13TH ICCRTS

Thirteenth International Command and Control Research and Technology Symposium

C2 for Complex Endeavors

CALL FOR PAPERS!

June 17-19, 2008
The Meydenbauer Center
Bellevue, WA

History of the ICCRTS

In 1995, the Command and Control Research Program (CCRP), within the Office of the Secretary of Defense, held the first International Command and Control Research and Technology Symposium (ICCRTS) at the National Defense University in Washington, D.C. This meeting built on a series of events established during the 1970s by the Office of Naval Research and the Massachusetts Institute of Technology that brought together interested researchers to exchange ideas on command and control (C2), its measurement and assessment, and the impact of new technologies on the C2 process.

The initial meeting was modest in size (63 participants) and included only a handful of non-U.S. participants. Subsequent meetings during the even years have been held in the United Kingdom (1996, 2006), Sweden (1998), Australia (2000), Canada (2002), and Denmark (2004). During odd-numbered years, the meetings have been held within the United States. Participation has grown substantially, to include more than hundreds of participants from dozens of nations. Equally important, the ICCRTS has developed into the meeting where the best C2 analysts from around the world exchange ideas about the state-of-the-art and seek to influence the state-of-the-practice within the United States, its coalition partners, and the missions they undertake. The Symposium is a meeting place for professional researchers, academics, active duty and reserve officers, and policy makers.

The ICCRTS has consistently focused on leading-edge issues involving (a) new concepts in C2 (b) new technologies and their potential impact on C2, and (c) feedback and evidence from experiments, exercises, and real-world operations. The Symposium is an important forum for discussion of Network Centric Operations, Effects Based Operations, Transformation, Edge Organizations and other important emerging ideas. It has also been a focal point for examination of coalition C2 issues and for examining the role of the military in reconstruction, humanitarian, and peace operations.

The Theme of the 13th ICCRTS

The theme of this year's International Command and Control Research and Technology Symposium is "C2 for Complex Endeavors." Complex endeavors are characterized by both the nature of the collection of participants who are working toward a shared purpose and the nature of the effects of interest. Put succinctly, complex endeavors are characterized by a large number of disparate entities that include not only various military units but also civil authorities, multinational and international organizations, non-governmental organizations, companies, and private volunteer organizations. The effects of interest go far beyond military effects to include social, political, and economic effects. The nature of the participants makes the collective action space complex while the multi-domain effects space contains complex interactions among effects of various types. In addition, the relationships between the action and effects spaces further contribute to the complexity of the endeavor.

Review and Acceptance Process

Interest in Command and Control and this Symposium has increased significantly over the years. This has resulted in an increasing number of paper submissions competing for the available time.

Although participants have indicated that they find the vast majority of the papers to be of very high quality, feedback also suggests that participants would welcome more rigorous review and a raising of the bar that governs acceptance. A number of people have also suggested that we should review the presentation materials as well as the papers. This year, you will note several alterations to the paper submission and approval schedule. These changes have been implemented to increase the amount of time for Track Chairs to review draft papers and provide detailed feedback to authors, as well as to increase the amount of time for authors to revise their papers. This is the latest step taken in our ongoing efforts to provide you with an event of the highest possible quality. We believe that these changes will help authors to improve their papers and presentations, and thereby improve the overall quality of the Symposium.

While we have found abstracts to be useful in identifying papers that are, for any number of reasons, not appropriate for this Symposium, abstracts are less useful in helping us decide which papers should be accepted. Therefore, while we will continue to accept abstracts as first submissions, authors are urged to submit papers for review as soon as possible. We will make every effort to provide timely feedback to authors. This rolling review process is designed to allow us to give the required attention to all papers that are submitted and maximize the time available for authors to make modifications to improve their papers. We understand that many authors will be in the middle of projects when the time comes to submit first drafts of their papers. If this is the case, this should be noted and we will expect the author to update the paper and presentation prior to final submission.

Key Dates (Please note: <u>all deadlines are final and will be strictly enforced.</u>)

Submit your abstract, outline, or initial draft paper by **<u>October 14, 2007</u>**

You will receive an invitation to submit a formal draft paper by **<u>November 11, 2007</u>**

Your formal draft paper and draft presentation must be submitted by **<u>January 6, 2008</u>**

You will receive CCRP reviewer comments by **<u>February 17, 2008</u>**

Your final revised paper must be submitted by **<u>March 9, 2008</u>**

Your final presentation must be submitted by **<u>May 18, 2008</u>**

Topics (1)

The 13th ICCRTS will comprise tracks on various topics. Each presentation will be given *30 minutes*: 20 minutes to present, 5 minutes to discuss, and 5 minutes to transition to the next presentation. The Track Chairs will provide feedback to assist authors in finalizing their papers and presentations.

Topic 1: C2 Concepts, Theory, and Policy

The changing nature of the missions being carried out, the impact of new information technologies, and the need to work in richer contexts (joint, coalition, inter-agency, etc.) have resulted in new approaches to C2. This topic examines issues related to designing, analyzing, and implementing new C2 concepts. The transformation of DoD will require updated policies and governance processes to manage this evolution successfully. New policies will need to address integration, increase collaboration, enhance support roles, and provide agility to the warfighter.

Topic 2: Networks and Networking

This topic addresses network designs and topologies, as well as the social or socio-technical nature of networking and how we can continue to understand and improve it. The related issue of coalition interoperability requires new organizational and process models that reflect coalition operations and behaviors, the development and application of international standards, and the creation and maintenance of multinational organizations and coalitions.

Topic 3: Modeling and Simulation

This topic encompasses models and simulations that represent emergent behavior, C2 in peace operations, allocating sensors, the effects of social networks, data management, self-organizing behaviors, and scenario management, among other M&S topics.

Topic 4: Cognitive and Social Issues

This topic focuses on cognitive and social processes. Cognitive domain topics include: sensemaking, situational awareness, mental models, intuition, knowledge, understanding, decisionmaking, individual psychology, training, and professional experience. Social domain issues include: information sharing, collaboration, communities of interest, small group decisionmaking, group cohesion, trust, and related issues.

Topic 5: Organizational Issues

The changing nature of missions, new technologies, and richer endeavor contexts may require new organizational forms. This topic examines designing, analyzing, and implementing new organizational forms, as well as research into issues relevant to the transformation from the Industrial Age to the Information Age, and attempts to describe new organizational forms and approaches (e.g., edge organizations, "power to the edge" concepts).

Topics (2)

The 13 ICCRTS will comprise tracks on various topics. Each presentation will be given **30 minutes**: 20 minutes to present, 5 minutes to discuss, and 5 minutes to transition to the next presentation. The Track Chairs will provide feedback to assist authors in finalizing their papers and presentations.

Topic 6: C2 Assessment Tools and Metrics

Information Age operations require that metrics and measurements be rethought. Metrics for agility, effects-based operations, networks, and networking are encouraged, as are measures of C2 process and quality. This topic also focuses on methodologies, tools, and techniques to analyze C2 and its impact on operations.

Topic 7: Network-Centric Experimentation and Analysis

This topic includes experiments and analyses related to the application of network-centric concepts and approaches.

Topic 8: C2 Architectures

This topic includes discussions of the nature of architectures suitable for emerging concepts of operations and the infostructure necessary to support them. Included are coalition and cooperative C2 arrangements, the introduction of new frameworks and architectures currently in development, and the examination of the practice of creating architectures.

Topic 9: Collaborative Technologies for Network-Centric Operations

The topic will integrate papers on new concepts, models, case studies, and experiments exploring collaboration and data-sharing technologies for different types of network-centric operations.

Topic 10: Civil-Military Endeavors

This topic addresses aspects of cooperation between civilian and military organizations, which is necessary for success in complex endeavors—from disaster relief and peacekeeping to counter-insurgency and Network Centric Warfare campaigns—to meet the emerging needs of a situation and bring all assets to bear. Topics include procedures, security, languages, skills, organizational culture, or similar subjects in the context of lessons learned from civil-military endeavors.

