



# AF Technical Program – 2018

## Dixie Crow Symposium 43

### Call for Papers



#### Theme: Maximizing Modular Open System Approach (MOSA) for Long Term Adaptability

The Electronic Warfare and Avionics System Program Office (EWA SPO), AFLCMC/WNY, and the Dixie Crow Chapter of the Association of Old Crows (AOC) will co-sponsor the AF Technical Program, 2018 Dixie Crow Symposium 43, on 20-22 March 2018. The program will be held at the Scott Theater (Building 1500), Museum of Aviation, Robins AFB, GA. An Air Force conference approval request has been submitted by the EWA SPO and is pending SAF/AA approval. For additional information:

E-mail: [AFLCMC.WNY.AFTechProg@us.af.mil](mailto:AFLCMC.WNY.AFTechProg@us.af.mil)

Web Site: <http://www.robins.af.mil/About-Us/AF-Technical-Program> and  
<https://www.crows.org/chapters/dixie-crow-home-page.html>

Phone: 478-926-7987 or 478-222-0278

This year's theme focuses on topics related to using a modular open systems approach during development of new systems and/or modernization of legacy systems. Threats continue to evolve and the Air Force must become more agile and adapt to changing threats and technology. MOSA is a strategy that could be used as an enabler for the Air Force to become more efficient and allow continued protection of US forces and our homeland.

#### Abstract

We are soliciting topics in support of this year's theme "Maximizing Modular Open System Approach (MOSA) for Long Term Adaptability." Papers to support this theme should relate to Electronic Warfare (EW), Intelligence, Surveillance & Reconnaissance (ISR), and Avionics and may include (but not limited to) technical challenges, initiatives, enablers, techniques, methods, policy/doctrine updates, interoperability, modeling, architectures, and best practices.

Abstracts should be unclassified; however the presentation itself may be classified. See the presentation section of this document for more information. Abstracts must include the speaker's name, position title, paper title, organization name, e-mail address, phone number, and applicable security classification of the proposed presentation. Abstracts must be unclassified and less than two pages. Abstracts should be submitted via e-mail not later than 3 February 2018. You must indicate the highest classification level of your presentation (written and verbal). A sample abstract is included at the end of this document. You must use the abstract format provided. Include contact information in your e-mail (if different than the proposed speaker) and forward to: [AFLCMC.WNY.AFTechProg@us.af.mil](mailto:AFLCMC.WNY.AFTechProg@us.af.mil)

#### Bio

Bios must be submitted with the abstracts not later than 3 February 2018. Bios will be reviewed along with the abstracts and information used in the bio will be used to introduce the speaker (if approved by the committee). A sample bio is included at the end of this document; however, you may use your own format as long as the speaker's name is clearly indicated in the bio. Include contact information in your e-mail (if different than the proposed speaker) and forward to: [AFLCMC.WNY.AFTechProg@us.af.mil](mailto:AFLCMC.WNY.AFTechProg@us.af.mil)

## Presentation

The committee will review all abstracts and notify you via e-mail not later than 27 February 2018 as to whether your topic was selected. Presentations will be submitted only after receiving notification from the AF Technical Program Committee that the speaker and topic have been approved. Presentations will be targeted for 20 minutes (including questions and answers). Presentations may be either (a) Unclassified, no restrictions; (b) Unclassified, export controlled; US only; or (c) Classified (Confidential or Secret), US only. If your topic was selected, you will receive further instructions on where to send your briefing charts, scheduled times, etc. If you plan on giving an unclassified presentation but wish to be in a classified time slot, you must e-mail the AF Technical Committee Chairperson at [AFLCMC.WNY.AFTechProg@us.af.mil](mailto:AFLCMC.WNY.AFTechProg@us.af.mil) immediately after receiving your approval to present. Presentations will be submitted not later than 14 March 2018. Do not send any presentations to the AF Technical Program e-mail box. E-mail information, mailing address, and other pertinent information will be provided in the notification e-mail.

## Releasability

A signed Releasability Certification is required before the presentation can take place. The person signing the statement is certifying that the appropriate approvals for release of the information have been obtained. Contact your applicable organization representatives for internal procedures. A sample releasability certification is included at the end of this document. You must use the releasability certification format provided. Signed releasability statements are due by 14 March 2018. Include contact information in your e-mail (if different than the proposed speaker) and forward to: [AFLCMC.WNY.AFTechProg@us.af.mil](mailto:AFLCMC.WNY.AFTechProg@us.af.mil)

## General Information

The AF Technical Program Committee does not release to the public any information submitted to the committee to include bios, abstracts, contact information, or presentations.

