The Military Operations Research Society (MORS) offers opportunities for professional development and training via courses, tutorials, workshops and the annual Symposium. Payment can be made via credit card, check, or form SF182: please check [here](https://mors.org) for more information. Custom training programs are available as well; for more information, please contact Jennifer Ferat at [Jennifer.ferat@mors.org](mailto:Jennifer.ferat@mors.org) or 703-933-9074.

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For more information, contact Tina Yan at [tina.yan@mors.org](mailto:tina.yan@mors.org) or 703-933-9076.
Education and Professional Development Colloquium

Dates: 3-4 March 2020

Location: U.S. Naval Academy, Annapolis, MD

Registration: Register here

Fee: Free

Description: This event is offered once again with NO CHARGE to attend. The purpose of the EPD is to expose undergrad students to opportunities to perform operational research work in National Security settings. Students do this by participating in the Richard E. Rosenthal competition. The Rosenthal Student Competition is a “quick reaction analysis” competition which allows students from all participating institutions to work on an OR problem together, demonstrate their skills and learn different ways to approach a problem toward a team solution.

Young Analysts who participate will learn about different formal education expectations of military, government civilians, private industry employees, and academics. Additionally, you will learn informal skill expectations and considerations for moving between careers. Finally, you will learn about different formal education expectations of military, government civilians, private industry employees, and academics.

This year, while students are participating in the Rosenthal Competition, MORS will be hosting a curriculum forum. This forum will provide instructors and professionals the chance to discuss the needs of the OR community and how best to fill that need with the rising generation of analysts.

Keynotes:
- VADM Ann Rondeau, USN, President, Naval Postgraduate School
- RADM James S. Bynum, USN, Director, Assessment Division (N81), Office of the Chief of Naval Operations
- Mr. Michael Hart, General Associate, Strategic Insight, LTD

Executive Seminar

Dates: 4 March 2020

Location: U.S. Naval Academy, Annapolis, MD

Registration: Register here

Fee: $350 - $500

Description: Decision-making is increasingly being driven by vast quantities, velocities, and varieties of data. Operations research (or analytics) offers many techniques for deriving insight from data, but the field of OR may be
intimidating to those without a formal OR, computer science, or math background. The Executive Seminar provides senior decision-makers a basic toolkit for getting the most out of quantitative analysis. Over the course of several modules, this seminar will introduce the core techniques and processes of operations research in the context of real-world problems. Register now to become a better-informed consumer of quantitative analysis.

Instructors:

- Mr. Walt DeGrange, CANA Advisors
- Dr. Paul Nicholas, Johns Hopkins University Applied Physics Laboratory
- Mr. Harrison Schramm, Center for Strategic and Budgetary Assessments (CSBA)

Certificate in Wargaming

Dates: 9-13 March 2020
Location: Arlington, VA
Registration: SOLD OUT. If you would like to be added to the waiting list, please contact Ms. Tina Yan at tina.yan@mors.org.
Fee: $2,700 - $3,000

Description: The MORS Certificate in Wargaming is a five-part course designed to enhance analyst capability and knowledge in multiple aspects of analytical and training games, including research, design, development, execution, analysis, and reporting. The analytical games focus on the development and execution of a research design through problem discovery and scenario development to experiment design and execution. Training games emphasize the development of learning plans and objectives to provide experiential learning for student retention. The course begins by teaching wargame theory and research design and culminates in a practicum where student teams will develop and execute their own games for assigned analytical problems.

Modeling and Complex Warfare Workshop

Dates: 24-26 March 2020
Location: Online Meeting
Registration: Register here
Fee: $150 - $325

Description: This meeting will be an online meeting via GoToMeetings. We deem this topic important and critical to our MORS community and will proceed with all of the planned content including the plenary speakers, tracks and collaboration. Our tentative plans call for the online sessions to run 24-26 March 1100 – 1800 eastern time.

For more information, contact Tina Yan at tina.yan@mors.org or 703-933-9076
The three tracks will be:

- Multi-Domain Ops
- Gray Zone
- New Technologies

Keynotes:

- Dr. Lynn Booth, Chief of Joint and Operations Division, The Defence Science and Technology Group
- Mr. Christopher J. Ristish, Director, Air Force Strategic Development Planning and Experimentation Office, Air Force Research Laboratory
- Maj Gen J. Daniel (Dan) Caine, USAF, Director of Special Programs and the Department of Defense Special Access Program Central Office (DoD SAPCO); previously, Deputy Commanding General, Special Operations Joint Task Force - Operation Inherent Resolve (SOJTF-OIR)

Certificate in Critical Tools for Analytics Professionals (CTAP)

Dates: 20-24 April 2020

Location: Arlington, VA

Registration: Register [here](#)

Fee: $2,700 - $3,000

Description: MORS is now offering a new certificate to complement the CSAP course. The main objectives of this course are to gain familiarity with the levels of analytics and obtain hands-on experience with OR tools covered in the CSAP course. Topics covered will include Statistics and Probability, Regression and Time Series, Optimization and Simulation, Decision Analysis and Causal Analysis.

