

2024

# YEAR END REPORT



ASSOCIATION  
OF OLD CROWS

Submitted by:

**Shelley Frost**  
Executive Director  
Association of Old Crows (AOC)

The Association of Old Crows (AOC) is a professional non-profit association that educates, connects, and advocates on behalf of its members and stakeholders across the global electromagnetic warfare (EW) and spectrum operations community.

**JOIN THE LEGACY, SHAPE THE FUTURE**

# INTRODUCTION



**ASSOCIATION**  
**OF OLD CROWS**

As we close another successful year at AOC, we look ahead to 2025 with great anticipation. Our 60<sup>th</sup> anniversary in 2024 marked a significant milestone, and we continue to build on that legacy with a strong commitment to advancing the organization and serving our global community of EW and EMSO professionals. Our investment in staff and resources continues to drive AOC's success. We now have 21 team members.

In 2024, AOC's membership numbers fell below 12,000, a challenge that we are actively addressing. While membership fluctuations are common, we recognize the importance of maintaining and growing our community. To reverse this trend, we have launched a comprehensive membership recovery and growth plan that includes:

- Expanded outreach efforts to re-engage lapsed members and attract new professionals.
- Enhanced member benefits, including exclusive content, new training

opportunities, and improved networking experiences.

- A targeted recruitment strategy, leveraging partnerships, chapters, and industry events to connect with emerging professionals and allied communities.
- A revamped digital experience following the launch of our new website and database in March 2024, providing better engagement tools for members and chapters.

With these initiatives in place, we are confident in regaining lost members and expanding our reach to new audiences in 2025.

In 2024, we successfully managed five major conferences and actively participated in seven chapter events. A major milestone was our transition of AOC Europe in-house, effective 2025. This move will give us greater control over the event's direction and further strengthen our presence in the international EW and EMSO community. Additionally, our annual symposium, AOC 2024, held in December, set a new attendance record, marking a 6% increase over 2023—a record-breaking year in its own right. This continued growth underscores the event's expanding impact and industry relevance.

One of the most significant operational advancements this past year was the implementation of our new database and website in March 2024. This upgrade, which includes enhanced chapter functionality, now allows for better engagement tracking, improved member services, and greater insights into supporting membership retention and growth.

AOC remains committed to building an Advocacy and Communications Enterprise, with From the Crows' Nest playing a pivotal role. In 2024, we successfully launched members-only and subscriber-exclusive podcast episodes, providing deeper access to valuable content. These efforts have further expanded the podcast's reach, solidifying its position as the leading podcast in our trade space.

As we enter 2025, AOC's Board of Directors and staff are focused on executing our strategic plan, strengthening our advocacy efforts, and driving innovation across all aspects of the organization. With a strong financial position, record-breaking event participation, and a proactive membership growth strategy, we are well-positioned for continued success.

Here's to the future of AOC – building on our legacy and shaping the path ahead!

# BOARD ACTIVITIES

## 2024 AOC Board of Directors

President	Brian "Hinks" Hinkley
President-Elect	Anthony (Tony) Lisuzzo
Secretary	Dennis Monahan
Treasurer	Jim Utt
International Rep.	Erik Bamford
At Large Directors	Haruko Kawahigashi, Nino Amoroso, Steve Oatman, Ken Dworkin, Scott Oliver, and Paul Vavra
Regional Directors	Central Director – Jim Utt Mid-Atlantic Director – Dennis Monahan Northwestern Director – Mark Schallheim Pacific Director – Amanda Brockermeyer International I Director – Erik Bamford International II Director – JP Kim Southern Director – Brandon Coleman Mountain-Western Director – Wayne Shaw Northeast Director – Myles Murphy
Past President	Glenn "Powder" Carlson
Appointed Directors	Ken Parks and Frank "Cowboy" Ball

## Annual Election

The annual election was conducted October 2024, for the 2025 Board of Directors. Results of the election were:

Two (2) At-Large Directors – Jeff Fischer and Dennis Monahan  
 Central Director – Jim Utt  
 Mid-Atlantic Director – Jeff Hughes  
 Mountain West Director – Frank Ball

Outgoing board members: Nino Amoroso, Glenn Carlson, Steve Oatman, Ken Parks, and Wayne Shaw

## Mission and Vision Statements

The Board approved changes to AOC's mission and vision statements to reflect stakeholders and their interests more accurately.

### Mission Statement

The Association of Old Crows (AOC) is a professional non-profit association educating, connecting and advocating on behalf of its members and stakeholders across the global electromagnetic warfare (EW) and spectrum operations community.

### Vision Statement

Position AOC as the premier global association that unites members, organizations, and like-minded individuals interested in electromagnetic warfare (EW) and spectrum operations internationally. Across government, defense, industry, and academia, and spanning air, land, maritime, space, and cyber maneuver spaces, we foster a global exchange of ideas, philosophies, and information. We are committed to providing a platform to recognize and celebrate the significant advancements and contributions in these critical domains, appreciating the hard work and dedication of our members.

## Meetings

The Board of Directors met five times during the year.

Date	Description
March 7, 2024	Virtual
June 6-7, 2024	In-Person
September 5, 2024	Virtual
September 19, 2024	Virtual
December 10, 2024	In-Person

## Strategic Planning

Tony Lisuzzo, President-Elect, led the strategic planning committee.

The board approved the 2025 Operating Plan (OpMan 14 Appendix A) in December 2024. This operating plan enables board members, committee leads, the executive director, and staff to have a common understanding of the overall objectives for the coming year.

A summary of the priorities and look ahead can be found at the end of this document. The specific details can be found in OpMan 14 Appendix A at [crows.org. https://crows.org/board-of-directors/governing\\_docs/](https://crows.org/board-of-directors/governing_docs/)

## AOC Governing Documents

AOC's Governing Documents (OpMans) effective dates are shown in the table below. OpMans can be found here. [https://crows.org/board-of-directors/governing\\_docs/](https://crows.org/board-of-directors/governing_docs/)

OPMAN	EFFECTIVE DATE
11 – Purposes and Responsibilities	February 2, 2021
13 – Bylaws of the Association of Old Crows	March 11, 2021
14 – AOC Strategic Positioning	May 2, 2022
15 – Code of Ethics	March 11, 2021
16 – Meeting Minutes	August 31, 2023
17 – Board/Chapter Operations	February 8, 2021
18 – Non-Discrimination Policy	February 16, 2021
21 – Financial Management	February 12, 2020
22 – Reserve Fund Policy	February 11, 2022
23 – Travel and Expense Reimbursement	March 11, 2021
24 – Records Retention	February 2, 2021
25 – Anti-Trust Compliance Policy	May 2, 2022
31 – Awards Program	March 11, 2021
32 – Nominations and Election Committee	March 11, 2021
41 – Conference Planning, Operations, and Reporting	April 26, 2019
42 – Certification Program	November 11, 2021
51 – Conducting Classified Events	February 19, 2021
72 – Annual Chapter Recognition Program	October 31, 2019
73 – Publishing Chapter Events in the JED/eCrow	October 31, 2019
74 – Establishing, Maintaining, and Closing AOC Chapters	May 13, 2022
92 – Human Resource Management	March 11, 2021

