

MORS Special Meeting Terms of Reference

DoD Force Structure Analysis Way Ahead

24-27 January 2011
TASC Heritage Conference Center, Chantilly, VA

DRAFT Version

1. Purpose

a. Problem Statement: How can the analytic community best identify and assess force structure elements required to achieve the national security objectives called for in current national security documents given a complex and dynamic security environment? Put another way – How can the analysis community help the Department examine two challenges:

1. Are we building the right force?
2. Are we building the force right?

b. This workshop will describe a way ahead for force structure analysis by:

1. Expanding the understanding of force structure analysis data, assumptions, procedures, and applications for workshop participants and the community of force structure analysis participants and customers.
2. Developing recommendations for improving force structure data, processes, tools, analysis, and products.

2. Background

a. The 2010 Quadrennial Defense Review (QDR) outlined a strategy to meet a broad array of security challenges. However, the ability of the QDR to suggest quantitative force structure adjustments was inhibited by the demands of the current fights and the complexity and uncertainty of the future environment. Given the near term disengagement of forces in Iraq and the expected responsible withdrawal from Afghanistan starting in 2011, the Joint Staff, at the direction of the Secretary of Defense, conducted the Operational Availability Study 2010 (OA-10) to determine

availability of currently stressed forces in the near- to mid-term. This study provided valuable insights as to the constraints on these forces, but was limited in scope to the type of units analyzed and limited in scale to ongoing current operations.

b. Looking forward, we can expect that eliminating the Overseas Contingency Operations (OCO) budget and returning to more normal resourcing levels will require a comprehensive examination of force structure to ensure we properly match the programmed force to the national security strategy demands. For the near term, the question for the Department is, "How best to reset and reconstitute the force?"

c. That means the Joint Staff and the Department must find ways to improve how we analyze the structure required for the joint force after next, and ensure that our current strategy and structure maps to this force in as seamless a manner as possible. The Force Structure Workshop will examine our analytical methods to collect the proper data, establish metrics, and develop and apply tools to examine how best to use the force we have as well as determine an appropriate force structure to meet national security objectives in the near, mid, and long terms.

3. Proponent Interest (DRAFT)

The Force Structure, Resources, and Assessment Directorate, J-8, is the lead proponent for this workshop. They have supported the concept behind this meeting from its inception. Another prime proponent of this meeting is the Office of the Secretary of Defense, Capability Assessment and Program Evaluation (CAPE). Both organizations have participated in shaping this workshop. The services will have a significant role in these discussions and have expressed a strong interest in this workshop. We anticipate that each will also provide input to shape this workshop moving forward.

4. Approach

The event concept is a hybrid of a mini-symposium and workshop focused on developing recommendations for improving force structure analysis processes, tools, and products. In order to most efficiently use the attendees' time, the workshop will be composed of five functional working groups and one synthesis working group. The format of the working groups acknowledges that major changes to personnel and equipment force structure are unlikely in the near-term, however, it is possible to size and shape the force over the mid- and long-term.

Each Working Group will develop individual, more-detailed Terms of Reference specific to the assigned topic, but the following questions are common across all functional working groups:

- What are the data requirements?

- What data is available? Where does it come from?
- How is data assessed? Who does the assessments?
- What analyses should be performed?
- What analyses are currently being performed?
- How do we address force sufficiency and proficiency in areas like hybrid and irregular warfare?
- What are the metrics that DoD does/should use to evaluate force sufficiency and proficiency in these areas?
- What tools and models are currently used in these analyses
- What tools and models can be used in your analyses?
- What are the prioritized data and tool gaps of these analyses?
- What are the best and worst practices for these analyses?
- What is the way ahead?

The plan for each Working Group is to intersperse topical paper presentations with round table discussions of current issues in that Working Group's focus area. The discussions should lead to an exchange of ideas that address the questions above and any other questions and issues developed within the Working Group.

