

# International AOC 2015 SNAP SHOT

Submitted by Mike Dolim, Executive Director

28 December 2015

## Introduction

Significant 2015 AOC accomplishments are outlined below. Major areas covered include: President's activities; Board meeting schedule; governance document updates; financial status; AOC staff and organization; advocacy accomplishments and plans; membership levels; and conference, professional development course and symposium activities.

## President's Outreach and Leadership

President Ken Israel was engaged in a very active schedule in 2015. He projected leadership and shared information about the AOC at the chapter meetings and events shown below. His overriding objective was to get the word out about AOC's professional achievements and bright future. He noted that "We are the 'New AOC' and our momentum and energy reflect favorably on our total commitment to support our members, sponsors, users, and overall strategic objectives."

## Events Attended

- AOC Outstanding Unit Award Presentation in Norfolk, Virginia (12 January)
- Meeting with Air Force A5 at AOC Headquarters (29 January)
- EWWG Meeting at the Rayburn Office Building, Washington DC (25 February)
- Review AF EW Roadmap and Meeting with Joint Staff at Pentagon (12 March)
- Dixie Crow Conference and Meeting with AFL CMC Staff in Warner Robins, Georgia (22-26 March)
- Collaborative EW Symposium at NAWCWD in Pt. Mugu, California (31 March - 2 April)
- DEPS Exhibits and DARPA Meeting in Washington DC (27-30 April)
- AOC EW Europe in Stockholm, Sweden (26-28 May)
- Kitty Hawk Conference in Dayton, Ohio (1-3 June)
- Annual EW/Cyber Convergence Conference at SPAWAR in Charleston, South Carolina (2-4 June)
- GTRI and Government International Affairs Conference in Atlanta, Georgia (8-10 June)
- Air Force Research Lab in Dayton, Ohio (10 July)
- Annual Capabilities Gaps and Enabling Technologies Conference at NSWC in Crane, Indiana (11-13 August)
- SME Meeting with MG Clardy and Jay Kistler (30-31 August)
- Pacific Chapter Visits (25-29 August)
- National Defense University (4 October)
- Cyber Electromagnetic Activity Conference at Aberdeen Proving Ground in Aberdeen, Maryland (6-8 October)
- USSTRATCOM Conference Discussion in Omaha, Nebraska (18-20 Oct)
- Marine Corps Spectrum Maneuver Warfare Conference at MCAS in Cherry Point, North Carolina (27-28 Oct)
- Metropolitan Chapter Awards and Meetings in New York City, New York (14 November)
- Graduation Speaker and Attend Chapter Meeting in Pensacola, Florida (21 November)

## Communications - I-Grams

President Israel released two (2) newsletters (called I-Grams) to the Board via email. They were:

### I-Gram #1 (November 2014) - Topics covered:

1. 2014 continues to be an outstanding year for the AOC
2. AOC executives continue to engage various national security leadership representatives on the importance of EW/Cyber/Spectrum management synergies
3. Interest in conferences is picking up
4. BoD is in the process of updating/revising all OpMans (all 22)
5. Renovations are now being initiated on AOC Headquarters building
6. Recent AOC conferences have shared more insight into the US Defense Science Board (DSB) report
7. Former President Wayne Shaw is still in the hospital recovering from his illness that began in July 2014
8. New AOC Strategy of "Resilience, Relevant, Restore and Reinvent" is gaining momentum and is resonating well with sponsors

### I-Gram #2 (July 2015) - Topics covered:

1. 2014 was a 5 star banner year and one which will not be repeated from a fiscal and organizational improvement context for a long time
2. Growing interest in the synchronization of Cyber and EW to achieve Spectrum Dominance
3. Process of updating Operations Manual 14 - Strategic Planning Direction
4. Energy focused on 52nd annual Symposium scheduled for 1-3 December 2015 at the Marriott Marquis, Washington and the Walter E. Washington Convention Center, Washington, DC
5. First ever Immersion Day topics
6. Impact of new 3rd Offset Strategy developed by Deputy Defense Secretary Bob Work
7. Wayne Shaw and Sam Roberts back and active on our BOD

## **Board Meetings**

There were four (4) face-to-face Board meetings in 2015 and five (5) Adobe Connect meetings. In addition, there were two (2) classified briefings held in conjunction with the face-to-face meetings and an extra day added to the June meeting to accommodate a "Strategic Immersion" discussion." Moreover, there were three (3) face-to-face Board of Governors meetings. Board of Directors and Board of Governors meetings are shown below.