Topic 11: Multinational Endeavors

This topic addresses aspects of cooperation between different nations, which is necessary for success in complex endeavors—from disaster relief and peacekeeping to counter-insurgency and Network Centric Warfare campaigns—to meet the emerging needs of a situation and bring all assets to bear. Topics include procedures, security, languages, skills, organizational culture, or similar subjects in the context of lessons learned from multinational endeavors.

Guidelines (1)

Abstract Submission

Abstract submissions must contain a cover page that includes the following information:

13th ICCRTS
"C2 for Complex Endeavors"
Title of Paper
Topic(s)
Name of Author(s) [indicate students with "STUDENT"]
Point of Contact
Name of Organization
Complete Address
Telephone
E-mail Address

In addition to the abstract, we encourage authors to submit an outline for the full paper. This will enable us to provide more useful feedback early in the review process.

Please Comply with the Following:

- Title of Paper: 15 word max.
- Suggested Topic: Please provide 3
- Body of Abstract: 200 word max. Classification: All work must be Unclassified
- Body of Paper: 20 pages max. (not including appendices and references)

Multiple Authors

For papers with multiple authors, identify <u>one</u> point of contact. Our Coordinator will communicate with this person regarding the Symposium. This point of contact *will be responsible* for passing on any information to the other authors of the paper.

Reporting Analyses & Experiments

When reporting any statistical results, make sure that these data analyses are described (central tendency, distribution, number of cases in the analysis, confidence intervals, etc.) in the body or in an appendix. When reporting experiment results, you must provide sufficient information such that the experiment could be repeated, as per accepted scientific studies. This means providing an overview of the experimental design (within-subject, between-subject, Latin square, etc.), describe statistical processing methods used (ANOVA, Regression Analysis, etc.), the measure of statistical validity for any conclusions you draw (in the body of the paper), and the implications of your conclusions. The statistical validity must be in the body of the paper. Authors are urged to make raw data available so that others can build upon and extend the body of knowledge.

Paper Criteria

Papers will be judged on the originality and quality of the argument or discussion, the relevance and timeliness of the topic, and on quality of the writing style. For the 13th ICCRTS, our Reviewers and Editors will be reading your papers with the following criteria in mind:

1. Demonstrated understanding of current literature or theory relevant to the paper's topic.
2. Thorough and detailed evidence and citations.
3. Presentation of/access to full data or research (raw or processed, as appropriate).
4. Thoughtful and logical structure.
5. Timeliness of the paper to current events and issues, as opposed to historical or classical subjects.
6. Rich and effective illustrations, charts, etc.
7. Clear and concise writing.
8. Appropriate references/sourcing.

Papers will not be accepted if:

1. Topics stray from the conceptual focus of the symposium.
2. Attempts are made to promote or sell specific goods and/or services.
3. Claims are unsubstantiated or facts are inaccurate.
4. Scientific merit is lacking.
5. Writing/explanations are poor.

Paper Submission Point of Contact

Please email all submissions to: ccrts-iccrts@dodccrp.org

For more information, please visit us online at: http://www.dodccrp.org

Venue

Location

In June 2008, we will be holding the 13th International Command and Control Research and Technology Symposium at The Meydenbauer Center in Bellevue, Washington.

The Meydenbauer Center
11100 NE 6th Street
Bellevue, WA 98004
Phone: 425-637-1020 or Fax: 425-637-0166
E-mail: info@meydenbauer.com

Accommodations

The CCRP has reserved room blocks at the following hotels and rates. Participants are responsible for making their own reservations. To help ensure your first choice, please make reservations as early as possible.

Hyatt Regency Bellevue
$229 per night
900 Bellevue Way NE
Bellevue, WA 98004-4272
P: 425-462-1234

Courtyard by Marriott Seattle Bellevue/Downtown
$219 per night
11010 NE 8th Street
Bellevue, WA 98004
P: 425-454-5888

Sheraton Bellevue Seattle East Hotel
$179 per night
100 112th Avenue NE
Bellevue, WA 98004
P: 425-455-3330

Red Lion Inn
$136 per night (Per Diem)
11211 Main Street
Bellevue, WA 98004
P: 425-455-5240