Working Group sessions should begin with an introductory presentation from the Working Group leadership or from a senior leader with cognizance in the focus area. That presentation should provide the Working Group with a set of challenges that they confront on a daily basis. In the ensuing sessions, the Working Group may conduct discussions of these topics and map out a way ahead to address them, reinforced by the paper presentations.

Presentations in these Working Groups should emphasize tools and methods, algorithms, historical and current data sources, on-going analysis, and opportunities for collaboration on future analysis and tool development. Successful projects, available data sources, and Operations Research "lessons learned" presentations are especially valuable. Of equal value are presentations that provide the audience insights into the challenges and opportunities that face decision makers—insights that may map to quantitative techniques and operations research methods to provide needed information to those decision makers.

The Workshop will conclude with a short out brief on Thursday afternoon at which the Working Groups and the Synthesis Group will share insights from the research presented and their discussions. On Friday morning, Working and Synthesis Group Chairs and Workshop Chairs will meet for a wrap-up session and document the Workshop. During this time, and as schedules allow, the Meeting Chair along with special representatives from the meeting and from MORS will conduct a Senior Leader Out-brief to the joint Analytic Agenda Steering Committee summarizing the findings.

Workshop Working Groups:

Working Group One: Near Term Force Structure Analysis.

This working group will examine how DoD currently analyzes force structure in the near-term (next 5 years) and put forward improvements ensuring the force is properly tailored to accomplish near-term strategic objectives. Improvements will concentrate on three essential elements of analysis: a) Data; b) Tools; c) Processes. As the working group addresses the key analytic questions for near-term force structure analysis and the implications for processes, data, tools, and assumptions, the working group should consider the consequences of past force structure employment and current operations. Also, the working group should consider the characteristics of force structure analyses for sizing and shaping the force. Key questions include:

- How does DoD assess (define and measure) the 'goodness' of the programmed force structure? Are the assessments processes dynamic, updating and transforming as requirements and capabilities evolve?
- What databases, tools and processes within DoD contribute to the assessment of the programmed force?
- Are there current gaps in force structure analysis capabilities and how can DoD avoid future gaps that may surface due to continually changing security environment and evolving force structure?
- What analysis capabilities are available to promote collaboration among the Services?
- How does/should near-term force structure analysis integrate with future force requirements and analysis?

Working Group Two: Personnel.

The theme throughout the 2010 Quadrennial Defense Review report was that of balancing resources and risk among four priority objectives. The preservation and enhancement of the All-Volunteer Force was included as one of the objectives in force planning and strategy deliberations. People are at the heart of the strategy and remain as critical as ever in meeting national security challenges. As delineated in the QDR, this priority objective includes developing the Total Defense Workforce – the right workforce size and mix with the right competencies. In keeping with the objectives of the overall Terms of Reference, this working group will examine how manpower and personnel total force requirements are analyzed when developing the right workforce size and mix with the right competencies to accomplish national security objectives. Total force includes the necessary manpower and personnel supporting infrastructure. Key questions include:

- What is the proper size and force mix (Active Component/Reserve Component [AC/RC]) needed to deliver the capabilities necessary to accomplish the national security objectives?
- What is the proper size and workforce mix (Military/Civilian/Contractor) needed to support the delivery of these capabilities?
- How can long term personnel impacts be anticipated and used to inform near term materiel acquisition and policy decisions?

- What analytical tools can be used to make the manpower and personnel system more responsive to transformational changes in the national security objectives?
- What metrics can be used to evaluate force sufficiency, and the cost effectiveness of the supporting infrastructure?

Working Group Three: Materiel and Acquisition.