Certificate in Excel Functions for Data Analysts

Dates: 4-8 May 2020

Location: Arlington, VA

Registration: Register [here](#)

Fee: $2,700 - $3,000

Description: Every worker must do some basic analysis, make presentations, and submit reports. Many organizations do not have the “fancy” software packages to create documents that instructional designers may have. However, most organizations have the Microsoft Office Suite.

For more information, contact Tina Yan at [tina.yan@mors.org](mailto:tina.yan@mors.org) or 703-933-9076
In the past 10-15 years, Microsoft have updated the capabilities in their Office Suite, especially in Excel. This course is designed to present the basic capabilities to prepare and brief presentations and reports that their managers will understand and be able to take appropriate actions.

The student will need to bring laptops with the Microsoft Office Suite. During class, the instructor will present an overview of a topic, let the students work on their own to practice the topic, and then go over their results as a class. Then at the end of the course, students will be given a project with a dataset. They will have to do some basic analysis, create a brief, and present the brief to the class.

Certificate in Critical Skills for Analytics Professionals (CSAP)

Dates: 11-15 May 2020
Location: The MORS Office, Arlington, VA
Registration: Register [here](#)
Fee: $2,700 - $3,000

Description: The Certificate in Critical Skills for Analytics Professionals (CSAP) is a five-part course that ensures students have the practical understanding and means to turn operational information of detailed analysis into actionable results. Students will hone their skills in researching problem sets, managing and participating in analytics projects, and communicating results both verbally and non-verbally. This course will begin by ensuring that participants understand the theoretical basis for effective and accurate presentation of project results in a military or government setting. Later courses will enhance understanding of the methods and techniques utilized in effective analysis project management and discuss best practices in overcoming challenges.

88th MORS Symposium

Dates: 15-18 June 2020
Location: United States Coast Guard Academy, New London, CT
Registration: Register and submit abstracts [here](#)
Fee:
- Early registration (By 3 April 2020): $360 - $610
- Regular registration (By 15 May 2020): $560 - $760
- Late registration (After 15 May 2020): $660 - $860

Description: The annual four-day Symposium will cover the latest in Operations Research studies, techniques, and critical National Security issues. Completed work and work in progress are shared, and potential areas for future study are discussed. The first day is dedicated to tutorials and CEU courses followed by 3 days of 700+ classified and unclassified presentations in over 40 focus areas.

For more information, contact Tina Yan at [tina.yan@mors.org](mailto:tina.yan@mors.org) or 703-933-9076
### Working Groups:

#### Homeland and International Operations
- **WG 1** Strategic Operations National Security Analysis
- **WG 2** Chemical, Biological, Radiological, Nuclear, and Advanced Explosives (CBRNE) Defense
- **WG 3** Infrastructure Analyses, Protection and Recovery
- **WG 4** Homeland Security, Homeland Defense and Civil Support

#### C4ISR and Net-Centric Operations
- **WG 5** Information and Cyber Operations
- **WG 6** Command and Control (C2)
- **WG 7** Intelligence, Surveillance, and Reconnaissance
- **WG 8** Space Acquisition, Testing and Operations

#### Joint Warfare
- **WG 9** Air and Missile Defense
- **WG 10** Joint Campaign Analysis
- **WG 11** Land and Expeditionary Warfare
- **WG 12** Maritime Operations
- **WG 13** Power Projection and Strike
- **WG 14** Air Warfare

#### Resource/Readiness/Training
- **WG 15** Health Service Support, Force Health Protection, and Casualty Estimation
- **WG 16** Strategic Deployment and Distribution
- **WG 17** Logistics, Reliability and Maintainability
- **WG 18** Manpower and Personnel
- **WG 19** Readiness
- **WG 20** Analytic Support to Training and Education
- **WG 21** Operational Energy

#### Acquisition and Capability Development
- **WG 23** Measures of Merit
- **WG 24** Test and Evaluation (T&E) and Experimentation
- **WG 25** AoAs and Capability Development
- **WG 26** Cost Analysis
- **WG 27** Decision Analysis

#### Interdisciplinary Advances in OR
- **WG 22** Military Assessments
- **WG 28** Advances in Modeling and Simulation Techniques
- **WG 29** Computational Advances in OR
- **WG 30** Wargaming
- **WG 34** Data Science and Analytics
- **WG 35** AI and Autonomous Systems

#### Hybrid Warfare

For more information, contact Tina Yan at [tina.yan@mors.org](mailto:tina.yan@mors.org) or 703-933-9076
Artificial Intelligence and Autonomy

Dates: 27-29 October 2020

Location: Johns Hopkins University Applied Physics Lab, Laurel, MD

Registration: Register here

Description: This Workshop on the AI and Autonomy or Autonomous Systems (AS) is to introduce DoD, DHS, and Allied analyst to key ideas, issues, and some of the many current applications for AI and AS. Topics include an overview to AI and autonomy; examples of commercial and defense applications; international perspectives on AI and autonomy; and implications for the analyst community. This meeting is being held at the unclassified level.