

**NDIA**

**AIRCRAFT  
SURVIVABILITY**  

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**SYMPOSIUM 2017**

*Combat Operations & Emerging Technologies*

**CALL FOR ABSTRACTS, POSTER PRESENTATIONS, & AWARD NOMINATIONS**



**NOVEMBER 7-9, 2017  
NAVAL POSTGRADUATE SCHOOL  
SECRET/U.S. ONLY**

## THEME

The theme of the Aircraft Survivability Symposium 2017 is "Combat Operations & Emerging Technologies." The goal of this three-day, classified Symposium is to foster technical dialogue and exchange of information on aircraft survivability topics such as design, operational experience, threats current and future, reliability and maintenance, and testing of aircraft survivability technologies. Additionally, the Aircraft Survivability Symposium offers a forum for learning through its presentation of relevant tutorials on survivability related subjects on the first day of the symposium. Using the Naval Post Graduate School as our venue and co-sponsor provides attendees with the unique experience of interacting with researchers, industry and government decision makers, and warfighters on a classified campus to discuss what is needed for the fight today and plan for the survivability challenges of tomorrow.

## OVERVIEW

Aircraft Survivability Symposium 2017 is a SECRET/U.S. ONLY event that will include tutorials and presentations by senior level government and industry representatives, the armed services, and academia. These presenters will discuss survivability technologies, survivability sustainment and operations, threats and counter measures and warfighter lessons learned from recent combat experiences. Government and industry keynotes will present talks on survivability related areas that will set the overall tone for the symposium content. Additionally, the symposium will include a warfighter session to provide firsthand information on survivability effectiveness in today's fight which will inform solutions for tomorrow's challenges.

The Symposium will begin on Tuesday, November 7, 2017 and run through Thursday, November 9, 2017. The first day will offer survivability tutorials from a wide range of topics. The symposium presentations will start on the second day, with an opening keynote address from a government leader, followed by presentation sessions on key topic areas. The third day will open with an Industry leader keynote address, followed by technical sessions on survivability related subjects. Technical presentation sessions will include design, operational experience, threats current and future, reliability and maintenance, and testing of aircraft survivability technologies. During both days of presentations, the Symposium will have a technical poster papers area where additional content can be viewed and discussed outside of the formal session presentations. The event will feature displays and extended breaks, and is specifically structured to facilitate relaxed dialogue and continuous networking opportunities among Attendees. Finally, NDIA's Combat Survivability Division (CSD) will recognize individual technical and leadership achievements in a formal awards ceremony during lunch on the third day.

## TECHNICAL PRESENTATIONS - ABSTRACTS REQUESTED

### *\*REDUCED REGISTRATION FEES FOR ABSTRACT AND POSTER PRESENTERS*

Aircraft Survivability Symposium 2017 will offer a program of selected and invited presentations. This program will provide a well-balanced range of perspectives from experts in intelligence, acquisition and technology development from both government and industry. The Symposium will also provide an opportunity for individuals to present, in a SECRET/U.S. ONLY classified environment, their key topics to a broad audience of influential observers and key decision-makers, including practicing engineers, analysts and evaluators in government and industry. Presentation abstract submissions are requested to provide an overview of the topic area and presentation content. After review and selection, abstract Presenters will be invited to present a twenty five (25) minute briefing. Classified presentations discussing related research, technical data and/or test results are highly encouraged. Only a presentation is required; no accompanying written paper is necessary as all presentations and Speaker remarks will be under a strict "not for attribution" ground rule to promote candid and informative communication among the Attendees. Each Session will conclude with a question-and-answer period to provide Attendees the opportunity to interact with the Speakers. For more information on submitting a technical presentation abstract, please refer to the abstract submittal instructions on the following page.

## POSTER PAPERS - ABSTRACTS REQUESTED

### *\*REDUCED REGISTRATION FEES FOR ABSTRACT AND POSTER PRESENTERS*

Aircraft Survivability Symposium 2017 will also feature a classified poster paper venue to complement the theme of the event and present details on specific project and technology accomplishments. Poster papers should enable exposition of detailed information that compliments the General Session. These papers will also provide the opportunity for one-on-one discussions outside of the event auditorium. The Planning Committee will evaluate all poster papers, and the top paper will be acknowledged during the Symposium. Abstracts for poster papers are to be submitted in the same format as technical presentation abstracts. Authors may also submit their poster paper abstracts for consideration as a General Session presentation. For more information on submitting a poster paper, please refer to the abstract submittal instructions on the following page.

## ABSTRACT SUBMITTAL INSTRUCTIONS

Abstracts must be submitted via the NDIA online abstract submittal webpage: <http://application.ndia.org/abstracts/8940>.

Abstracts must be in text format; no graphics or pictures. A maximum of 5,000 characters are allowed. Abstracts should be sufficient to provide the Selection Committee with a comprehensive understanding of your presentation/poster paper. Although presentations may be classified up to SECRET/U.S. ONLY, abstracts MUST be UNCLASSIFIED. Please complete all portions of the abstract submittal page. If you are submitting an abstract for a poster paper only, please indicate so within the abstract.

Typically, more abstracts are received than can be accommodated during the 2 days of General Sessions. Submittal of an abstract is a professional commitment. If the abstract is accepted, the Author commits to attend the event and make a presentation based on the material submitted in the abstract. If an Author finds that he or she will be unable to make the presentation, then it is incumbent upon him or her to find a substitute presenter. If the abstract is not accepted for oral presentation, it may be accepted for presentation as a poster paper. For all presentations, Authors are responsible for obtaining appropriate approvals for their presentation prior to Friday, October 13, 2017; Authors are cautioned to begin the clearance process in a timely manner. All Authors will be notified of their abstract selection status by Thursday, August 31, 2017.

### **ABSTRACT SUBMITTAL EXTENDED DEADLINE – FRIDAY, AUGUST 18, 2017**

**<http://application.ndia.org/abstracts/8940>**

## FOCUS AREAS

### DEPARTMENT OF DEFENSE PERSPECTIVES & STRATEGIES

- Force modernization versus readiness levels
- Persistent permissive and/or anti-access/area denial gaps
- Fixed wing and rotary wing capability gaps
- Next generation technology investments

### FUTURE THREAT TRENDS

- IADS trends: digital signal processing, electronic protection, passive/multi-static sensors
- SAM trends: mobility, lethality, EMCON, decoys, passive/asymmetric kill chains
- Future Fighter Threat: signature, sensors, weapons and electronic attack
- Communications, data links and GPS jamming trends

### COMBAT LESSONS LEARNED

- Lessons learned on the survivability of today's manned and unmanned aircraft in combat
- Development of new tactics, techniques and procedures by weapons schools
- Analyses of threat weapons engagements and combat damage events

### AIRCRAFT SURVIVABILITY-RELATED PROGRAM OF RECORD UPDATES

- UAS programs
- Future Family of Systems programs and Air Dominance initiatives
- Fixed and rotary wing program updates
- High Value Airborne Asset (HVAA) program updates

### DEVELOPMENTS IN AIRCRAFT SURVIVABILITY TECHNOLOGIES

- Early warning, countermeasures and counter-countermeasures developments, techniques and technologies
- Advances in sharing and fusion of Intelligence/Surveillance/Reconnaissance (ISR) and targeting data
- Protection of network systems critical to the success of combat aircraft survivability
- On-board threat information collection, fusion and automatic response guidance
- Next-generation survivability concepts

### AIRCRAFT SURVIVABILITY-RELATED TRADE STUDIES & ANALYSES

- Effective and affordable survivability development and advances across services and platforms
- Vehicle signature reduction technologies across the spectrum: RF, IR, acoustic, visual and electrical emissions
- Developmental, operational and live fire testing against conventional and emerging threats
- Testing and integration of hostile fire indication systems

## CONTACTS

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## AWARDS PROGRAM

NDIA recognizes superior contributions to combat survivability through awards for leadership and technical achievement. This year, NDIA has established a new award to recognize the contributors of young professionals within the aircraft survivability community. These awards are presented at the annual Aircraft Survivability Symposium and recognize excellence across the entire spectrum of survivability, including susceptibility, vulnerability reduction and related modeling and simulation.

**RADM Robert H. Gormley Combat Survivability Award for Leadership** – This award is presented to a person who has made major leadership contributions to combat survivability. The individual selected must have demonstrated outstanding leadership in enhancing overall combat survivability or played a significant role in a major aspect of survivability design, program management, research and development, test and evaluation, modeling and simulation, education or the development of standards. The emphasis of this award is on demonstrated superior leadership over an extended period of time.

**Combat Survivability Award for Technical Achievement** – This award is presented to a person who has made a significant technical contribution to any aspect of survivability. It may be presented for a specific achievement or for exceptional technical excellence over an extended period. Individuals at any level of experience are eligible for this award.

**Young Professional Award for Combat Survivability** – This award is presented to a person who has made a significant technical, analytic, or tactical contribution to any aspect of survivability. It may be presented for a specific technical achievement, an original analytic effort, or new development of tactics, techniques, and procedures that increase the survivability of aircraft in combat. Individuals must be age 35 or younger at the time of selection to be eligible for this award.

**AWARD NOMINATIONS EXTENDED DEADLINE – FRIDAY, AUGUST 18, 2017**

**TO SUBMIT AN AWARD NOMINATION, PLEASE VISIT THE FOLLOWING WEBLINK:**

**<http://application.ndia.org/abstracts/8940NOM/>**