

23rd International
Command and Control
Research & Technology Symposium
6-9 November, Pensacola, Florida, USA

2018

Welcome !

Countries Represented



ADMINISTRATIVE REMARKS

23RD ICCRTS
THANKS

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THANKS

ICCRTS was conceived with the goal of providing C2-related researchers with an venue and opportunity to present their ideas and findings, get feedback, and foster research collaborations

Thank you for sharing taking the time to write papers and participate in this year's event.

23RD ICCRTS THANKS

to our Host the
Florida Institute for Human & Machine Cognition



Niranjan Suri

Michelle Bowers

23RD ICCRTS THANKS

to our Program Chair

Ken Teske

23RD ICCRTS THANKS

to our Arrangements Chairs

Mark Miller

Niranjan Suri

23RD ICCRTS

THANKS

to our Track Chairs

Mark Miller – Operational Issues: Coalition C2

Russell Bryant – Battlefields of the Future and Internet of Intelligent Things

Liz Bowman & Sue Case – Cognitive and Social-Technical Challenges

Marco Manso & Frank Johnsen – Highly Connected, Automated, and Autonomous Forces

Mark Pullen – Interoperability, Integration, and Security

Adrienne Raglin – Human Information Interaction

Patrick Guerin – Methodology, Experimentation, Analysis, Assessment, and Metrics

Jeffrey Lauver – Knowledge Systems

Richard Metzgar – Cyberspace Challenges

23RD ICCRTS THANKS

to our many authors

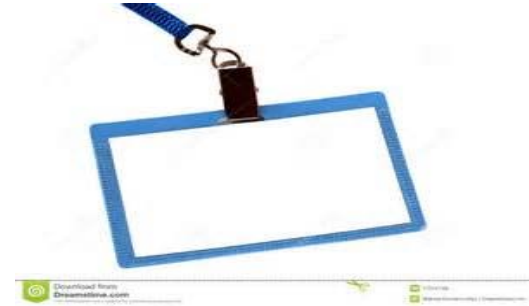
23RD ICCRTS

BEST PAPER NOMINEES

- Track 1 - Decoupling Command from Control**
- Track 3 - How to cooperate with intelligent machines: Lessons for defense operations from the integration of AI and robotics across multiple domains**
- Track 4 - Self-synchronization as additional approach to traditional C2**
- Track 5 - Distributed combat identification of aircraft**
- Track 6 - A Framework for Advanced Decision Support in Multi-domain and Coalition Operations**
- Track 7 - Reasoning with Vector-Based Knowledge Representations**
- Track 8 - Finding correlations between ship positions**
- Track 9 - Artificial Intelligence for Decision Support in Command and Control Systems**
- Track 10 - A Methodology for Managing Multiple, Complex, C2-Enabling, Cybersecurity Research and Development Efforts**

Security

- ▶ The conference is an unclassified, open forum for presentations that do not involve sensitive or proprietary information
- ▶ ICCRTS is not an appropriate location for classified discussion
- ▶ Presentations will be posted to the IC2I website after the conclusion of the conference



UNCLASSIFIED

Attribution

- ▶ Plenary presentations and Q&A are “not for attribution”
- ▶ This facilitates an full and frank exchange of views
- ▶ If you wish to quote a statement you must get explicit permission from the speaker



OPEN FORUM

- ▶ If you refer to the concepts and findings in any of the technical papers, please remember to cite the author and source.

Survey

- ▶ We want to hear from you
- ▶ The good... and the bad
- ▶ Suggestions for future Symposium
- ▶ Please take the time to fill in your forms

International C2 Institute

- ▶ Participation at ICCRTS comes with a one-year membership
- ▶ New memberships begin the week after ICCRTS; existing memberships are extended
- ▶ New members will get instructions in an email

23RD ICCRTS OVERVIEW

Plenaries

ICCRTS Track Preview
Cyber Risk to Mission

MDC2 Cost
MDC2 Panel – International Perspectives

Cybernetics
Explainable AI

NATO SAS-143 – Agile, Multi-Domain C2
Best Paper Award
Track Chair Take Aways

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and, of course, Reflections

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Best Paper Award
Track Chair Take-aways

Social Events

- ▶ **Reception**

- **Tuesday 6th September at 1800 – 2000**

- ▶ **IHMC Dinner**

- **Wednesday 7th September 2016 at 1800 - 2130**

**Missing
Track Session Presentations**

**Missing
Track Session Presenters**

Track Session Previews

24TH ICCRTS CALL FOR PARTICIPATION

Week of 28 October 2019

Washington D.C. Area

**Theme:
Managing Cyber Risk to Mission**