### AOC Board of Directors Meetings

Date	Description
27 January	Defense Science Board (DSB) Report Briefing by LtCol Mike Harvey (GTRI secure facility)
27-28 January	Face-to-Face (AOC Headquarters)
19 March	Adobe Connect
10 April	Adobe Connect
20 May	Adobe Connect
16 June	US DoD Information Session by Jay Kistler (GTRI secure facility)
16 June	Strategic Immersion (AOC Headquarters)
17-18 June	Face-to Face (AOC Headquarters)
19 August	Adobe Connect

26 October	Adobe Connect
30 November	Face-to-Face (AOC Symposium)
3 December	Face-to-Face (AOC Symposium)

### AOC Board of Governors Meetings

Date	Description
28 January	Face-to-Face (AOC Headquarters)
18 June	Face-to-Face (AOC Headquarters)
30 November	Face-to-Face (AOC Symposium)

With regard to the “Strategic Immersion” session, discussion topics are listed below and notes posted on the BoD Only “Minutes” webpage.

#	Topic	Discussion Leader(s)
1	AOC Strategic Plan (OpMan 14 – AOC Strategic Positioning)	Dave Hime
2	Award Review <ul style="list-style-type: none"> <li>▪ Ensure Alignment with our International AOC Constitution and Bylaws Change in Mission Focus</li> </ul>	Powder Carlson and Dave Hime
3	Chapter Support and Sustainment Initiatives	Lisa Fruge-Cirilli, Mark Schallheim and Glorianne O'Neilin
4	BOG Organization and Potential Realignment	Dave Baciocco, Muddy Watters and Paul Westcott
5	EW Modeling and Simulation	Craig Harm and Ken Israel
6	Next Generation Membership Initiative	Lisa Fruge-Cirilli and Amanda Kammier
7	Future AOC Advocacy Needs	Bob Elder and Mike Dolim
8	Communications Plan (Part II)	Amanda Kammier and Brock Sheets
9	AOC Conferences Security Procedures Review	Craig Harm, Ken Israel and Mark Schallheim
10	Scholarship Strategy <ul style="list-style-type: none"> <li>• Chapter or National Level Approach</li> </ul>	Ken Israel, Joe Koesters and Dave Baciocco
11	N&E Refinement <ul style="list-style-type: none"> <li>• Approach to voting an International AOC Election Slate when BOD members are on the slate</li> <li>• Changes to OpMan Required?</li> <li>• Election Process and Procedure Review</li> </ul>	Sam Roberts and Dave Hime
12	Role of the International AOC President	Bob Elder, Wayne Shaw, Ken Israel, Dave Hime

### Action Items

An active list of items requiring Board member and staff attention was fully implemented in 2015 by Secretary Vickie Greenier. Procedures require close scrutiny and close out actions.

### **Strategic Planning**

President-Elect Dave Hime led a team that prepared a 2016 "and beyond" strategic plan approved by the Board at its 26 October 2015 meeting. A key element of the plan is strategic guidance for a 3-5 year time frame.

Moreover, OpMan 14 – AOC Strategic Planning – was overhauled to include three components: 1) Strategic Planning (process); 2) AOC Vision, Mission, Beliefs, Objectives and Framework; and AOC Strategic Plan. The previous OpMan 14 did not include information about the strategic planning process.

## Annual Election

The annual election in 2015 implemented a change to a two (2) year term for the AOC President. Lisa Fruge-Cirilli was elected to serve as President in 2017 and 2018.

## Bylaws

The Bylaws (OpMan 13) were amended on 25 August 2015 to include stipulations to prevent the unintended export of sensitive EW technologies. Specifically, Article II, Section 2.02 - Regular Membership - states "Persons or entities that are in opposition to the interests of the United States and countries of concern for technology transfers shall not be eligible for membership in the AOC, to attend the Technical Symposium or Exhibits, or to participate in AOC events. A list of ineligible countries and/or organizations will be developed and maintained by the AOC Board of Directors, by reference to, among other things, applicable US laws (See Appendix A)." Appendix A is shown below.

**Appendix A.** The AOC International observes all US laws designed to prevent the export of sensitive technology and technology implementation, and to protect American and international partner technological accomplishments from potential adversaries.

The Department of State is responsible for the export and temporary import of defense articles and services governed by 22 U.S.C. 2778 of the Arms Export Control Act (ACEA) and Executive Order 13637. The International Traffic in Arms Regulations ("ITAR," 22 CFR 120-130) implements the AECA.

In accord with the Bylaws (Section 2.02), persons or entities from countries on the Department of State Directorate of Defense Trade Controls "Country Policies and Embargoes" list ([www.pmdtdc.state.gov/embargoed\\_countries/](http://www.pmdtdc.state.gov/embargoed_countries/)) as of 21 August 2015 (shown below) are not eligible for membership in the AOC, to attend the Technical Symposium or Exhibits, or to participate in AOC events.

Afghanistan	Cyprus	Kyrgyzstan	Sudan
Belarus	Democratic	Lebanon	Syria
Burma	Republic of the	Liberia	Venezuela
Central	Congo	Libya	Vietnam
African Republic	Eritrea	North Korea	Zimbabwe
China	Haiti	Russia	
Cote d'Ivoire	Iran	Somalia	
Cuba	Iraq	Sri Lanka	

A membership termination letter was prepared by legal counsel and affected individuals were notified.