This working group will examine how we currently analyze our capability needs based on capability gaps and what are the processes that provide the equipment necessary to address those gaps -- ensuring it is the correct equipment to accomplish national security objectives. The focus will be on the ability to provide these capabilities within two to nine years and to provide recommendations on how we can improve these processes. Key questions may include:

- Do we have the correct relationship between the Force Structure analytic processes and the Material Development and Acquisition processes?
- Do the Material Development and Acquisition analytic processes provide senior with useful decision criteria? Do the leaders make truly “informed” investment decisions?
- Is the Material Development and Acquisition Processes delivering capabilities that can succeed in any likely future?
- Can a 7-9 year Material Development and Acquisition Process effectively support our forces, given the ability of adversaries to find low-cost, rapidly developed, asymmetric responses to our technology? Are we building the right mix and quantity of capabilities for the future?
- What are the metrics that DoD does/should use to evaluate the decision to invest in a Material solution?
- What are the metrics that DoD does/should use to evaluate the decision to continue/cancel/modify an ongoing Acquisition program?
- How can we revise the Material and Acquisition processes to be more responsive and timely in supporting changing warfighter needs?

Working Group Four: Linking Near Term to Future Force Structure Analysis.

This working group will examine how we optimize the force structure over time to ensure the trajectory of the near term force structure aligns with the required force structure in the future. This working group seeks OSD, Joint Staff, and Service participation to identify the challenges and shortfalls of current approaches linking near-term and future force structure analysis. The desired end state is to provide an analytical framework addressing these issues, and to establish a direction for subsequent analyses to better meet the needs of DOD leadership. Key questions to examine include:

- What analysis capabilities are available (or needed) to promote collaboration among the Services and ensure sufficient and proficient Joint forces are, and continue to be, available to the warfighter?
- How do we avoid gaps (or accommodate/leverage rapid changes) in capabilities (e.g., personnel and equipment) that may result due to the inherently dynamic nature of US force structure and the environments within which it must operate (e.g., retirement, refurbishment, acquisition, change in CONOPS, non-traditional contingencies, etc.)?
- What metrics should DOD use to evaluate force sufficiency and proficiency, and how would these apply when accounting for the temporal and dynamic dimensions of our own forces, adversary capabilities, and likelihood of various types of conflict?
- How does/should the DOD address force sufficiency and proficiency in 'non-traditional' areas like hybrid-, irregular warfare, and non-kinetic challenges and capabilities?
- How do we evolve our analytic capability to permit force structure trades extending beyond air-based platforms? Such capabilities could include ISR, cyberspace, and other enablers, thereby considering the 'total' force structure, but may also include those with (potentially decades) long development and production times.

Working Group Five: Analytic Tools for Force Structure Analysis.

This working group will examine the methodologies and the analytic tools, models and simulations used by the Department and the components to support force structure analyses. Key questions to examine include:

- What analytic tools are used by OSD, the Joint Staff and the Services to analyze the Force Structure?
- What tools do we have to ensure service programs complement each other over time?
- What are the data requirements for these analytic tools and how is the data generated and verified?
- What metrics, tools, and data are available to evaluate force sufficiency and proficiency in hybrid, cyber and irregular warfare?
- What analytic capabilities and datasets are lacking to support Service and Joint Force Structure assessments? How should these shortfalls be remedied?
- Are there existing tools and methodologies that can be used by all the Services?

Synthesis Working Group:

This working group will take the outputs of the functional working groups and create a consolidated summary of the findings and recommendations of each group. The Synthesis Group (SynGrp) will have a member in each working group to identify those

nuggets in the papers and discussions that reveal analysis lessons learned. The SynGrp will categorize observations in the following three classes.

- The “Constants” – These are the lessons of analyses that were learned in previous force structure analysis and have been re-learned in subsequent contingencies, including the most recent.
- The “Trends” – These are observations of something new, at least in emphasis, which promise to extend beyond the present. Some will reflect advancing technology and others will reflect changes in policy or global security conditions.
- The “Variables” – These are conditional considerations for force planning conducted in conditions like the present conflicts.

5. Pre-conference Session (Tutorials)

See Section 11 of this TOR (Conference Agenda). The objective of the tutorial sessions is to provide conference attendees with background on:

- Department guidance for force sizing, shaping and capability development.
- Existing data, methods, and analysis for generating and managing the current force as well as sizing, shaping, and developing the future force.

