operations (EMSO). Journalist and weapons expert David Hambling said "As far as I can tell, in that case, he is talking about some kind of electronic warfare system" to hone in on air defenses in the country, [1]"Joint Chiefs of Staff Chairman General Dan Caine has publicly acknowledged EA-18 Growler electronic warfare aircraft accompanied a litany of fighter jets, bombers, helicopters and drones on the mission."[1]

Indeed, the Wall Street Journal reported "the Growler is built to control the electromagnetic spectrum. It does not drop bombs. Instead, it targets radars and communications. During the Venezuela mission, the aircraft joined a large US air armada that shut down radar coverage and jammed command links. This allowed special-forces aircraft to enter and leave Venezuelan airspace quickly." In Venezuela, the Growlers exploited weaknesses in an ageing air-defense network that relies largely on older Soviet- and Russian-made systems, including versions of the S-300 missile system."[2]

In Venezuela, the Growler and other U.S. aircraft were able to easily work around the country's aging, predominantly Soviet- and Russian-made air-defense systems. The tactics employed "would probably be less effective against a well-equipped near-peer adversary such as Russia or China," said aid Nick Cunningham, a defense analyst at Agency Partners, a research firm. [3] Analysts wonder, though, if the U.S. and Europe have fallen behind China, in particular. For instance, updates to the Growler's electronic-warfare pods, which the U.S. relies on to protect its air fleets, have been delayed. "Progress in the program has been painfully slow," said Frank Kendall, who served as the U.S. Air Force secretary during the Biden administration.[3] But, then again, there may be a shadowy upgrade program that had produced the universal Discombobulator.

A U.S. Navy EA-18G Growler aircraft.
© Ricardo Arduengo/Reuters

Figure 1. EA-18G Growler, Photo from (3)

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1. https://www.newsweek.com/the-discombobulator-does-trumps-secret-weapon-really-exist-11416698
2. https://www.thestatesman.com/world/us-growler-jets-venezuela-air-defences-maduro-1503536759.html
3. https://www.msn.com/en-us/news/world/the-growler-signal-jamming-jet-that-helped-capture-nicol%C3%A1s-maduro/ar-AA1THCyM

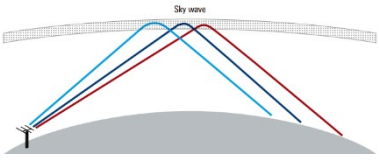
Entertaining FLR-9 HF Direction Finding Lunch & Learn

A dozen members got a deep dive into the details of some of the largest antennas on earth over a pizza lunch on February 19. In the 1960s, the US Air Force and US Army constructed eight huge antenna

systems, each the size of the Pentagon, to conduct HF Direction Finding and intercept operations. The FLR-9 antenna systems, sometimes referred to as the "Elephant Cages", were Circularly Disposed Antenna Arrays (CDAAs), or Wullenweber antennas. The talk explored the evolution of the CDAA technique, and the technology inside these impressive systems. Apologies to those who tried to join on Zoom, we had some issues there and have a corrective path for the future.

Informative Over The Horizon Radar Event

A well-attended (~42 attendees) lunch & learn was provided courtesy of Joe Faulkner and Denis Pyatkov of Rhode & Schwarz on Jan. 22. The session reviewed the principles of long-range HF propagation and the sources of interference and ionospheric effects. Operational OTH radars were highlighted, including the US Relocatable Over the Horizon Radar (ROTHR) and the Australian Jindalee Operational Radar Network (JORN). The session concluded with an overview of the challenges of OTH radar from a Research, Development, Test & Evaluation (RDT&E) viewpoint, modelling and simulation tools, channel sounding, coherent transmission and calibration, the use of COTS power amplifier and coherent reception. Rohde & Schwarz is a very capable supplier in this technical area.



Wonderful Happy Hour Event

Thanks to all the members who broke out of hibernation and enjoyed some snacks and drinks at the February 12th Happy Hour event at Reckless Shepherd Brewing. It was great to connect with our core local members, make some new friends, and have some great conversations. Members voted on a new chapter coin design and chapter President Jon Ward presented chapter Secretary Joe Sluz with the chapter-level Outstanding Chapter Support Award.