### Conference and Symposium Policy Related to OpMan 13 – Appendix A

Statements were added to all conference and symposium registration forms about attendance eligibility and prohibitions for recording content. They state:

Statement 1 - "As an international organization headquartered in the United States, AOC International observes all US laws designed to prevent the export of sensitive technology and technology implementation, and to protect American and international partner technological accomplishments from potential adversaries. Citizens from countries and/or organizations that follow policies in opposition to the interests of the United States and countries of concern for technology transfer shall not be eligible for membership in the AOC, to attend the Technical Symposium or Exhibits, or to participate in AOC events."

Statement 2 - "All content presented during this Symposium/Convention is owned by the Association of Old Crows or the individual speakers and presenters authorized to take part in the

Symposium/Convention. Symposium/Convention attendees are strictly prohibited from recording any content presented during the Symposium/Convention by any means, including, audio, video and photographic methods. By agreeing to this statement and registering for the Symposium/Convention, you represent and warrant that you understand and agree to this prohibition against recording Symposium/Convention content and that you understand and acknowledge that any attendee who violates this policy will be escorted out of the session and their symposium credentials will be revoked for the remainder of all technical sessions. No Annual Symposium/Convention refund will be granted for subsequent sessions missed due to such violation."

## **Governance – AOC Operations Manual**

As of December 2015, all OpMans have 2014 or 2015 effective dates (see table below). Current status is a result of an update and administrative review of OpMans initiated in October 2014.

It is important to note that OpMan 18 – Non-Discrimination Policy – is newly created in 2015 to reinforce certain aspects of OpMan 13 – Appendix A.

<b>OpMan</b>	<b>Effective Date</b>
11- Purposes and Responsibilities	14 Nov 2014
12 – Constitution of the Association of Old Crows	27 Aug 2014
13 – Bylaws of the Association of Old Crows	25 Aug 2015
14 – AOC Strategic Planning	26 Oct 2015
15 – Code of Ethics	11 June 2015
16 – Meeting Minutes	7 Nov 2014
17 – Board/Chapter Operations	29 Oct 2014
18 – Non-Discrimination Policy	26 Aug 2015
21 – Financial Management	4 Nov 2014
22 – Reserve Fund Policy	19 Mar 2015
23 – Travel and Expense Reimbursement	23 July 2014
24 – Records Retention	11 June 2015
25 – Anti-Trust Compliance Policy	2 July 2015
31 – Awards Program	26 Oct 2015
32 – Nominations and Election Committee	19 Mar 2015
35 – Audit and Inspection Committee	23 Jan 2014
41 – Conference Planning, Operations, and Reporting	28 Aug 2015
51 – Conducting Classified Events	20 Mar 2014
71 – Membership Growth Incentive Program - Individuals	3 Dec 2015
72 – Annual Chapter Recognition Program	29 April 2014
73 – Publishing Chapter Events in the JED/eCrow	3 Dec 2015
74 – Establishing, Maintaining and Closing AOC Chapters	26 Aug 2015
91 – Employee Handbook	5 Nov 2014

In addition, two (2) additional OpMans were proposed in 2015. They are: 1) an HR OpMan, and 2) a Membership Grades OpMan. Review of the proposed OpMans will occur in 2016.

## **Financial Status**

The most significant financial news in 2015 is the release of the 2014 independent auditor report which showed a \$631,185 surplus (income from operations). It confirmed that 2014 was a phenomenal financial success. The independent auditor stated "I have never seen such a dramatic turnaround in any organization's financial posture in my 36 years of experience." This follows on the almost \$500K

turnaround between 2012 and 2013 (2012 impacted by sequestration and Federal travel restrictions). Actions taken in 2013 resulted in the first surplus in two years and the same fiscal restraint approach and positive outcome continued in 2014 (see comparison table below). A positive financial outcome is anticipated in 2015, including an estimated \$105,336 surplus.

	2011	2012	2013	2014	2015 Projected
Revenue	\$3,392,466	\$3,217,415	\$2,477,071	\$3,050,688	~\$2,535,550
Expenses	\$3,550,770	\$3,653,359	\$2,417,488	\$2,419,503	~\$2,430,214
Income (loss) from operations	-\$158,304	-\$435,944	\$59,583	\$631,185	~\$105,336

### Financial Management

Another "success" was identified by the independent auditors. They reported that all issues identified in the 2014 audit management letter were cleared. Improvements follow on significant progress made toward clearing issues in the 2013 audit. The 2014 audit confirms that current financial operations reflect sound practices.