For the latest information on the AF Technical Program, visit <http://www.robins.af.mil/About-Us/AF-Technical-Program> or for more information about the Dixie Crow Symposium 43, visit <https://www.crows.org/chapters/dixie-crow-home-page.html>.

## Key Dates

Abstracts Due	3 February 2018
Bios Due	3 February 2018
Approval Notifications	27 February 2018
Releasability Certification Due	14 March 2018
Presentations Due	14 March 2018

## SAMPLE ABSTRACT

Name: Dr. Jane Doe E-mail: jane.doe@acme.com  
Position Title: Senior Research Engineer Phone: 478-922-1234  
Organization: ACME Defense Corporation  
Paper Title: Cyber Security Challenges in MOSA Systems

Proposed highest level classification (not to exceed Secret) of your presentation to include both the paper (charts) and any verbal discussions (questions and answers, etc.) during your presentation. Select one:

- (a) Unclassified, no restrictions. Information has been approved for presentation to all attendees including Foreign Nationals.
- (b) Unclassified, export controlled; US only. Export controlled technical information is in accordance with International Traffic in Arms Regulations (ITAR).
- (c) Classified (Confidential or Secret), US only. AF or DoD program office approval required for release

### ABSTRACT

Technology advances now make it possible to create exceptionally realistic and arbitrarily complex test environments that can have hundreds or thousands of signals and span the entire RF spectrum. Signals have high dynamic range and exceptional fidelity. Multiple unique test environments can be easily created and the system reconfigured in minutes. This system is backward compatible with legacy PDW databases, with the additional capability to re-create actual recorded signals and arbitrarily complex radar and non-radar signals. This presentation will describe a modular system that can provide these capabilities using primarily COTS equipment. An example will be presented demonstrating how the system can be used to create a complex, long duration, dynamic, multi-GHz bandwidth test scenario.

## **SAMPLE BIO**

**Name:** Dr. Jane Doe  
**Position Title:** Senior Research Engineer  
**Organization:** ACME Defense Corporation

### **BIOGRAPHY**

#### **Dr. Jane Doe, Senior Engineer, ACME Defense Corporation**

Dr. Jane Doe has more than 35 years of experience designing microwave hardware for EW, radar and communication systems. Her specific expertise involves the design of microwave transmitters, receivers, and signal sources that are used primarily in military systems. She has also successfully managed several engineering development projects, including the Army Research Laboratory's Tri-Service MPM program. Dr. Doe earned a Bachelor's Degree in Electrical Engineering from Georgia Tech in 1982, a Master's Degree in Electrical Engineering from the MIT in 1989, and a doctorate degree from MIT in 1993. Dr. Doe is a member of the IEEE, has been an Old Crow since 1991, and was inducted into the AOC Hall of Fame in 2006.

# SAMPLE RELEASABILITY CERTIFICATION

Name: Dr. Jane Doe E-mail: jane.doe@acme.com  
Position Title: Senior Research Engineer Phone: 478-922-1234  
Organization: ACME Defense Corporation

## 2018 AF TECHNICAL PROGRAM, DIXIE CROW SYMPOSIUM RELEASABILITY CERTIFICATION

I certify that I have secured the appropriate approvals for:  
Dr. Jane Doe to present Cyber Security Challenges  
in MOSA Systems

at the 2018 AF Technical Program, Dixie Crow Symposium.

The releasability/security classification of this information is (select only one of the following statements):

- (a) *Unclassified, no restrictions.* Information has been approved for presentation to all attendees including Foreign Nationals.
- (b) *Unclassified, export controlled; US only.* Export controlled technical information is in accordance with International Traffic in Arms Regulations (ITAR).
- (c) *Classified (Confidential or Secret), US only.* AF or DoD program office approval required for release;

*Mary L. Jones*

MARY L. JONES  
(Approving Official)

*1 March 2018*

DATE

Note: Speakers are responsible for ensuring their briefings are approved by the appropriate personnel for release at the levels indicated above.