The workshop tutorial presentations include:

1. Data, Methods, and Analysis for Current- and Near-Term Force Planning and Management (Joint Staff/Services/SOCOM)
2. Guidance for Force Sizing, Shaping, and Development (OSD Policy)
3. Data, Methods, and Analysis for Mid- to Long-Term Force Sizing, Shaping, and Development Data (Joint Staff/Services/SOCOM/CAPE)

6. Workshop Planning and WG Chairs

Proponents:

- The Office of Force Structure, Resources, and Assessment Directorate, J-8
- The Office of the Secretary of Defense, Capability Assessment and Program Evaluation (CAPE).

Program Chairs:

- Colonel Peter With (USA), J8, peter.with@js.pentagon.mil, 703-695-3705
- Dr. James Stevens, OSD, james.stevens@osd.mil, 703-699-1702

Administrative Coordinators:

- Ms. Krista Paternostro, Chief Executive Officer, MORS, krista@mors.org, 703-933-9070
- Ms. Jordan Fischer, MORS Meeting Planner, jordan@mors.org, 703-933-9070
- Mr. Timothy Hope, MORS Special Meeting Chair, thope@wbbinc.com, 703- 448-6081 x279

MORS Bulldog:

- Dr. Michael Kwinn, ASA/ALT, michael.kwinn@us.army.mil, 703-697-2653

Working Group Chairs:

TUTORIALS

Chair:

Mr. Jeffrey Geroso, USAMSAA, jeffrey.geroso@us.army.mil, 410-278-4739

WG1: Near Term Force Structure Analysis

Chair:

- Norm Edwards, J8 MASD, edwardsnd@js.mil, 703-695-3156

Co-chair:

- LTC Firman Ray, J8 SAGD, rayfh@js.mil, 703-692-8150

WG2: Personnel

Chair:

- Ms. Ronda J. Syring, JHU/APL, ronda.syring@jhuapl.edu, 240-228-2712

Co-chair:

- Mr. Scott Flood, USAMAA, scott.flood@us.army.mil, 703-805-1176

WG3: Material and Acquisition

Chair:

- COL Bob Larson, DA G8, bob.larsen@us.army.mil, 571-256-2618

Co-chair:

- COL Mike Linnick, DA G3/5/7, michael.linick@us.army.mil,

WG 4: Linking Current to Future Force Structure Analysis

Chair:

- COL Scott Schutzmeister, CAA,

Co-chair:

- LtCol Dave Quick, A9, david.quick@pentagon.af.mil, 703-588-8170

- LTC Ralston, CAPE, brian.ralston@osd.mil, 703-699-2350

WG 5: Analytic Tools for Force Structure Analysis

Chair:

- Trena Lilly, JHU/APL, Trena.Lilly@jhuapl.edu, 240- 228-7142

Co-chair:

- Jerry Smith, OPNAV N81, Jerry.R.Smith1@navy.mil, 703-695-4888

Synthesis Group

Chair:

- Joe Adams, IDA, jadams@ida.org, 703-845-2148

Co-chair:

- Royce Reiss, JDS, royce.reiss.ctr@osd.mil , 703 699-1720

MORS Sponsor Representatives

- Army: COL Chris Hill (Center for Army Analysis)
- Navy: Mr. Herb Cupo (OPNAV N81)
- Air Force: Dr. Clayton Bowen (HQ AF/A9)
- Marines: Mr Mike Bailey (MCCDC Studies and Analysis)
- Joint Staff: Lt Col Benjamin Koudelka, Jr., (J8)
- OSD: Mr. Jim Bexfield, FS (CAPE)
- DHS: Mr. Ervin Kapos (S&T)

7. Attendance

Attendees will include those who work in the force structure and requirements area for and the Department of Defense. There will likely be implications for the Department of Homeland Defense and the Department of State as we develop an interagency approach to this analysis. To that end, participation will include experts from OSD, the Services, the Joint Staff, University Affiliated Research Centers, Federally Funded Research and Development Centers, Operational Commanders, DoD contractors, Department of Homeland Security, the Department of State and others. This will be a US only meeting classified up to and including discussions at the Secret classification level. This Workshop can reach out to a large audience of decision-makers, operators, and analysts to bring to bear analytical capabilities to address existing and future force structure challenges and potential analytical gaps.