### Reserve Fund

The Reserve Fund balance as of December 2015 is \$1,448,783; up from \$967,729 in December 2014. The change (including market fluctuations) resulted from a \$493,220 transfer from the 2014 realized surplus. The Reserve Fund was also "re-funded" with \$100,000 in 2014. The fund is on an upward trend, with the last withdrawal occurring in 2013. It is anticipated that a surplus will be realized in 2015 with monies again being transferred to the Reserve Fund.

The "Reserve Fund Policy" (OpMan 22) was amended to include a statement about the purpose of the fund. Specifically; "The Reserve Fund provides a source of revenue which can be used for the following purposes: A) Continuity of operations...B) Income for large capital purchases (such as building improvements or equipment upgrades)... [and] C) Resources for new Association business opportunities..." A goal of \$1.6M was targeted to provide the equivalent of approximately six (6) months operating revenue and additional monies to cover various Capital Items needs which might arise.

### **Capital Items**

A Capital Items budget was approved by the Board in 2014. Monies were designated for software upgrades (AOC website eCommerce features) and AOC building repairs/ maintenance. Items completed in 2015 and planned for 2016 are shown below.

Software Upgrades – Upgrades are part of an ongoing effort to improve the AOC website; specifically, increased functionality and user friendly features.

- eCommerce Website Functions (completed on budget - \$50K)

Building Improvements - A "building maintenance" program was implemented in 2014 to ensure that many "deferred maintenance" issues in the headquarters building will receive attention, as well as to install an ongoing program to avoid such future issues.

- 2015 - Façade Repairs and Window Caulking (completed under budget - \$108K)
- 2015 - New AOC Signs / Logo – (completed on budget - \$5K)
- 2016 - Garage Ceiling – Replace deteriorating and sagging ceiling (budget \$40K)
- 2016 - Unit Heaters – Replacement / repairs (budget \$15K)

## **Chapter Activity Assistance Support Fund**

A chapter support fund was initiated based on changes made in OpMan 74 - Establishing, Maintaining and Closing AOC Chapters. The OpMan was amended to state "Funds that are received by AOC Headquarters after the closing of a chapter account with funds that were received from the rebates and or chapter activities will be placed directly into a Chapter Activity Assistance Support Fund." Previously, funds were held in an escrow account for three (3) years and subsequently had to be deposited in the AOC Foundation account.

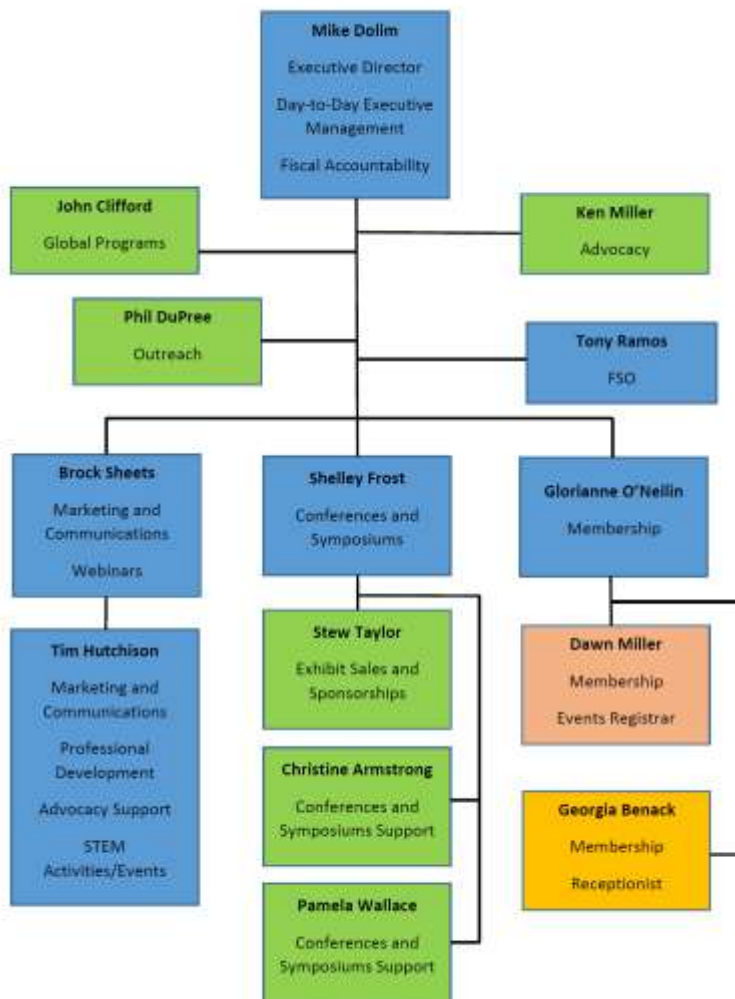
The fund was started with \$79,791.79 provided by the defunct Golden Spike Chapter. Monies may be disbursed to chapters with funding and/or financial needs based on submission of an application contained in OpMan 74. The application covers:

- Chapter purpose for funds and intended outcome – Date of event if applicable
- Amount of funding requested – funding options depending on amount requested may consider a matching opportunity
- After Action Report sharing information about the event and its success so that we may share with other chapters as a benchmark opportunity

As of December 2015, one (1) chapter, Red Baron Roost, requested and attained a \$1,500 disbursement (Fund balance is now \$78, 291.79).