## 2025 AOC Board of Directors

President	Anthony (Tony) Lisuzzo
Vice President	Amanda Brockermeyer
Secretary	Dennis Monahan
Treasurer	Jim Utt
International Executive	Erik Bamford
At Large Directors	Haruko Kawahigashi, Ken Dworkin, Scott “Sherm” Oliver, Paul Vavra, Jeff Fischer, and Dennis Monahan
Regional Directors	Central Director – Jim Utt Mid-Atlantic Director – Jeff Hughes Northeast Director – Myles Murphy Northwestern Director – Mark Schallheim Pacific Director – Amanda Brockermeyer International I Director – Erik Bamford International II Director – JP Kim Southern Director – Brandon Coleman Mountain-Western Director – Frank Ball
Past President	Brian Hinkley
Appointed Directors	Kevin Finch and Fran Orzech

## AOC Business Meeting: Annual Assembly of Delegates

The meeting of AOC Delegates (chapter representatives) was held on December 11, 2024, at the Annual Symposium. The president provided a recap of the year. The 2025 Board of Directors swearing-in was conducted at the Keynote Session on December 13, 2024.



# FINANCIAL

The Finance Committee held several meetings throughout the year to closely monitor the finances with a top priority of AOC's Five- Year Strategy. A foreign exchange account was opened in Euros to manage the upcoming AOC Europe event.

AOC Reserve Fund Allocation - \$2,594,000

OPMAN 22 mandated contingency (50% of the internal operating budget plus anticipated capital expenses for the next 10 years)

AOC Current Obligations - \$428,765

Chapter Sustainment, 3-Year/Life Membership, Accrued Time Off

AOC Account Balances - \$6,460,977

Schwab (Fixed Income & Equities) - \$5,730,280; Checking - \$588,171; Euros Account - \$142,526

Available "Extra Funding" - \$3,513,075

Account Balances – (Reserve Fund + Operating Obligations) + Net Operating Income AOC is financially solvent coming out of 2024 and has a stable foundation to start FY 2025.

## 2023 Financial Audit

The 2023 independent audit report showed a total surplus for the year of \$600,113 (investment income and operation revenue from operation expenses) and that current financial operations reflect sound practices.

The table below shows audit report income (loss) from operations from 2017 through 2023. The 2024 audit is scheduled for March 2025.

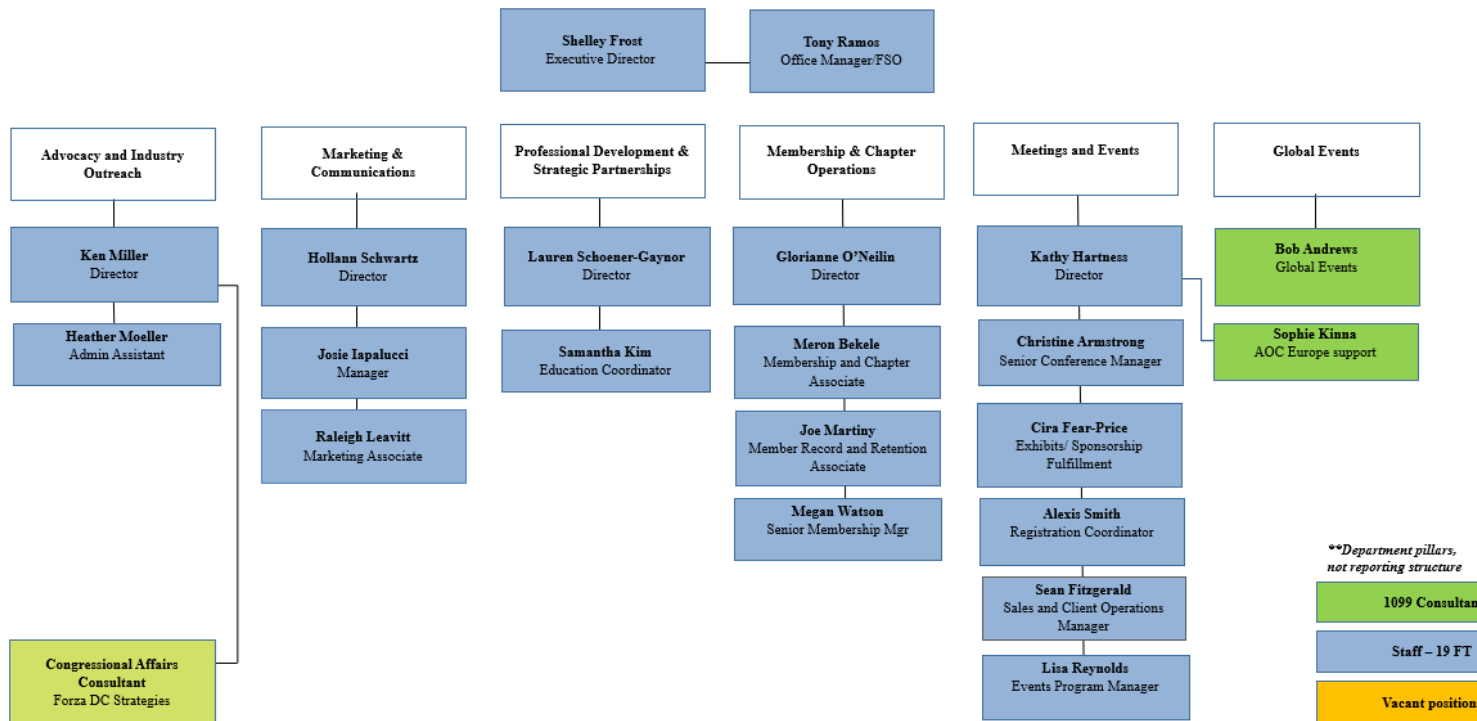
	2024 projected	2023	2022	2021	2020	2019	2018	2017
Revenue	~\$4,787,212	\$4,447,082	\$3,388,824	\$4,129,946	\$2,009,909	\$4,375,436	\$3,389,992	\$3,440,150
Expenses	~\$4,809,577	\$4,487,587	\$3,489,176	\$3,122,223	\$2,498,654	\$3,700,666	\$3,498,698	\$2,975,067
Income (loss) from operations	~\$22,365	\$600,113	\$654,229 *market correction	\$1,007,723	\$488,745 *COVID	\$674,770	\$108,706 *market correction	\$465,083



# OPERATIONS

## HQ Staff

As of December 2024, the staff is composed of twenty-one (21) employees (19 full-time and two consultants). An organization chart is provided below:



## 2024 Staff Changes

- Samantha Kim, Professional Development Coordinator, April 2024
- Lisa Reynolds, Events Program Manager, June 2024
- Laura Schoener-Gaynor, Director of Strategic Partnerships & Training, September 2024
- Megan Watson, Sr. Membership Manager, December 2024
- Departing employees – Michael Brock and Matt Thompson

## Contractor Services

Outside contractor services will continue in 2025 with information technology services provided by TSI, bookkeeping, and accounting by Chazin and Company (the former accounting firm Outsource Consultants closed its doors), an audit firm, Synder Cohn, and congressional affairs outreach by Forza DC.

### Naylor Agreement

AOC renewed its contracts with Naylor Association Solutions through November 2029 to produce the weekly electronic newsletter eCrow, the monthly publication Journal of Electromagnetic Dominance (JED), the online JED Resource Guide, and Spectrum Watch, our new AI-based newsletter.





# MEMBERSHIP

Overall individual memberships decreased. There was about a 10% growth in Organizational memberships compared to 2023 (see chart below). We added two new Partner Categories, Champion (XL) and Visionary (XXL) The Membership Committee consisted of Chairman Eric Colon and Regional Directors Mark Schallheim, Amanda Brockermeyer, Erik Bamford, JP Kim, Brandon Coleman, Dennis Monahan, Wayne Shaw, Jim Utt, and Myles Murphy.

Membership	Dec 2024	Dec 2023	Dec 2022	Dec 2021	Dec 2020	Dec 2019	Dec 2018
US	9,120	11,378	11,439	11,391	11,306	10,849	10,419
International	2,529	3,222	3,022	2,938	2,948	2,901	2,643
Total	11,649	14,600	14,461	14,329	14,254	13,750	13,062
Partners	233	254	222	216	226	217	230
Groups (includes military, govt, and universities)	39						

## Chapter Sustainment Initiative Program – Assistance Fund

A chapter assistance fund was initiated in 2015 with funds from a defunct Chapter. Monies may be disbursed to chapters with funding and/or financial needs based on stipulations contained in OpMan 74, Section II, Paragraph H. A history of activity is provided below:

Month/Year	Balance	Note
June 2015	\$79,791	Initial Funding
2015	\$78,291	\$1,500 total disbursements
2016	\$76,291	\$2,000 total disbursements
2017	\$86,840	\$4,250 total disbursements and \$14,688 funding from the closing of two chapters
2018	\$88,853	\$10,549 total disbursements
2019	\$53,378	\$23,599 total disbursements and \$341 funding from the closing of one chapter
2020	\$50,452	\$3,218 total disbursements and \$568 funding from the closing of one chapter
2021	\$47,857	\$1,000 total disbursements and \$1,595 Audit adjustment
2022	\$43,072	\$4,785 total disbursements
2023	\$41,814	\$4,135 total disbursements and \$2,877 funding from the closing of two chapters
2024	\$29,872	\$11,942 total disbursements

## Chapters

Northwest Region (5 chapters) – Frozen Crows Chapter, Joint Base Lewis McChord Chapter, Mile High Country Crows Chapter, Pikes Peak Roost Chapter, Whidbey Roost Chapter

Pacific (6 chapters) – Diamond Head Chapter, Golden Gate Chapter, Greater LA Chapter, Mugu Crows Chapter, Santa Barbara Chapter

Mountain West (10- chapters) – Cochise Roost Chapter, Billy Mitchell Chapter, Loan Star Roost Chapter, Desert Sun Roost Chapter, Fort Worth Chapter, Querque Chapter, Southwestern Chapter, Golden Spike Chapter. Capital of Texas Crows Chapter

Central Region (5 chapters) – Crane Roost Chapter, Gateway Chapter, KittyHawk Chapter, Windy City Chapter, Ravens Roost Chapter

Northeast (7 chapters) – Empire Chapter, Garden State Chapter, Granite State Chapter, Maple Leaf Chapter, Metropolitan Chapter, Niagara Frontier Chapter, Patriots' Roost Chapter

Mid-Atlantic (8 chapters) – APG Susquehanna Chapter, Capital Club Chapter, Chesapeake Bay Roost Chapter, Dahlgren Chapter, Independence Chapter, Pax River Chapter, Charlie Yankee Roost Chapter, SEARCH Group (Young Crow Club)

Southern (9 chapters) – Dixie Crow Chapter, Emerald Coast Chapter, Green Jacket Roost Chapter, Gulf Crow's Nest Chapter, Palmetto Roost Chapter, Peachtree Roost Chapter, Spacecoast Chapter, Redstone Rebel Chapter, Citrus Roost Chapter

International I (15 chapters) – Aardvark's Roost Chapter (South Africa), Arctic Roost Chapter (Norway), Bohemian Roost (Czech Republic), De Ooievaar Chapter (Netherlands), Hussars Roost (Poland), India Chapter (India), Israeli Chapter (Israel), Roma Chapter (Italy), La Fayette Chapter (France), Red Baron Roost Chapter (Germany), Saudi Arabia Chapter (Saudi Arabia), Swiss Crows Chapter (Switzerland), UK Chapter, (United Kingdom), Viking Roost Chapter (Sweden), Turkiye Chapter

International II (8 chapters) – AOC Japan Chapter (Japan), Australian Chapter (Australia), Kiwi Chapter (New Zealand), ROK Roost Chapter (South Korea); Singapore Chapter (Singapore), Taipei Chapter (Taiwan, R.O.C.), Wild Parrots Roost Chapter (Brazil) and Condor Chapter (Chile)

For 2025, the membership committee is working on revitalizing the Greater LA Chapter and the Charlie Yankee Roost Chapter. They are also working on new chapters in Finland

### Changes in 2024

New: Search Group (Liberty University) and Turkiye Chapter

Revitalized: Capitol of Texas (Austin, TX)

## 2024 Chapter of the Year Winners

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### Large Category (300+ members)

Chapter of the Year: Dixie Crow Chapter

### Medium Category (100-299 members)

Chapter of the Year: Garden State Chapter

Distinguished Chapter Awards: APG Susquehanna Chapter, Mugu Chapter, Patriots Roost Chapter, Billy Mitchell Chapter, and Windy City Chapter

Excellent Chapter Award: Dahlgren Roost Chapter

### Small Category (10-99 members)

Chapter of the Year: Palmetto Roost Chapter

Distinguished Chapter Award: Diamond Head Chapter

Outstanding Chapter Award: Crane Roost Chapter

### Regional Chapter Greatest Increase Award

Central Region: Crane Roost Chapter

Mid-Atlantic Region: Capitol Club Chapter

Mountain-Western Region: N/A

Northeast Region: Patriots Roost Chapter

Northwest Region: none

Pacific Region: Diamond Head Chapter

Southern Region: Peachtree Roost Chapter

International Region I: Red Baron Roost Chapter

International Region II: Taipei Chapter

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Overall Greatest Increase Winner: Capitol Club Chapter

# EVENTS

## Conferences

AOC held three in-person conferences in 2024. It is anticipated that AOC will host six to seven conferences in 2025.

