Working Group Descriptions

Tutorials. On the first day, 17 June, the workshop will include a day long series of introductory tutorial courses for newcomers to wargaming or MORS. These will be based on the MORS certification program in development.

Working Group 1: Analytic Process (Chairs: Paul Davis, Matthew Caffrey, and Mike Ottenberg). Working Group 1 will explore how wargames are integrated into analysis by showcasing examples of good wargames and how the output from these games influenced or could have influenced decision making. Wargames that support analysis are an integral part of a well thought out research design, are conducted without any pathologies, and produce meaningful insights. The WG will continue the goals of the DoD Wargame Workshop conducted in March 2016. Our goal is to identify best practices for wargames to support analysis in the following general areas:

- Scenario development
- Technology assessment
- Concept, doctrine, and related product development
- Logistics assessments
- Programmatic/procurement assessments
- Other

Our approach will include overview papers and papers on past wargames from the broad defense community, looking for ideas, lessons learned, and examples relating specifically to our working group’s charter (tying games to analysis, decisions, and programs). Most sessions will be unclassified. Analysts from allied nations are welcome to share their experiences. We anticipate that after hearing two stage-setting plenary papers and talks from the larger community, the working group will split into smaller groups that will develop guidance for planning to use gaming to connect effectively to analysis, decisions, and programs in each of several areas. These groups will then compare notes. Challenges will then be posed to test these constructs (i.e., the working group will “game” its tentative suggestions). The working group will then prepare and give a brief-out presentation to the larger workshop. The chairs will prepare a follow-up paper of insights and suggestions that will be circulated to participants soon after the workshop and then submitted to workshop organizers so that the working group will have a product with more enduring value. The report from this WG will be considered for incorporation into the next edition of the MORS wargaming handbook and as a potential article in Phalanx.

Working Group 2: Communication and Implementation (Chairs: Paul Vebber and Ed McGrady). Working Group 2 will explore how the Department can best communicate information to the players in a game, and how to control and adjudicate the game. Automation is only one of many tools which can be used to assist the game designer and execution. The working group will examine the range of techniques and tools which can be employed to implement a game to facilitate player understanding of information within the game, and analyst understanding of the information produced by the game. These techniques and technology must be consistent with each other, with the manner in which adjudication is performed, and be appropriate to the research questions the game is designed to answer. These can range widely in
level of technological complexity, from paper and pencil to virtual reality technology or large scale data analytics tools. Recognizing wargames and M&S are separate but potentially complementary tools, the working group will review existing or developing tools, identify best practices, and synthesize lessons learned from the presentations and discussions for presentation to the Plenary Group. The product from this WG will be considered for incorporation into the next edition of the MORS wargaming handbook.

**Working Group 3 Adjudication (Chairs: Tim Wilkie and Stephen Downes-Martin).** Working Group 3 (Adjudication) will address the questions “what are the barriers to doing the best possible job of adjudicating wargames?” and “how can we best overcome those barriers?” using a disciplined group methodology known as “Language Processing” (TM) in two sessions. Working Group Participants are expected to be competent and experienced wargame adjudicators. The Working Group will produce two linked products corresponding to the two questions in a format similar to a mind-map. If you are interested and an experienced wargame adjudicator please contact the two Working Group Chairs; Timothy Wilkie (timothy.wilkie@ndu.edu) AND Stephen Downes-Martin (stephen.downesmartin@gmail.com) to discuss your participation as soon as possible but before Friday 30 September at the latest.

**Course 2. Red Teaming Short Course (Chair: Steven Rotkoff).** US ARMY TRADOC will facilitate the use of tools and methods from the Red Team program tailored to the needs of war gamers and designed to develop creative approaches to enduring problems. Successful wargaming requires a variety of cognitive and group behaviors. These include: the ability to role model the perspectives of allies, adversaries and agnostics in the operational environment; the willingness to consider alternative perspectives and encourage divergent thinking during the building, execution and adjudication of the game; a variety of tools and methods designed to help participants recognize their plan as a 'theory about the future', vice 'ground truth' so they may remain open to changing the plan as the environment changes. The decision support red team working group will familiarize participants with some of the means to achieve these kinds of cognitive and group behaviors in support of wargaming. The working group processes will be based on the curriculum of the University of Foreign Military and Cultural Studies (UFMCS) aka 'The Army Red Team School'. UFMCS has been teaching red team techniques since 2006. The Army, Marines and Special Forces all recognize UFMCS as the center for red team education. Class size is limited to 20 people.

**Course 3. Structured Analytic Techniques (Chair: Joseph C. Cyrulik).** The Kent School will conduct a condensed version of their SAT course to expose participants in how to employ liberating structures and other reframing techniques to expand understanding of data and problems. Class size is limited to 20 US government or AD military personnel only, no foreign nationals or contractors.

**Wargame 1. Project Cassandra (Chairs: Phil Pournelle and Yuna Wong).** Players will participate in a series of guided discussions employing liberating structures techniques for the development of alternative future histories. In the process of these guided discussions participants will develop their own Terms of Reference to develop a scenario in which they will then play. This process will demonstrate how to conduct structured, guided discussions for the purposes of designing and execution of wargames for the
objective of improving understanding of complex, uncertain environments and the changing character of warfare by rapid generation of innovative scenarios. This event is unclassified.

Wargame 2. Phase Zero Baltic Operations. (Chair: Scott Simpkins). Johns Hopkins APL will conduct a wargame set in the near future in the European theater. Players will portray multiple actors in the theater. The game employs JHU/APL’s DIMEFIL-PMESII model to demonstrate multi-player environments, soft factor game mechanics and distributed play. Attendees will be exposed to the underlying game mechanics, software application and adjudication process while participating in actual game play. The war game will involve many non-DOD decision criteria and allow discussion about necessary player experience, game play expectations of quality as well as in-game rhythm. 5 player stations will be available, one for each team of five attendees to play as a group at each station. An introductory presentation will be given about the model. Attendees will receive player material including a scenario and action set descriptions. Post-game assessments will be discussed as a group so attendees can identify strong and weak points of the application. Participation will be limited to 25 players from US and allied nations. This event is unclassified.

Wargame 3. Matrix Gaming (Chair: Major Tom Mouat MBE MSc PGCE). Wargame 3 is an introduction to matrix gaming. Matrix games are multi-sided games where adjudication in done openly through the arguments that game participants make on why an action should or should not be successful. It is an adjudication style well-suited to complex phenomena where rigid adjudication rules are not possible. Originally developed by Chris Engle for use in social work, matrix gaming has wide applicability and has been used to address cyber, urban warfare, irregular warfare, and conventional warfare with unfamiliar topics such as semi-autonomous systems. Participants will play up to four different matrix games as time allows, and will also receive instruction on how to facilitate their own matrix game. This wargame is led by Major Tom Mouat from the UK Defence Academy.

Basic concept: Day 1 -- Intro to Wargaming and this particular Wargame. Group is briefed the situation, mission, and the capabilities at their disposal. One group will attack and the other will defend. Groups develop CONOPs and a multi-domain approach to achieving their objectives.
Day 2 AM -- Groups brief CONOPs and then we go through joint adjudication to assess the outcome. Day 2 PM -- We talk through capture instruments, group products, and analytic approach to the data we’ve just generated. Discuss how we incorporate these results into the larger ongoing effort to understand the future battlefield.