## **AOC Staff**

As of December 2015, the staff is composed of six (6) AOC employees (5 full-time and 1 part-time), six (6) consultants, one (1) 1099 contractor and one (1) temporary agency employee (see organization chart below). The six (6) consultants are under contract to provide services for approximately 80 hours per month or less.



### Staff Changes in 2015

- Philip DuPree was contracted in October 2015 to expand government and industry relations, as well as to serve as staff Subject Matter Expert (SME). The selection process included bid packages received from 11 candidates; five (5) were eliminated for various reasons; and six (6) candidates were jointly interviewed by Tony Lisuzzo, Paul Westcott and Mike Dolim. An offer was extended on 26 May and accepted on 9 June. The position holds the title Director of US Operations.
- Tim Hutchison was hired in September 2015 to fill the Marketing and Communication Manager Position previously held by Bridget Whyde.
- Pamela Wallace was added in September 2015 to assist Shelley Frost with logistics planning and executing STEM program activities/requirements.

### Other Contractor Services

Outside contractor services continued in 2015 with: 1) website support by 3by400; 2) Information Technology services by TSI; and bookkeeping& accounting by Consultance Accounting Services.



## **Advocacy**

The Government and Industry Relations (GIR) Committee conducted an active 2015 program coordinated by Robert Elder (Chair), Ken Miller and Mike Dolim. Accomplishments and 2016 objectives include:

### 2015 Accomplishments

- Congressional Education and Awareness (Regular)
- Industry Executive Roundtable (February 28)
- Advocacy Training Webinar (April 22)
- Congressional Staff Briefing on DoD Spectrum Strategy & Policy (May 10)
- Defense Budget Analysis and Policy Recommendations (May/June)
- Advocacy Presentation at AOC Conference at NSWC Crane (Aug. 11)
- EW 101 Congressional Staff Briefing (September 25)
- Outreach on Spectrum legislation (Nov / Dec)
- Congressional Briefing on Spectrum "Pipeline" (Dec. 10)

### 2016 Objectives

- Prepare for legislative season, January - July (Presidential election will consume time and attention from August - November).
- Congressional Outreach and Education (HASC, SASC, HAC-D, SAC-D, House/Senate Telecom Subcommittees, relevant Caucuses)
- FY 2017 National Defense Authorization Act - Defense/Acquisition Reform & EMS Warfare Oversight
- Spectrum "Pipeline" policy advocacy
- Congressional and Federal Agency Outreach
- Congressional Panel Discussion on Spectrum legislation (bi-directional sharing, incentives, action)
- Plan for education and awareness surrounding new Administration and 115th Congress
- "EW 101" for Congress: 4-5 part briefing series with workbooks to distribute to Members of Congress
- Build-out defense budget database and "Centers of Gravity" matrix
- Build Chapter Advocacy Initiatives
- RAFB Congressional Breakfast (April)
- Desert Sun Roost Site Visit by Rep. Martha McSally
- NAS Whidbey Island Site Visit by Rep. Rick Larsen
- Integrate outreach government (Congress/Federal Agency), industry, and DoD/military services stakeholders
- 4th Annual Industry Executive Roundtable
- Coordinate with AOC Industry Outreach Consultant on Industry Government Affairs

### GIR and Outreach Reports

A webpage (GIR Reports) was established for posting of advocacy information, including Ken Miller's monthly reports. In addition, a separate webpage (Outreach Reports) was created for Phil DuPree's monthly reports. Each monthly report provides a summary of work performed in the past 30 days, a forecast of the next 30 days, and work "On the Horizon."

## **SME Activities**

The SME "team" was established to broaden the AOC's brand and garner information from groups/organizations that AOC heretofore had not been engaged with. The primary objective is to expand AOC's knowledge and exposure targeted to the newly incorporated areas in AOC's mission statement. A list of events attended with reports posted on the newly created "SME Reports" webpage is provided below.

Date	Activity/Event
28 April 2015	Directed Energy Professional Society Event of Capital Hill
13 June 2015	International & Foreign Military Sales (FMS) EW Symposium and Workshop
10 July 2015	Wright Patterson AFB Visit
28 July 2015	Directed Energy Conference
28 July 2015	Directed Energy Conference – Attachment
14-16 September 2015	Air Force Air & Space Symposium

## Membership

Overall membership numbers continue to stay constant – with normal variations (see table below). AOC continues to offer special membership dues incentives such as student memberships and one-year memberships tied to certain AOC events/activities. Also, support is provided for chapter membership drives.

Membership	October 2013	December 2014	December 2015
<b>US</b>	10,925	10,726	10,519
<b>International</b>	2,075	2,261	2,416
<b>Total</b>	13,000	12,987	12,935
<b>Industry</b>	211	200	2015

## Website Update – Responsive Template

A project to enhance AOC website user satisfaction by employing a “responsive template” was completed in 2015. The responsive template provides optimal viewing and interaction across a wide range of devices – desktop computers to mobile phones. It adapts to viewer’s different device widths and resolutions. This promotes easy reading and navigation with minimum of resizing, panning and scrolling. Also, Google boosts its ratings of sites that are mobile friendly (higher ranking in search results).

## Conferences

The six (6) conferences held in 2015 continued a “revitalization” since 2013; only one (1) conference was held in 2013 (see table below). The number of conferences during the past four (4) years ranges from nine (9) in 2012 to six (6) in 2015 (see table below). It is anticipated that there will be 5 - 7 conferences in 2016.

Name of Conference	2015	2014	2013	2012
Collaborative EW Symposium Pt Mugu CA	March 31 – April 2	April 8-10	n/a	Jan 24-26
	629 attendees	474 attendees		388 attendees
EW/Cyber Convergence Charleston SC	June 2-4	June 3-5	n/a	June 5-7
	148 attendees	163 attendees		143 attendees
Modern Threats: SAMs Huntsville AL	n/a	Sept 3-5	n/a	June 19-21
		325 attendees		204 attendees
PACOM	October 20-22	Oct 21-23	Oct 22-24	Oct 16-18
	187 attendees	130 attendees	150 attendees	139 attendees

Capability Gaps and Enabling Technologies Crane IN	August 11-13 261 attendees	Nov 18-21 215 attendees	n/a	May 8-10 346 attendees
Cyber Electromagnetic Activity, Aberdeen, MD	October 6-8 538 attendees			
Marine Corps Spectrum Maneuver Warfare Conference, Cherry Pt, NC	October 27-28 291 attendees			
Spectrum Superiority; Critical Enabler to Century Warfare Las Vegas NV		n/a	n/a	April 3-5 110 attendees
ACIN: Legislative Initiatives for Small Business Integration Camden NJ		n/a	n/a	May 1-2 45 attendees
EMS Engineering and Acquisition Dahlgren VA		n/a	n/a	July 17-19 111 attendees
Land EW Conference Quantico VA		n/a	n/a	Dec 11-13 213 attendees

Post Conference Information Site

A "Conference Reports" webpage was created in 2015 for AOC historical information and feedback/critique. The intent is to include information about each conference, such as an executive summary, financial report, registrant list and final agenda.

**Global Conferences**

AOC conducted two (2) successful global conferences in 2015 providing \$172,400 revenue (see table below). The 2015 conferences were supported by the International Advisory Committee, John Clifford and conference partner Clarion.

2015 Events	Location	Dates	AOC Profit
AOC EW Brazil	Rio	April 14-17	\$2,400
AOC EW Europe	Stockholm	May 26-28, 2015	\$170,000
2014 Events	Location	Dates	AOC Profit
AOC EW Asia	KL, Malaysia	Mar 10-11, 2014	\$65,054
AOC EW Europe	Edinburgh	May 13-15	\$142,516
2013 Event	Location	Dates	AOC Profit
AOC EW Europe	Cologne	May 28-30	\$77,757
AOC Saudi Arabia	Riyadh, KSA	Nov 11-13	\$34,153

## International Advisory Committee

The International Advisory Committee (IAC) charter was updated to strengthen its role in conference planning. Specifically, the charter calls for the IAC to "Oversee and coordinate on all AOC international agendas, themes, session arrangements, speakers and event guides for Global Conferences in conjunction with the Conference Committee and Director of Global Conference."

## Clarion Partnership Contract

Renewal of the Clarion contract was completed in 2015 with the term extended for three (3) years. In addition, various updates were made to reflect current practices and make terms mutually beneficial to both parties.

## 2016 Global Conference Plans

The 2016 EW Europe conferences is scheduled to be held May 10-12 in Rotterdam, Netherlands.

## **Virtual Conferences (webinars)**

Eighteen (18) virtual conferences were held in 2015. Launched in 2013, there were 10 webinars in 2013 and 15 in 2014. Currently, 20 webinars are planned in 2016.

Webinar sponsorship revenues also increased in 2015 to \$135,375; up from \$113,425 in 2014 and \$64,000 in 2013. Great sponsor support continues with companies such as Rohde & Schwarz, Raytheon, National Instruments, Narda, Keysight Technologies, Harris (Exelis) and Giga-Tronics.