Conference	2024	2023	2022	2021	2020 (Cancelled COVID)	2019	2018
Collaborative EW Symposium Point Mugu, CA	Mar 12 – 14 700 attendees	Mar 14-16 664 attendees	-	-	-	Mar. 2-4 620 attendees	Mar.13-15 564 attendees
CEMA APG, MD	April 30 – May 2 723 attendees	May 2-4 615 attendees	May 3-4 340 attendees	May 25-26 Virtual = 263 In-Person = 223	-	Oct. 8-10 804 attendees	Oct. 23-25 761 attendees
Capability Gaps and Enabling Technologies Crane, IN	June 25 – 27 296 attendees	May 16-18 221 attendees	May 10-11 168 attendees	-	-	May 14-16 313 attendees	May 8-10 264 attendees
EW/Cyber Convergence Charleston, SC	-	June 6-8 203 attendees	-	-	-	June 4-6 157 attendees	June 4-6 169 attendees
Modern Threats: SAMs Huntsville, AL	-	Sept 19-21 356 attendees	Feb. 1-2 112 attendees	-	-	Feb. 5 321 attendees	-
EMS Engineering and Acquisition Dahlgren, VA	-	-	-	-	-	Sept. 10-11 138 attendees	-
Security Cooperation: EW & FMS GTRI Atlanta, GA	-	-	-	-	-	Apr. 29-May 1 234 attendees	-

## Global Conferences

Global Conferences were overseen by Bob Andrews and supported by our conference partner Clarion. In 2023, the board elected not to renew the contract with Clarion (ending in 2024), bringing AOC Europe in-house in 2025. The Board also elected to relaunch AOC Asia which will start in 2025 as a chapter-run event (ROK Roost Chapter) and slowly transition to AOC managed by 2029 or 2031.

Conference	2024	2023	2022	2021	2020	2019	2018
AOC Europe (Clarion)	May 13-15 Oslo, Norway  AOC Share \$729,306	May 15-17 Bonn, Germany  AOC Share \$487,143	May 10-12 Montpellier, France  AOC Share \$309,334	Oct. 11-13 Liverpool, UK  AOC Share \$256,670	Canceled	May 13-15, Stockholm, Sweden  AOC Share \$315,118	June 5-7, Lausanne, Switzerland  AOC Share \$305,465
AOC Asia (Clarion)				Canceled (COVID-19)	Feb. 4-5, Singapore  AOC Share \$25,063	Jan. 29-30, Singapore  AOC Share \$18,929	Jan. 16-18, Singapore  AOC Share \$28,684

### 2025 Global Conference Schedule

- AOC Europe – May 6-8, 2025 – Rome, Italy
- EW Live – September 23-26, 2025 – Tartu, Estonia (partnership with Tangent Link)
- AOC Asia – October 29-30, 2025 (run and managed by ROK Roost Chapter)
- EW GCC (Abu Dhabi) – tentative 2025

## Annual Symposium

### AOC 2024 | December 11-13, 2024 | Gaylord National Resort & Convention Center

Theme: Electromagnetic Spectrum Warfare - The Great Power Competition

AOC 2024 proved to be another successful event, coming in just shy financially of the record-breaking 2023 event. The Convention Committee, led by Chair Lisa Fruge-Cirilli, included a dedicated team of board members and engaged volunteers.

	2024 Gaylord National	2023 Gaylord National	2022 D.C. Conv. Center	2021 D.C. Conv. Center	2020 Canceled	2019 D.C. Conv. Center	2018 D.C. Conv. Center
Square Footage Sold	24,100	25,600	22,000	17,100	-	17,800	16,300
Exhibiting Companies	174	174	143	109	-	120	103
Paid Registrants	339	348	272	246	-	368	325
Full Attendance	2,581	2,443	2,160	1,703	-	1,978	1,870

AOC 2024 estimated revenue and expenses are shown in the table below.

	2024 Projections	2023 Actual	2022 Actual	2021 Actual	2020 Cancelled	2019 Actual	2018 Actual
Paid Registrations	~\$332,007	\$318,428	\$261,505	\$210,340	-	\$230,885	\$259,958
Exhibitors (includes room rentals)	~1,452,558	\$1,483,522	\$1,267,798	\$1,028,920	-	\$1,051,117	\$981,643
Sponsors	~\$262,660	\$256,015	\$244,700	\$342,000	-	\$325,450	\$281,381
Show Daily	n/a	n/a	n/a	n/a	-	\$3,000	\$9,750
<b>Total Revenue</b>	<b>~\$2,047,225</b>	<b>\$2,057,965</b>	<b>\$1,774,003</b>	<b>\$1,581,260</b>	-	<b>\$1,610,712</b>	<b>\$1,532,732</b>
Expenses	~\$902,148*	\$833,396	\$795,112	\$693,258	-	\$709,271	\$811,428
<b>Net Revenue/Surplus</b>	<b>~\$1,145,077</b>	<b>\$1,224,568</b>	<b>\$978,891</b>	<b>\$888,002</b>	-	<b>\$903,153</b>	<b>\$721,304</b>

\*Includes coffee added per BOD directive

International attendance: approximately 16% (11-17% historically).

### SAVE THE DATE:

AOC 2025

December 9-11, 2025

Gaylord National Resort & Convention Center

National Harbor, MD

Host sponsor: L3Harris

# PROFESSIONAL DEVELOPMENT

The strategic partnerships and professional development department oversees educational opportunities that are offered to members and non-members. In addition, the department identifies, establishes, and retains partnerships with institutions, organizations, and like-minded groups to advance AOC, its mission, and its members. The list below is an up-to-date summary of what has been completed or is in the process of being worked on since the beginning of October 2024.

- Continuing to work with Stevens Institute and the AOC Certification Chair to launch the Certificate Program in 2025
  - AOC and Stevens Institute hosted a lunchtime discussion at AOC 2024 titled *Inside the AOC Certificate Program: A How-to Session*
  - AOC is currently in the process of negotiating the final terms of the certificate program agreement with Stevens Institute
  - Upon the finalization of the agreement, AOC will begin securing the appropriate subject matter experts needed to lead the various courses at Stevens
  - Secured an [AOC Certificate Program page](#) on the AOC website
- Created a new educational sponsorship program to launch in 2025
  - Will allow sponsors and/or partners to customize their level of participation to ensure their ROI and continued support. The program expands AOC's sponsorship opportunities and allows an expanded audience connection.
- Targeting potential strategic partners, including companies, organizations, universities, colleges, like-minded associations, etc., to begin introductory conversations
- Seeking speakers/presenters/subject matter experts (SME) to deliver educational opportunities to grow AOC's current speaker database
  - In search of SMEs who represent AOC's current and potential audiences, focusing on the level of expertise/experience as well as offering attendees a diverse range of presenters to choose from
- Assessed past and upcoming educational programs and their analytics to determine on-site, on-demand, and webinar offerings in 2025
  - After a strategic analysis of webinar data, the AOC Director of Strategic Partnerships and Professional Development established that beginning in June 2025, AOC will host a maximum of two (2) webinars a month
    - Webinar attendance has been significantly declining over the past two years resulting in less leads for the webinar sponsor
    - Since reducing the number of webinars, AOC has already seen an improvement in webinar attendance compared to this time last year
- Determined industry and AOC events in 2025 where AOC Strategic Partnerships and Professional Development should have a presence

## Educational Opportunities Offered Year-to-Date

The following charts reflect all educational opportunities offered by AOC in 2024. This includes pre-convention courses, on-demand sessions, and webinars. Based on requests and needs, more onsite opportunities are planned for 2025 in various locations throughout the U.S. and at AOC Europe 2025. Topics, speaker(s), and locations were selected based on popularity, speaker availability, and space cost and efficiency.