Working Groups will be led by a Chair and up to three Co-Chairs. This leadership group will be comprised of members of MORS and Subject Matter Experts (SME). The responsibilities of this team include:

- Chair:
 - Dynamic individual who is a SME in the WG topic
 - Solicits analysts and operators in the focus area to participate in the WG
 - Guides the WG during the Workshop
 - Challenged to provide the “substance” of the special meeting WG
 - Develops the WG’s final product

- Co-Chair:
 - Individual interested in the WG topic
 - Assists the Chair in WG membership
 - Provides perspective during the Workshop
 - Assist Chair as needed/requested

Another key group of individuals during the Workshop is the Synthesis Group. This group will provide representation to each of the WGs and assist the Workshop Chairs in consolidating the Working Group results and developing overall assessment/ recommendations from the analysis community.

8. Deliverables

Products generated from the workshop will include:

- A presentation to senior leaders in DoD, on the Joint Staff, within all services and the Department’s of Homeland Security and State on Friday, the day following the Workshop.
- An Executive Summary in the form of a text document or scripted briefing for the MORS Proponents and other invitees as appropriate addressing the workshop objectives, findings, conclusions, and recommendations
- A proceedings document containing summaries of all sessions and annotated copies of appropriate briefing slides and presentations
- An article summarizing the Workshop and its findings will be produced and submitted to *PHALANX* in time for the next deadline after the meeting
- A general session presentation for the 79th MORS Symposium at the Naval Postgraduate School in Monterey,, CA.

9. Administrative

Name: *DoD Force Structure Analysis Way Ahead*

Dates: 24-27 January 2011 with Tutorials on Monday

Location: TASC Heritage Conference Center
 4803 Stonecroft Boulevard
 Chantilly, VA 20151

Registration Fees/Tuition:

Entire Workshop

Non-Government/Non-Member:	\$600
Non-Government/Member:	\$500
Government/Non-Member:	\$475
Government/Member:	\$375

Maximum Attendance: **To Be Determined**

Classification: Secret, US Only. Post-workshop products such as the PHALANX article, the Working Group and Synthesis Group out-briefs that are unclassified and cleared for public release may be posted on the MORS web site. Other products, such as the Senior Leader out-brief, the Sponsors' out-brief, and MORSS presentation may be classified, as necessary.

11. Agenda (Tentative)

Monday (0900-1700)

- 0900 Registration
- 0930 FS Workshop Objectives and Challenges [WS Chair]
- 1000 Service/SOCOM-Led Breakout Sessions – Current and Near Term Force Generation (5 Breakout Rooms)
- 1115 Break
- 1130 Current and Near Term Joint Force Planning and Management (Joint Staff)
- 1230 Lunch
- 1330 Guidance for Mid- to Long-Term Force Sizing, Shaping, and Development (OSD Policy)
- 1430 Mid- to Long-Term Joint Force Sizing, Shaping, and Concept Development (Joint Staff and CAPE)
- 1530 Break
- 1545 Service/SOCOM-Led Breakout Sessions -- Mid- to Long-Term Force Sizing, Shaping, and Development (5 Breakout Rooms)

Tuesday – Opening Session (0700-1700)

- 0700 Workshop registration and Continental Breakfast
- 0800 MORS President's Welcome
- 0810 Facility Host Welcome
- 0820 Sponsor's Welcome
- 0830 Keynote Address (Chairman JCS)
- 0915 Break
- 0930 Panel Discussion (GO/FO/SES – