

CALL FOR ABSTRACTS

Deadline for Submitting Abstracts: July 31, 2020

THEME

The theme of the 2020 Aircraft Survivability Symposium is *Aircraft Survivability in Multi-Domain Operations*.

The goal of this three-day, classified symposium is to foster technical dialogue and the exchange of information on aircraft survivability topics such as design, operational employment, current and future threats, hypersonic weapons, cyber survivability, and the testing of aircraft survivability technologies—all within the context of multi-domain operations. Additionally, this symposium offers a forum for learning through its presentation of relevant tutorials on survivability-related subjects on the first day of the event.

Using the Naval Postgraduate 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

The Aircraft Survivability Symposium is a SECRET//NOFORN event that will include Survivability Tutorials and presentations by senior leaders from industry, government, academia, and the armed services. These presenters will discuss survivability technologies, survivability sustainment and operations, threats and countermeasures, 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's content. Additionally, the symposium will include warfighters 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 3, 2020, and run through Thursday, November 5, 2020. The first day will offer Survivability Tutorials on Hypersonics and Acoustics. The symposium presentations will start on the second day, with an opening keynote address from Dr. Mark Lewis from the Office of the Under Secretary of Defense for Research & Engineering, 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 cover the design, operational experience, current and future threats, reliability, maintenance, and testing of aircraft survivability technologies.

During both days of presentations, the symposium will have an area for classified technical poster papers 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 a relaxed dialogue and continuous networking opportunities among attendees. King Hall at the Naval Postgraduate School is a large facility that will allow participants to practice safe social distancing protocols while fully engaging in the symposium. 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.

FOCUS AREAS

Future Threats

- Directed energy and hypersonic weapons development, sensing, and countermeasures

Developments in Aircraft Survivability Technologies

- Threat warning and countermeasures developments, techniques, and technologies

<ul style="list-style-type: none"> • IADS trends: digital signal processing, electronic protection, and passive/multi-static sensors • SAM trends: mobility, lethality, EMCON, decoys, and passive/asymmetric kill chains • Future Fighter Threat: signature, sensors, weapons, and electronic attack • Communications data links and GPS jamming trends 	<ul style="list-style-type: none"> • Advances in the sharing and fusion of Intelligence/Surveillance/Reconnaissance (ISR) and targeting data • Aircraft Combat Cyber Survivability • On-board threat information collection, fusion, and automatic response guidance
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<p>Department of Defense Perspectives & Strategies</p> <ul style="list-style-type: none"> • Multi-Domain Operations • 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 	<p>Aircraft Survivability-related Program of Record Updates</p> <ul style="list-style-type: none"> • UAS programs: Manned/Unmanned Teaming and Novel Approaches to UAS Survivability • Future Family of Systems programs and Air Dominance initiatives • Fixed and rotary wing program updates
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<p>Combat Lessons Learned</p> <ul style="list-style-type: none"> • 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 	<p>Aircraft Survivability-Related Trade Studies & Analyses</p> <ul style="list-style-type: none"> • 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 and active protection systems
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CLASSIFICATION

The Aircraft Survivability Symposium will be conducted at the SECRET//NOFORN security level. Although presentations may be classified up to SECRET//NOFORN, **abstracts MUST be UNCLASSIFIED.**

PRESENTATIONS

The symposium will provide an opportunity for individuals to present, in a SECRET//NOFORN 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 areas described above with an emphasis placed on **Multi-Domain Operations, Directed Energy and Hypersonic Weapons, Aircraft Cyber Combat Survivability, and traditional aircraft survivability technologies.**

After review and selection, abstract presenters will be invited to present a **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 attendees. Each session will conclude with a question-and-answer period to provide attendees the opportunity to interact with the speakers.

POSTERS

The symposium 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 the exposition of detailed information that complements the general session. It will also provide the opportunity for one-on-one discussions outside of the event auditorium. **Classified posters must be able to fit into a standard GSA drawer since they will be locked up each night.**

The Selection Committee will evaluate all poster papers; 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.

ABSTRACT SUBMISSION INSTRUCTIONS

Abstracts must be submitted via the NDIA online abstract submission webpage:

<https://application.ndia.org/abstracts/1940/>

Abstracts must be in text format without any 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 or poster paper. Although presentations may be classified up to SECRET//NOFORN, abstracts MUST be UNCLASSIFIED. Please complete all portions of the abstract submission webpage. 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 two days of general sessions. The submission of an abstract is a professional commitment. If an 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 clearances for their presentation prior to Friday, October 16, 2020; authors are cautioned to begin the clearance process in a timely manner. All authors will be notified of their abstract selection status by Friday, August 21, 2020.

ABSTRACT SUBMISSION DEADLINE – FRIDAY, JULY 31, 2020

SUBMIT HERE: <https://application.ndia.org/abstracts/1940/>

SUMMARY

The following table defines the abstract timeline for the 2020 Aircraft Survivability Symposium.

EVENT	DATE
ABSTRACTS DUE	July 31, 2020
AUTHOR NOTIFICATION	August 21, 2020
OBTAIN APPROPRIATE CLEARANCE FOR PRESENTATION	October 16, 2020
FINAL PRESENTATIONS DUE	TBD
2020 SYMPOSIUM	NOVEMBER 3 – 5, 2020