## Course and Webinar History

In-Person/Live	2024	2023	2022	2021	2020	2019	2018	2017
# of Courses	5	1	2	6	6	11	3	5
# of Students	108	20	28	125	267	183	85	51

On-Demand	2024	2023	2022	2021	2020	2019	2018
# of Students	136	91	69	123	161	14	4

Webinars	2024	2023	2022	2021	2020	2019	2018	2017
# of Webinars	28	25	21	25	21	19	12	16
Attendees	5,511	11,410	8,599	4,144	13,527	3,336	3,173	2,389
Sponsorship	\$133,000	\$149,000	\$136,000	\$271,175	\$231,500	\$147,374	\$118,982	\$90,625

## In-Person/Live Courses in 2024

Course Title	Instructor	# of Students	Dates	Location
How Pulse-Doppler Radar Really Works: How to Beat It and How to Defend It	Mr. Chuck Quintero	16	12/9 – 12/10/24	Gaylord National Harbor
ESM Anomalies and Solutions Using Cognitive EW Techniques	Dr. Sue Robertson	15	12/10/24	Gaylord National Harbor
Application of Counter-DRFM Techniques	Dr. Phil Pace	19	12/10/24	Gaylord National Harbor
Tutorial on Cognitive Electronic Warfare	Dr. Karen Haigh	34	12/10/24	Gaylord National Harbor
Counter-UAS Electronic Warfare	Dr. Kyle Davidson	24	12/10/24	Gaylord National Harbor

## On-Demand Courses

The following are the on-demand courses offered in 2024 for purchase.

On-Demand Course Title	Instructor	# of Purchases
21st Century Electronic Warfare, Systems, Technology, and Techniques	Clayton Stewart	1
Advanced Principles of Electronic Warfare	Dave Adamy	9
Communications EW	Dave Adamy	3
EW Against a New Generation of Threats	Dave Adamy	5
EW Modeling and Simulation	Dave Adamy	5
Fundamental Principles of Electronic Warfare	Dave Adamy	39
Space EW	Dave Adamy	4
Missile Design, Development, and System Engineering	Eugene Fleeman	1
Cognitive Electronic Warfare: An AI Approach	Karen Haigh	7
Electronic Countermeasures Theory and Design	Kyle Davidson	3
Electronic Intelligence (ELINT) - Principles & Practice	Kyle Davidson	3
Introduction to Directed Energy Weapons	Kyle Davidson	21
Introduction to Machine Learning for Electronic Warfare	Kyle Davidson	0
Introduction to Radar Systems	Kyle Davidson	3
Introduction to Satellite Communications	Patrick Ford	13
RF Theory for ES Operations	Patrick Ford	3
The World of Airborne Expendables & small Unmanned Aircraft Systems (sUAS)	Patrick Ford	1
Autonomous Detection and Classification of LPI Emitters	Phil Pace	3
DRFM Technology and Design for Electromagnetic Maneuver Warfare	Phil Pace	4
Electro-Optical/Infrared Sensor Engineering	Phil Pace	2
Principles of ESM Analysis	Sue Robertson	6



## AOC Webinars

The following are the webinars offered in 2024. Webinars are currently scheduled through October 2025.

Date	Title	Speaker(s)	Registered
1/11/24	Assuring Cognitive Systems	Karen Haigh	407
1/25/24	The EW Innovation Chasm - Bridging the Gap Between Academia and EW	Warren de Plessis, PHD	264
2/8/24	EW in the New Threat Environment	Dave Adamy	400
2/22/24	EMSO Update—The Battle for Sensing and Sense-Making	Bryan Clark	282
3/14/24	How to Fight and Win Space Wars - An Introduction	Paul Szymanski	275
3/21/24	Electromagnetic Protection for Defense and Critical Infrastructure Facilities	David Tilton	82
4/4/24	Distributed, Collaborative, Autonomous EW	Dustan Hellwig	246
4/18/24	Changing the Paradigm: New Concepts for Tactical Spectrum Monitoring	Zac George	162
5/16/24	An Effective Approach to Evaluating Electronic Warfare Systems	Alexander Davis	205
5/30/24	The Fundamental Physics of Doppler Radar Jamming and Jamming to Signal Ratio	Chuck Quintero	206
6/13/24	Using Large Language Models for Flight Test Data Analysis	Desh Sharma	146
6/20/24	High Power Radio Frequency/Microwave (HPM) Directed Energy Weapons (DEW)	John T. Tatum	350
6/27/24	High-Bandwidth Oscilloscopes for Multi-Channel, Coherent, RF Pulse Analysis	Brad Frieden	80
7/11/24	Deploy Full Stack Spectrum Situational Awareness System with Networked Handheld Sensors	Rolland Zhang	130
7/18/24	Radar Identification Libraries for EW Systems	Vito Pesare	210
8/1/24	Through the Use of Amateur Radio Licensing	Matthew G. Sherburne	69
8/8/24	How IADS and SAMs Work	Chuck Quintero	259
8/15/24	Fighting in the Electromagnetic Spectrum	Thomas Wildenberg	157
8/22/24	Using Standards to Integrate Autonomous EMSO Maneuver in EMSO Planning and Execution	Dr. John A Stine	88
8/29/24	Intelligence From Space: Improving Awareness	Dr. David Stupples	129
9/5/24	Model-Based Design in EW	Vijay Kowtha	120
9/19/24	Revealing Secrets and The Signals Intelligence Ties That Bind	John Blaxland, PhD.	187
9/26/24	Ground Clutter and Airborne Radar	Warren Du Plessis, Ph.D.	210
10/3/24	Using State of the Practice Digital Electronic Systems Engineering To Make DoD EW Systems Afford To Operate and Sustain, and Agile To Modernize and The Speed of Relevance	James Chew & Steve Carlson	84
11/7/24	An Autonomous EW Coordination Framework	Andrew Lucas, Ph.D	150
11/21/24	Electronic Warfare in a World Populated by Metasurfaces	Dr. Rafael Licursi	166
12/5/24	Metasurface-Driven EW Drone Swarms to Tackle Multifunctional and Cognitive Radars	Dr. Rafael Licursi	173

## Career Center

The sales for the career center are outsourced.

	2024	2023	2022	2021	2020	2019
Job Views	98,767	122,307	85,623	65,836	111,166	925,159
Job Postings	25	52	67	91	81	156
Gross Sales (includes pre-orders of posting packages)	\$21,232	\$29,729	\$51,657	\$60,924	\$65,205	\$87,194
Net Revenue to AOC	\$9,451	\$8,048	\$14,345	\$25,528	\$16,095	\$26,347

# ADVOCACY AND OUTREACH

Advocacy and Outreach continues to evolve based on the goals of AOC's five-year strategy, specifically building an advocacy and communications enterprise concept to deliver timely and professional resources and adapt messaging to a diverse and global stakeholder audience across military, government, and industry. This effort is central to AOC meeting growth expectations aligned with other strategic goals, including increasing and diversifying revenue streams.

The main accomplishments for 2024 were the continued success of AOC's podcast, *From the Crows' Nest*, and our influence on Capitol Hill. For AOC podcasts, listenership continued to grow and showed how podcast revenue can provide alternate revenue streams. Naylor sold out all podcast advertising in 2024 and sold booth interview sponsorships for our FTCN Live show at AOC Europe in Oslo and AOC 2024 in National Harbor, MD. Due to FTCN's growth, we are optimistic heading into 2025 to further expand our offerings, especially video and live-streaming, and grow revenue.

Additionally, while we were able to make progress on our study collaboration with NSW Crane, we could not secure the necessary subject matter expertise to lead the initiative, which has caused delays and will trigger a revision of deliverables in 2025. Finally, a major success in 2024 was the AOC Board of Directors' approval to establish a new political action committee called CROW PAC. The PAC will launch in early 2025 and help reshape AOC advocacy and our influence on Capitol Hill. Due to limited bandwidth, we had to delay new episodes of our sister podcast, the History of Crows.

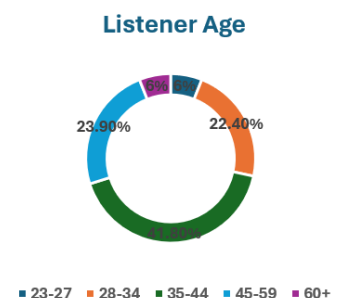
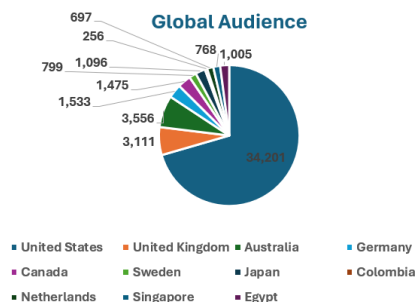
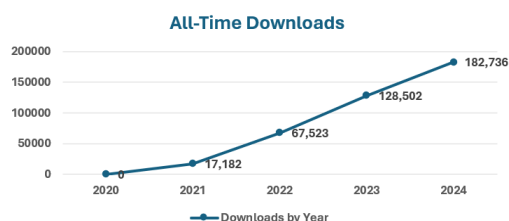
## 2024 Accomplishments/Activities

The Advocacy and Outreach program continued to build an advocacy and communications enterprise in accordance with AOC's five-year strategy (2022-2026). For the advocacy program to succeed and spur success across other departments, AOC must pursue an enterprise approach to advocacy that generates, packages, and distributes knowledge, relationships, and stakeholder value to growing and diverse audiences in the US and abroad. This effort will take several years to implement and fine-tune, but success will help accomplish AOC's strategic goals, including increasing and diversifying streams of revenue.

The main accomplishments were the continued success of AOC's *From the Crows' Nest* family of podcasts, which includes our regular FTCN show and the History of Crows podcast. In 2024, we also successfully launched a new subscription service and our new Chief Technology Officer (CTO) Series. As expected, our newly implemented dynamic advertising model listenership and expansion of shows provided new opportunities that saw a significant increase in revenue over the previous year. With additional changes planned in 2025, including live stream and video programming, we expect revenue to continue to rise and provide more balance in our revenue streams. Revenue generation aside, AOC podcasts proved to be an adaptable product that helps AOC connect with its diverse members worldwide.

### *From the Crows' Nest* (FTCN) Podcast

FTCN, AOC's regularly scheduled podcast, features interviews, analysis, and discussions covering leading issues of the day related to EW and EMSO. We produced 28 episodes of FTCN in 2024, plus an additional 16 bonus episodes for AOC members and subscribers. We have now officially released over 130 episodes since May 2021. Episodes covering counter-drones/UAS, the Russia-Ukraine War, Artificial Intelligence/Machine Learning, the USAF 350th Spectrum Warfare Wing, and Directed Energy were the top-performing podcasts for the year. The podcast reached a new threshold of over 180,000 downloads since its inception. In 2024, the podcast had 54,234 total downloads, averaging 4,520 monthly downloads. In April 2024, the podcast achieved its highest ranking at #58 in the United States. It maintained a Top 10 ranking throughout the year in multiple countries, including the UK, Israel, Japan, South Africa, India, and Turkey. Most importantly, 73 percent of our listeners are under the age of 44 years old. Over a quarter (28 percent) are ages 28-34.



### **From the Crows' Nest CTO Series**

In Fall of 2024, we launched a new podcast series tailored for the more technical discussions of senior engineers and scientists. Season 1 of the CTO Series was powered by L3 Harris and it was a six (6) episode deep dive into challenges and opportunities of developing and leading next-generation EW solutions to counter emerging threats with speed, agility, and resilience across the electromagnetic spectrum. The CTO series provides an additional revenue stream and our plan is to expand the series for 2-3 new seasons in 2025.

### **AOC History Committee**

In 2023, AOC established the new History Committee to steer the AOC History Initiative. The committee will oversee efforts to capture, preserve and share the unique history of EW and EMSO to audiences around the world. In 2024, the committee began cataloging newly digitized files of recorded interviews and events. It also focused efforts on commemorating AOC's 60th anniversary throughout the year with monthly articles in JED covering AOC's history. The committee also coordinated an AOC history display at AOC 2024.

### **Congressional Outreach**

AOC has a consulting relationship with Forza DC, a small government affairs consulting firm to help rebuild AOC's congressional education program. Throughout 2024, Forza DC was responsible for being AOC's primary interface with the congressional Electromagnetic Warfare Working Group (EWWG). Forza DC kept AOC abreast of developments in the annual defense budget process and managed the transmission of hearing questions through the EWWG to the House Armed Services Committee. In the Spring, AOC hosted two congressional staff briefings on EW in the Pacific and the Russia-Ukraine War. Finally, Forza worked with the Advocacy and Outreach Department to provide the EWWG revised EMSO language (Section 1682) in the FY 2014 National Defense Authorization Act, passed by Congress in December 2023 and signed into law by President Biden in January 2024.

### **AOC Political Action Committee (PAC)**

AOC took an important step in 2024 to build and expand its advocacy mission by approving the establishment of a new political action committee (CROWPAC). The PAC will be founded in early-2025 to begin contributions to political candidates by Q4. The PAC will deliver value for AOC Advocacy by advancing EMSO priorities to senior congressional leaders. It will also help grow AOC by providing a collective voice and making it more relevant in our market.