Photo: New coin options voted during social held at Reckless Shepherd Brewing

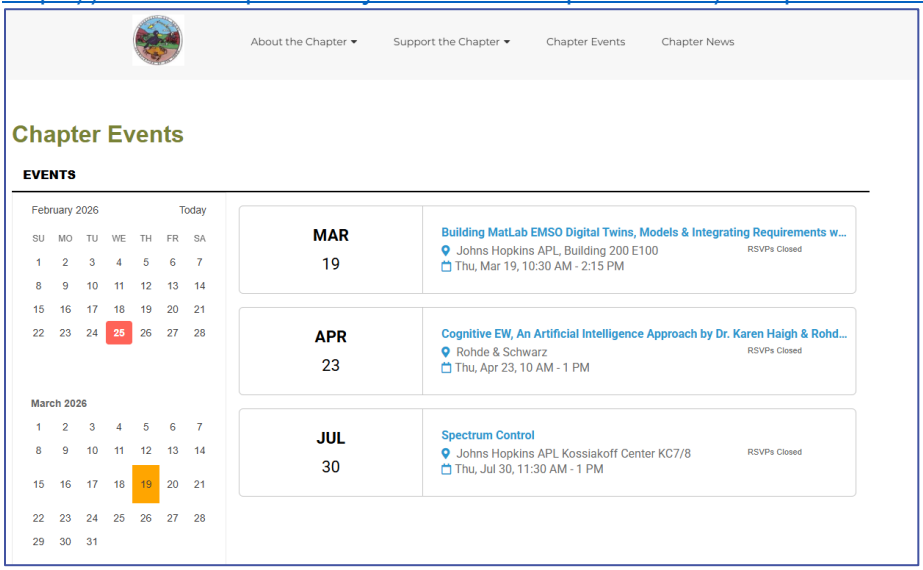
Newsletter & Chapter News Website Update

We have added updates to our chapter website of interest to our chapter membership. Please check out our web site!

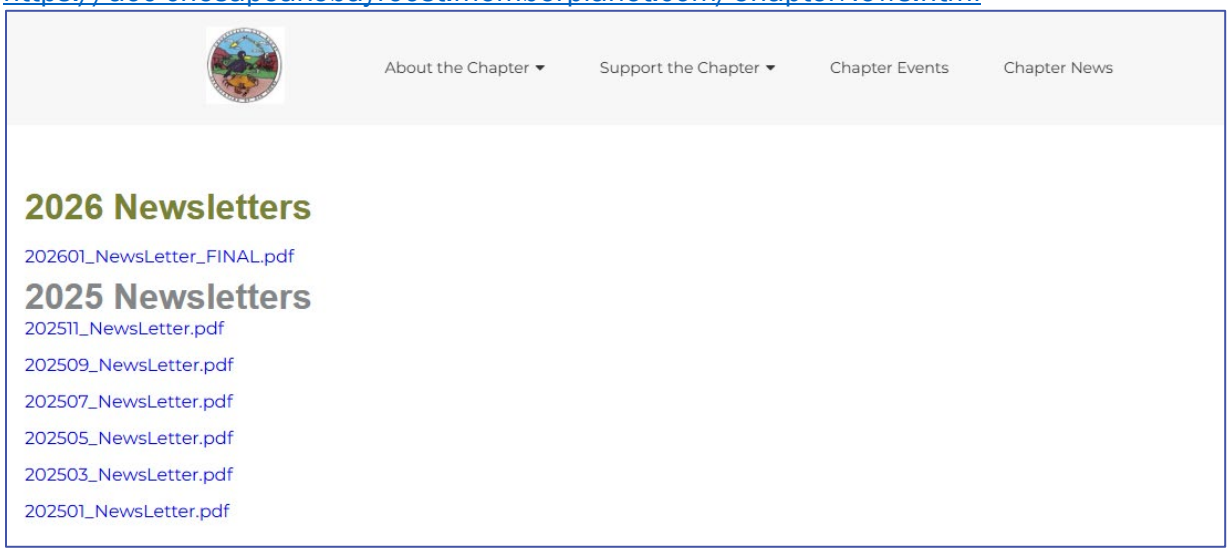
https://aoc-chesapeakebayroost.memberplanet.com/

Home Page
https://aoc-chesapeakebayroost.memberplanet.com

Upcoming Events
https://aoc-chesapeakebayroost.memberplanet.com/ChapterEvents.html



Newsletters at:
https://aoc-chesapeakebayroost.memberplanet.com/ChapterNews.html



Upcoming Technical Lunch & Learn Talk

March 19, 10:30AM - 2:15PM

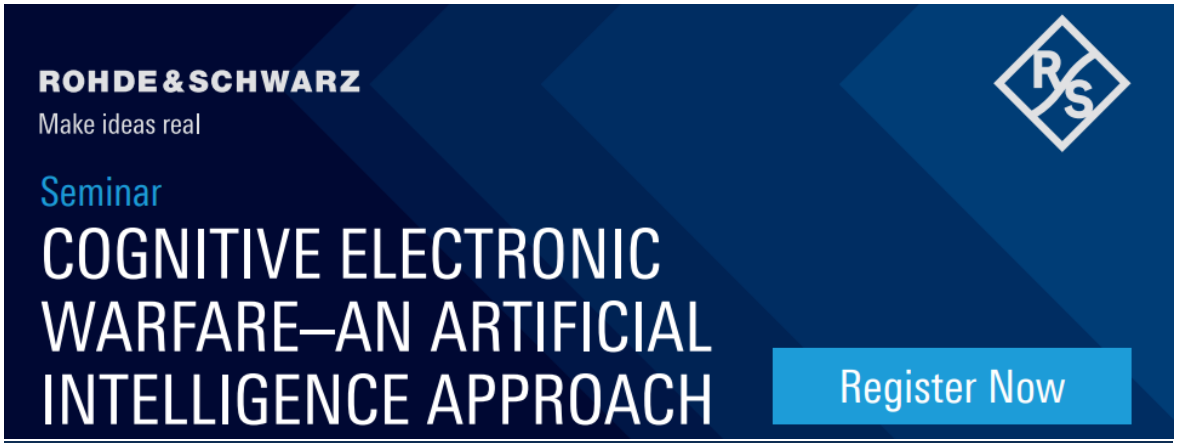
We are jointly hosting a special event with MathWorks on using MatLab for EMSO models and digital twins.