## 2015 Webinars

Date	Title	Speaker(s)	Sponsors	Attendees
1/15/2015	GPS Interference	Logan Scott	Rohde & Schwarz, Raytheon	260
1/30/2015	Trade-offs for Synthetic Aperture Radar	Mark Richards	Rohde & Schwarz	137
2/12/2015	LTE - Ready for Critical Communication?	Andreas Roessler	Rohde & Schwarz	84
2/19/2015	Vulnerabilities of LTE	Jeffrey Reed	Rohde & Schwarz	149
3/12/2015	Test and Measurement Receiver Architectures for use in SIGINT, EW and Radar Applications	Brian Avenell & Eddie Rodriguez	National Instruments, Narda, Raytheon	139
3/26/2015	Opening the US DoD for EW Businesses	Stan Vanderwerf	Raytheon	82
4/23/2015	AOC Advocacy Training 2015	Ken Miller		34
5/7/2015	Demystifying Monopulse Radars	Warren du Plessis	Keysight, Raytheon	270
5/28/2015	Evolving to the Next Generation of Multifunctional EW	Matthew Orr	Keysight, Rohde & Schwarz, Raytheon, National Instruments	216
6/11/2015	Signal Analysis: Emitter Location in Congested Environments	Jurgen Modlich	Rohde & Schwarz, Giga-Tronics	171
6/25/2015	MIMO Radars	Eli Brookner	Rohde & Schwarz, National Instruments, Giga-Tronics	159
7/9/2015	SAR & GMTI	Greg Showman	Rohde & Schwarz, Giga-Tronics	177
8/6/2015	IQ Signal Recording: Getting Answers from Big IQ Data	Jim Taber	Keysight, Giga-Tronics	143

9/3/2015	Software Defined Radios (SDR)	Warren du Plessis	Keysight, National Instruments, Rohde & Schwarz, Giga-Tronics	215
9/17/2015	Coexistence of LTE & S-band radars	Steffen Heuel (R&S)	Rohde & Schwarz	131
10/1/2015	EW in the Cyber-Information Age	Bob Elder	Keysight, Harris (Exelis), Giga-Tronics, Raytheon	139
10/15/2015	Resilient Positioning, Navigation and Timing (PNT)	Logan Scott	Rohde & Schwarz, Raytheon	167
11/5/2015	Algorithm Designs on FPGA Based SDR	Erik Luther (NI)	National Instruments	138
<b>Totals:</b>	<b>18</b>			<b>2811</b>

## Professional Development

The number of courses and students attending in 2015 was less than 2014 for various reasons (see table below). Challenges in 2015 included the loss of a legacy instructor Dick Wiley. However, two (2) successful “webcourses” were conducted, reinforcing the utility of this delivery method. An expanded number of web based courses will be offered in 2016.

	2015	2014	2013	2012	2011
Courses	8	14	4	17	13
Students	152	227	128	274	

### 2015 Professional Development Courses

Month	Course	Instructor	Location	Note
<b>Feb 4</b>	Essential EW Terms and Concepts	Dr. Pat Ford	Webcourse	28 Attendees
<b>Mar 4</b>	Introduction to Unmanned Aircraft Systems (UAS)	Dr. Pat Ford	Webcourse	6 Attendees
<b>April 14-17</b>	EW 104: Critical Thinking and Problem Solving for Electronic Warfare	Dr. Pat Ford	Linthicum, MD	21 Attendees
<b>May 4-5</b>	Survey of Electromagnetic Battle Management (EMBM) Concepts	Robert Samuel	Pax River, MD	25 Attendees
<b>May 12-15</b>	Essentials of 21 <sup>st</sup> Century EW	Robert Samuel	AOC	Cancelled
<b>June 23-26</b>	Advanced Electronic Warfare	Dave Adamy	AOC	Cancelled
<b>Sept 15-18</b>	Fundamental Principles of EW	Dave Adamy	AOC	18 Attendees
<b>Sept 22-24</b>	Survey of Unmanned Aircraft Systems (UAS) EW Applications	Dr. Pat Ford	Pax River, MD	15 Attendees
<b>Oct 20-23</b>	Essentials of 21 <sup>st</sup> Century EW	Robert Samuel	AOC	Cancelled
<b>Nov 3-6</b>	Advanced Electronic Warfare	Dave Adamy	AOC	Cancelled
<b>Dec 2-3</b>	Navigation and Dynamic Spectrum Use	Robert Samuel	AOC Conv	6 registered
<b>Dec 3-5</b>	EW Against A New Generation of Threats	Dave Adamy	AOC Conv	33 registered

## Symposium

The 2015 Symposium was an outstanding success. The numbers below show a strong turnout with Companies (booth sales), paid registrations and overall attendance exceeding every year since 2011. Many factors contributed to the 2015 success including great key note and session speakers. A new venue was used, the Marriott Marquis DC and Convention Center. The upscale hotel, its central location, and added available space in the convention center were significant factors in growth.