### **Other Activity Highlights**

In addition to the above deliverables, the Advocacy and Outreach department continued select initiatives from prior years, including:

- Increased stakeholder outreach (industry and military) through engagements in San Antonio, TX, Davis-Monthan AFB, Clifton, NJ, Warner Robins AFB, and at numerous trade shows and conferences.
- Organized the San Antonio EW Workshop, held on March 5th, 2024. The theme was "EW Resource and Integration Challenges," and it successfully convened forty-five professionals from across the Electronic Warfare (EW) and Electromagnetic Spectrum Operations (EMSO) communities. The workshop aimed to foster dialogue, collaboration, and innovation, featuring a comprehensive agenda of keynote speeches, insightful presentations, and dynamic breakout sessions. These activities were designed to address the strategic challenges and opportunities within the EW sector, with a particular focus on enhancing resource allocation, integration efforts, and leveraging the unique assets of San Antonio.
- Monitored Mark-Ups and Hearings in the House/Senate Armed Services Committees and provided analysis of FY 2025 National Defense Authorization Act and available version of FY 2024 Defense Appropriations legislation, which has not been passed by Congress as of the end of the year.
- Conducted regular outreach to AOC Industry Members, including technical subject matter expertise and business development.
- Launched the new FTCN Replay, which are transcript-based written summaries of each FTCN episode.
- Produced FTCN Live segments comprised of guest speakers and industry sponsors at AOC Europe (Oslo, Norway) and AOC 2024. This initiative is the starting point for offering livestream programming. Attended the Directed Energy Professional Society S&T Symposium in April 2023. Discussed future collaboration on an EMSO/DE workshop, possibly focusing on High Power Microwave (HPM).

# 2024 AWARDS

PRESTIGE AWARDS	
AOC Gold Medal Recipient	Paul J. Wescott
Hal Gershanoff Silver Medal Award Recipient	Lisa Frugé-Cirilli
Hall Gershanoff Silver Medal Award Recipient – International	Dr. Sue Robertson
Anton D. “Tony” Brees Lifetime Service Award	George Morris
Joseph W. Kearney Pioneer Award Recipient	Stacey Mervyn
AOC Technology Hall of Fame Recipients	Michael Clement and Louis Ludwig
John Clifford Award for the Advancement of the Electromagnetic Domain Award	Dr. David Stoudt
COMMUNITY AWARDS	
Engineering and Technical Excellence Award	Steve Milz
Project Team of the Year Award	Joint Electromagnetic Warfare Center (JEWEC)
EW Professional Outstanding Young Crow Award	Matthew Copeland and SGT Anthony Whitten, USA
Professional Outstanding Achievement Award	Nicole Perry
Military Service Award – Air Force	1 <sup>st</sup> Lt Ryan Chen, USAF
Military Service Award – Navy	AG2 Harpreet Kaur Jassal, USN
Military Service Award – Army	CPT Marquel Campbell, USA
Military Service Award – Army National Guard	Lieutenant Colonel Michael Torre, ARNG
Military Service Award – Space Force	Maj Adam Beck, USSF
CHAPTER FLOW-UP AWARDS	
Outstanding Chapter Support	David Brown and Paul Kennedy
Academic and Educational Excellence Award	Dr. Phillip E. Pace
Academic and Educational Excellence Award – International	Professor David Stupples
Military Individual Excellence Award – Army	CPT David Lewis Moore, USA
Military Unit Excellence Award	350 <sup>th</sup> Spectrum Warfare Wing Department
Outstanding Units – Air Force	Advance Threat Replication Flight, 53d Test Support Squadron (ACC)
	55 <sup>th</sup> Wing (ACC)
	57 <sup>th</sup> Intelligence Squadron, 363 <sup>rd</sup> Intelligence, Surveillance, and Reconnaissance Wing (ACC)
Outstanding Unit – Army	2 <sup>nd</sup> MDEB
	75 <sup>th</sup> RMIB
Outstanding Unit – Navy	USS McFaul (DDG-74)
	Electronic Attack Squadron One Three Zero (VAQ-130)
	Naval Information Warfighting Development Center (NIWDC)

# LOOK AHEAD

The Board approved the five-year strategy and 2025 Operating Plan of Directors in December 2024. For the detailed report, please visit [https://crows.org/board-of-directors/governing\\_docs/](https://crows.org/board-of-directors/governing_docs/) OpMan 14- Appendix A.

## FIVE YEAR GOALS

Our mission is to educate, connect, and advocate on behalf of members and stakeholders in the global electromagnetic warfare community. With that in mind, these are five strategic goals to become the AOC we want to become in 2026 and beyond.

1. Grow our global membership commensurate with our market to reach at least 20,000 individual members and 350 industry members by 2026.
2. Build an advocacy and communications enterprise to deliver timely and professional resources and support to stakeholders.
3. Diversify streams of revenue to strengthen our ability to adapt to changing business environment.
4. Strengthen international programs to reflect our global presence by increasing international membership, enhancing membership experience, and developing a plan to improve member engagement.
5. Grow professional development certification and STEM programs in accordance with recently established road maps.

## 2025 GOALS

- **MEMBERSHIP EXPANSION**
  - Develop and execute a strategy for all membership types (Groups, Partners, Military, University Young Crow Groups)
  - Continue utilizing and increasing chapter usage of databases and websites (Impexium and Billhighway).
  - Increase Chapter outreach, participation, and growth
  - Explore how to expand the Future Leaders initiatives and create a new Empowering Women in EW committee
- **ADVOCACY AND COMMUNICATIONS ENTERPRISE**
  - Expand the congressional outreach and education program
  - Establish the Advocacy and Technical Advisory (ATA) Committee, formerly the Advocacy and Outreach Committee
  - Develop strategic public relations with government and industry stakeholders, including journalists, public affairs officers, relevant podcasts, and industry communications teams.
  - Advance AOC History initiatives
- **DIVERSIFY STREAMS OF REVENUE**
  - Grow and develop audiences for the FTCN family of podcasts, including our regular, member/subscriber-only, FTCN Live, and CTO Series
  - Expand our reach into adjacent markets to grow potential event opportunities (workshops, conferences, etc)
- **INTERNATIONAL EXPANSION**
  - Successfully transition and execute AOC Europe
  - Increase AOC stakeholder outreach to international chapters and events.
  - Explore opportunities for expanding conferences for stakeholders in Asia.
  - Expand AOC's relationship across NATO entities.
- **EDUCATE**
  - Continue implementation and usage of data from the roadmap determined by the 2023 McKinley Assessment
  - Build relationships and partnerships with organizations, institutions, and/or like-minded associations to grow and enhance AOC's presence and offer expanded varying educational opportunities.
  - Create and execute the AOC Certificate Program, beginning with Stevens Institute as the host of the pilot program, and expand to additional institutions.
  - Develop a comprehensive education schedule that provides valuable professional development opportunities to our members through webinars, on-demand webinars, and on-site courses.

AOC FOUNDATION



# AOC EDUCATION FOUNDATION

In December, the Board of Governors unanimously approved the Foundation's first-ever strategic plan, marking a pivotal moment in our organization's history since its creation in the mid-1980s. This five-year strategy sets clear priorities to guide our work in the coming years, with a focus on strengthening our fundraising and development efforts, expanding scholarship programs, enhancing STEM opportunities for youth, and broadening community education to support talent development to ensure a steady pipeline of skilled professionals entering the EMSO workforce. To help execute this ambitious strategy, the Foundation also took a significant step and will hire a Director of Operations, its first employee, in January 2025. This new team member will be instrumental in bringing the strategy to life, ensuring its success, and positioning the Foundation for long-term growth and impact.