10:30-11:30 Tech Talk 1 - Building Digital Twins for EMSO Systems with MATLAB and Simulink
11:30-12:00 Q&A, lunch & brief chapter business
12:00-1:00 Tech Talk 2 - Building World Models for EMSO Scenarios with MATLAB and Simulink
1:00-1:15 Break and Q&A
1:15-2:15 Tech Talk 3 - Digital, System, and Mission Engineering: Integrating Requirements with Architectures and System Models

In person at
Johns Hopkins APL, 11101 Johns Hopkins Rd, Laurel, MD Bldg 200-E100

RSVP at:
https://www.mathworks.com/company/events/seminars/series/aoc-chesapeake-bay-roost-technical-talks-courtesy-of-mathworks-na-2026.html

April 23, 10:00AM – 3:00PM



COGNITIVE ELECTRONIC WARFARE–AN ARTIFICIAL INTELLIGENCE APPROACH

Cognitive EW: Assuring In-Mission Learning for EW

This presentation will discuss the challenges for assuring the performance of a system that can learn from novel experiences in the field. EW systems operate at a timescale that means they cannot afford to learn post-mission, or with human supervision. EW systems must learn from a single observation, using self-supervised reinforcement feedback. The validation infrastructure must therefore support

automated closed-loop, multi-resolution testing, and ways to test the effectiveness of actions. We must validate the learning process, rather than validating the learned model.
Cognitive EW: Data Requirements for AI. A common myth is that we need a lot of data to train an AI-ML system.
This myth not only causes developers to fear data collection, but also causes developers to create solutions that are not fieldable. EW systems can leverage first-principle models (such as physics), feature engineering, and progression of the engagement to dramatically reduce the data collection requirements, and create systems that can learn on single observations of novel environments.

Speaker: Dr. Karen Haigh
Dr. Karen Haigh is an expert and consultant in Cognitive EW and embedded AI. She recently wrote the book “Cognitive EW: An AI Approach” with Julia Andrusenko. She was a pioneer in three fields now common across the globe: (1) closed-loop planning and machine learning for autonomous robots, (2) smart homes for elder care, and (3) cognitive RF systems

Please Join Us

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Location: TBA & Registration to be announced!

Upcoming Technical Lunch & Learn Talk

July 30, 11:30AM

Topic: Spectrum Control

Overview of Spectrum Control products courtesy of Spectrum Control & RL Engineering

Johns Hopkins University APL 11100 Johns Hopkins Rd, Laurel, MD Kossiakoff Center KC7/8 Rooms

Agenda:
11:30-11:50 Lunch for those onsite
11:50-12:00, Chapter News
12:00-12:45 Technical Talk
12:45-1:00 Q&A

Aug 20 TBA

Sep 30 TBA

Oct 29 TBA

Advertise Your Company Here!

Did you know as of 12/1/25 this Chesapeake Bay Roost has over 450 current members in its database?

Our membership represents major EW centers in this area, including:

- Axillon Aerospace
- BAE Systems
- Boeing
- Booz Allen Hamilton
- CACI
- CEA Technologies
- Johns Hopkins Applied Physics Laboratory
- Multiple branches of the Department of Defense
- Northrop Grumman Corporation
- Rohde & Schwarz
- Raytheon
- Textron Systems
- WGS Systems
- And many others!

We are seeking sponsorship to support our club activities and scholarship benefits we provide the community.

Space is available here to target your advertisement/ announcements to our select membership!

Please contact the board at AOC.ChesapeakeBay@gmail.com for reasonable rates

Advertise Your Company Here!

Chesapeake Bay Roost Newsletter

Follow the Chesapeake Bay Roost

https://www.facebook.com/profile.php?id=61551521264680

www.linkedin.com/company/association-of-old-crows-chesapeake-bay-roost

https://twitter.com/AOCBayRoost

https://www.instagram.com/aocbayroost/

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Treasurer:	Niels G. Eegholm
Secretary:	Joseph Sluz
Outreach:	Sarah Willenbrink
Awards/Scholarships:	Paul Kennedy
Directors:	Sunita Bhatia, Niels G. Eegholm, Joseph Sluz

AOC.ChesapeakeBay@gmail.com

AOC Events

June 2-3, 2026
Cyber/Electronic Warfare Convergence
Charleston, SC

July 28-30, 2026
EW Capabilities & Gaps
Crane, IN