



Workshop on *Analytical Approaches to Airborne ISR*

April 16-19, 2012 | National Defense University, Ft McNair, Washington DC

Workshop security level: SECRET releasable ACGU

Terms of Reference

Table of Contents

[Click to go to](#)

Section

[Page](#)

Overview	2
Background	2
Objective	2
Approach	2
Administrative Information	4
Fee structure.....	4
Call for Presentations.....	4

Overview

From April 16–19, 2012 MORS will conduct a Workshop on Analytical Approaches to Airborne Intelligence, Surveillance, and Reconnaissance (ISR). The workshop will be held at National Defense University, Fort McNair, Washington, DC, and is open to all citizens of Australia, Canada, Great Britain, and the United States (ACGU) with a SECRET clearance. The goal of the workshop is to improve attendees' understanding of the strengths and limitations of current airborne ISR (AISR) analytic techniques and generate ideas for developing new and improved analytic methodologies.

Most of the workshop will take place in plenary sessions in which four major AISR issue areas will be addressed through

- an introduction to the issue area;
- briefs on the analytic methodology used in recent exemplar studies;
- reviews by a discussant of the strengths and limitations of these studies relative to the issues, with suggestions on a preferred analytical approach; and
- a discussion by a panel of experts and other workshop participants on the studies and preferred approach.

In addition, three keynotes by senior DoD officials will set the stage and four working groups will address key questions. The remainder of this paper provides additional detail on the workshop.

Background

Knowing where the enemy is, how many there are, what they're doing, how they're supplied and what kind of support they have gives our forces a distinct edge. AISR is a key capability for providing near-realtime threat identification, tracking and targeting, as well as battlefield situational awareness. AISR missions, performed by manned and unmanned platforms and the sensors they employ, have expanded exponentially in the recent Iraq and Afghanistan conflicts as ISR sensors became smaller and more efficient and platforms became more reliable and able to provide persistent loiter time. Determining the proper portfolio of AISR assets, and ensuring we have the manpower and enablers necessary for future success will require challenging and innovative analyses.

Objective

The objectives are to provide the U.S. Department of Defense with a better understanding of where analysis can help resolve emerging AISR challenges and to identify new emerging analytical concepts that may be useful in addressing these challenges. The focus of the workshop will be on improving analytical approaches (including data) used to solve AISR problems, not on the solutions to problems.

Approach

The workshop will begin with optional tutorial briefs on Monday afternoon that overview AISR capabilities and analyses. The main part of the workshop will be structured along three tracks. The first track consists of keynote presentations by a senior DoD officials at the start of each day that set the stage for subsequent deliberations in the other two tracks.

The plenary track seeks to build improved analytical approaches informed by critical assessments of past studies. It consists of four thematic sessions each addressing a specific issue area: (1) sensor/platform mix, (2) mission capability, (3) capacity, and (4) enabler capability (for example, processing, exploitation, and dissemination [PED]). Each session will

- Begin with an overview by the workshop chair of potential major challenges in the issue area.
- Include briefs describing the analytical methodology used in recent exemplar AISR analyses that addressed challenges in this issue area. These briefs will be presented by the study authors and will include the analytical approach used, the questions they did and did not answer and the author's ideas on how the analysis could be improved. Both the overview and the briefs will be provided to workshop participants prior to the workshop.
- Contain a discussion by a member of a panel of senior analytic experts on the applicability of the analytical methods used in these analyses to the emerging challenges in the issue area. This discussion will highlight where the analytic techniques in the exemplar analyses may work well, and where there would be limitations. The discussant will also suggest alternative analytical approaches for addressing these emerging challenges. Their approach may leverage the exemplar analyses and draw upon methodologies used by others.
- Finish with comments from the remaining members on the expert panel followed by insights and suggestions from the audience.

The third track consists of four working groups each addressing a question associated with ISR analysis. Each group will leverage the insights gained from keynote and plenary presentations during their limited time (5–6 hours) to deliberate on their assigned question. They will meet Tuesday and Thursday during extended lunch periods and Wednesday afternoon. For additional background, each working group may leverage existing studies that pertain to their question through the use of short overview briefs. The working groups with an example question appear below. (Note: The specific working group questions are likely to change prior to the workshop.)

- Working Group 1: AISR Capacity. Example question: How can one tie AISR capacity to the required missions?
- Working Group 2: AISR Capability. Example question: Is there a difference in required analytic techniques used for CT missions vice A2/AD AISR missions?
- Working Group 3: AISR Metrics. Example question: Do manned systems and unmanned systems differ in the analytic techniques used to measure them?
- Working Group 4: AISR Analytical Techniques. Example question: What analytic techniques are used in other mission areas that can help inform the relationship between AISR and PED force structure?

A Synthesis and Integration Group consisting of senior analysts with experience in the AISR area will develop an integrated perspective of the workshop and capture crosscutting insights derived from the keynote, plenary and working group sessions.

The Workshop will conclude Thursday afternoon with a plenary session that consists of 15-minute outbriefs by the working group chairs, a 30 minute brief by the chair of the synthesis

group and a discussion led by the workshop chair. This discussion will include an evaluation of the effectiveness of the structure used in this workshop.

Administrative Information

Socializing and the free exchange of ideas will be encouraged among workshop attendees. A social event will be held Tuesday night in the Lincoln Hall atrium with complimentary hors d'oeuvres and a cash bar. Breakfast and snacks will be provided during the meeting. Lunch will be in the Lincoln Hall cafeteria. Meeting rooms will be used in Lincoln and Marshall Halls. Finally, attendees will be asked to provide a classified email address to facilitate the distribution of read aheads.

Fee structure

MORS members: US Government: \$575, all others: \$675

Non-members: US Government: \$640, all others: \$750

Call for Presentations

The workshop chair seeks presentations on creative analytical approaches that address either directly or indirectly the issue areas mentioned above. Nonquantitative methods will be considered, especially for those topics that have stubbornly resisted quantitative approaches. The methods presented need not have demonstrated successes or have an extended pedigree. If you would like to submit a presentation or need additional information, please contact the workshop chairs/co-chairs: John Orem at john.orem@osd.mil or 703-614-1490, Jim Bexfield (OSD/CAPE) at james.bexfield@osd.mil or 703-695-7945, or Laura Williams at laura.williams@osd.mil or 571-256-7801.