	2015 (DC)	2014 (DC)	2013 (DC)	2012 (Phoenix)	2011 (DC)
Companies	100	95	96	92	93
Paid Registrants	419	234	311	285	322
Full Attendance	2,039	1,273	1,627	1,368	1,742

Processing of 2015 Symposium expenses is ongoing; consequently, actual revenue and expenses can only be estimated at this time. Again, the 2015 numbers shown in the table below are projections; however, it is anticipated that net revenue will be in the neighborhood of \$600K. Actual amounts will be finalized in January 2016.

	2015	2014 Actual	2013 Actual
<b>Paid Registrations</b>	~\$158,940	\$183,175	\$220,332
<b>Exhibitors</b>	~\$843,575	\$768,261	\$781,383
<b>Sponsors</b>	~\$172,215	\$163,261	\$185,415
<b>Show Daily</b>	~\$23,150	\$24,075	\$23,500
<b>Total Revenue</b>	~\$1,197,880	\$1,139,184	\$1,210,620
<b>Expenses</b>	TBD	\$478,088	\$543,303
<b>Net Revenue/Surplus</b>	TDB	\$661,096	\$667,317

### STEM Program

A Science, Technology, Engineering and Mathematics (STEM) program was added to the 2015 Symposium. It featured an educational, exciting, fun and interactive experience for over 300 students invited from middle school, high school and undergraduate institutions. Activities included: 10 learning stations manned by SME instructors; 14 static and interactive displays (“petting zoo”); 12 college recruiting booths; and volunteer led discussions about “a day in the life of an engineer.” Sponsors provided \$7,475 to help defray expenses.

Display contributors and college booth providers are listed below.

### Petting Zoo

- Next Gen Jammer display - Raytheon
- F-35 Cockpit Demonstrator - Lockheed Martin
- Drone Demo - Raytheon
- Striker Helmet - Bae Systems
- “Antenna” Demonstration - Rohde & Schwarz
- Chaff - Esterline
- BOL Dispenser - Bae Systems
- AN/ALQ-214 Component - Harris
- High Power Microwave - American Systems
- EA-18 Growler Model - Northrop Grumman
- Directional Sound - GTRI
- RadioMap demo - DARPA
- JIDA - Joint Improvised Threat Defeat Agency
- CREW Equipment - EWC

College Booths

- Drexel University
- Ohio State University
- The Office of Naval Research - Ed & Workforce
- George Mason University
- University of Dayton
- AFROTC Detachment 330-U of Maryland
- University of Maryland Army ROTC
- US Air Force Academy
- The Hume Center at Virginia Tech
- Penn State University College of Information Science and Technology
- Georgia Tech Research Institute
- Notre Dame

An expanded 2016 event is anticipated which will attract additional sponsors and participants.

2016 Symposium Site

The 2016 Symposium is scheduled for November 29 - December 1 at the Marriott Marquis DC and Convention Center.

**Security**

A security inspection originally planned for June 2014 is indefinitely postponed. However, a self-inspection was completed in December 2015 and noted by DSS. The self-inspection ensures that the AOC remains ready for inspection and all requisite training and procedures are up-to-date.

The need for an additional person to handle JPAS processing was identified during the self-inspection. Currently FSO Tony Ramos is the sole AOC employee with JPAS credentials. Glorianne O’Neilin has volunteered to become a second JPAS credentialed employee.

**Foundation Fund**

The AOC Foundation balance as December 2015 is \$107,467.18 which includes a \$25,000 deposit made on 12/4/2015 from Raytheon for 2016 scholarship distributions (see table below).

Month/Yr	Balance	Note
Aug 2014	\$68,746.18	
Sept	\$78,746.18	\$10,000 deposit from William Howe Trust
Oct – Dec 2014	\$98,746.18	\$20,000 deposit from Raytheon (scholarships)
Jan 2015 - Mar	\$98,746.18	
Apr	102,467.18	\$3,721.00 deposit from contributions made during 2014 membership renewals
May	\$92,467.18	\$10,000 disbursement to Pt Mugu Chapter for Raytheon scholarship
Jun	\$82,467.18	\$10,000 disbursement to Patriots Roost for Raytheon scholarship
July - Nov	\$82,467.18	
Dec 2015	107,467.18	\$25,000 deposit from Raytheon (scholarships)

## **2016 Look Ahead**

Moving forward in 2016, a summary of major activities is provided below.

- Execute surplus budget
- Continue with building repairs program (Capital Item)
- Grow membership by 2.5% (Strategic Plan objective), as well as expand membership and services in new areas incorporated in updated mission statement
- Continue aggressive advocacy program with Ken Miller
- Expand industry outreach with Phil DuPree
- Support an expanded conference schedule – anticipate 5-7 conferences, plus two (2) Global conferences
- Provide ~20 webinars
- Provide traditional face-to-face professional development courses with an expanded schedule of “Webcourses”
- Host an information and networking rich Annual Symposium with expanded STEM event