## BOARD ACTIVITIES

2024 AOC Education Foundation Board of Governors	
President	Brian Hinkley
President-Elect	Myles Murphy
Secretary	Dennis Monahan
Treasurer	Jim Utt
International Exec	Erik Bamford
Regional Directors	Erik Bamford, Amanda Brockermeyer, Dennis Monahan, Myles Murphy, Mark Schallheim, Wayne Shaw, Jim Utt, Brandon Coleman, and JP Kim
Past President	Glenn "Powder" Carlson
Appointed Directors	Tim Kuehhas, Mick Riley

### Meetings

There were four (4) Board of Governors meetings held in 2024.

Date	Description
April 18, 2024	Virtual
June 6, 2024	In-Person
October 10, 202	Virtual
December 10, 2024	In-Person

### Foundation Governing Documents

The Education Foundation Governing Documents can be found here:

[https://crows.org/board-of-directors/governing\\_docs/](https://crows.org/board-of-directors/governing_docs/)

### Financial Status

The AOC Foundation balance as of December 2024 is \$200,766 which includes the following donations:

- \$25,000 – 2024 Raytheon Scholarships – Raytheon Missiles & Defense
- \$14,302 – 2024 individual contributions



## Scholarships

### 2024 Program Highlights

STEM Students of the Year Scholarship – AOC, made possible by a \$25,000 donation from Raytheon, awarded two \$12,500 scholarships; we partnered with an independent group to review the applications and select two winners:

- Perer Braza — University of Colorado Boulder
- Anna Ottman — Bucknell University

AOC Chapters distributed approximately \$150,000 in scholarship money in 2024. Between HQ and Chapters, approximately 110 individuals received some form of scholarship from AOC.

### AOC Future Five Program

The Future 5 program was established to recognize and celebrate five outstanding young professionals under 30 each year. This initiative honors the industry's brightest emerging leaders while inspiring their peers to strive for excellence.

- This year’s winners were:
  - Matthew Copeland, Electronics Engineer, CSIR Center – RTI-CEMA Division – IOEW Branch
  - Imani Davis, Computer Scientist, Naval Surface Warfare Center, Crane Division
  - Michael Gutierrez, Software Engineer, Palantir Technologies
  - Paul Kennedy, Section Supervisor, Johns Hopkins University Applied Physics Lab
  - Paul Wilkowski, Systems Engineer, L3Harris Technologies

## AOC Muddy Watters STEM Program

### Vision

Investment and development of our "young" crowds through EMS STEM education programs, mentorships, and AOC events encouraging collaboration while ensuring the successful growth of our “EMS Leaders of Tomorrow.”

### 2024 Program Highlights

- All planned STEM activities for 2023 were put on hold until the completion of the McKinley Advisors review of AOC Educational activities and the hiring of a full-time employee.
- The major efforts for the committee will be to collaborate with AOC Chapters’ current and future STEM programs, as well as other STEM efforts by the government and/or industry.
- We are looking forward to reinvigorating the STEM program in the coming year.

2025 AOC Education Foundation Board of Governors	
President	Brian Hinkley
Vice President	Amanda Brockermeyer
Secretary	Dennis Monahan
Treasurer	Jim Utt
International Executive	Erik Bamford
Regional Directors	Frank Ball, Erik Bamford, Amanda Brockermeyer, Brandon Coleman, JP Kim, Jeff Hughes, Myles Murphy, Mark Schallheim, and Jim Utt
Past President	Brian Hinkley
Appointed Directors	Nino Amoroso, Guy Albanese

# LOOK AHEAD

The Board approved the brand-new five-year strategy and 2025 Foundation Operating Plan of Governors in December 2024. For the detailed reports, visit [https://crows.org/board-of-directors/governing\\_docs/](https://crows.org/board-of-directors/governing_docs/)

## FIVE YEAR GOALS

As the Foundation seeks to grow its impact, we remain focused on expanding opportunities for students from diverse backgrounds to access educational resources, mentorship, and career development. By funding scholarships and creating EMS STEM programs, we aim to ignite curiosity and passion in the next generation, ensuring they are equipped to lead in the rapidly evolving field of EMSO. Our strategic priorities for the next five years include:

1. Establish a robust fundraising program to ensure the sustainability and growth of our scholarships and educational initiatives.
2. Expand and enhance our scholarship programs to provide financial support to aspiring EMSO professionals
3. Support and enhance EMS STEM activities on the electromagnetic spectrum for youth engagement across Chapters and with other organizations to expose young students to the exciting possibilities within the EMSO domain.
4. Broadening opportunities for learning and talent development to ensure a steady pipeline of skilled professionals entering the EMSO workforce

## 2025 GOALS

- Fundraising & Development
  - Establish and grow a sustainable fundraising infrastructure to raise \$500,000 over 5 years.
  - Establish the foundational elements necessary for a successful fundraising operation.
  - Committee to develop a comprehensive fundraising plan outlining various fundraising activities and timelines.
  - Establish a diverse volunteer Fundraising Committee dedicated to developing and executing fundraising strategies.
  - Explore a relationship with the CFC
  - Conduct a thorough assessment of our current fundraising capabilities, donor base, and market opportunities.
  - Target funds raised in 2025 - \$30,000.
- Scholarship Programs
  - Scholarship disbursement: \$25,000; Target scholarships disbursed: 1 (current STEM Student of the Year funded by RTX)
  - Review and assess our current scholarship offerings to identify areas for expansion and enhancement including various needs and career stages, such as undergraduate, graduate, and professional development scholarships.
  - Work with Chapters to investigate opportunities with Chapters for flow-up scholarships competing at the regional level
  - Build a comprehensive scholarship program, enhancing the ability to attract and support promising individuals in the EMSO field to disperse \$750,000 over 5 years.
  - Establish the foundational elements necessary for a successful scholarship program.
  - Expand a diverse volunteer scholarship committee to oversee scholarship programs including application review, selection processes, and fund management.
  - Expand the Future 5 program to include international members with the committee determining if a spot should be reserved for an international candidate
  - Engage Foundation leadership to build relationships with large and small companies to obtain donations.
- STEM Activities
  - Strive for at least 55% of chapters actively participating in EMS STEM initiatives, creating a strong network of engagement across the globe over 5 years.
  - Establish relationships with existing international STEM programs that have proven successful programs.
- Community Learning & Development
  - Assess and build the foundational elements for this goal.
  - Create a diverse committee for broadening opportunities for exposure to electromagnetic spectrum activities.
  - Engage with US Congressional representatives and relevant stakeholders to build support for the introduction of a bill that mandates the inclusion of electromagnetic sciences in high school and undergraduate curricula.
  - Committee to determine recognized and eligible museums and determine criteria for financial support; budget for donation to at least one museum.
  - Committee to establish a list of universities in the U.S. conducting EW research at the master's level and beyond.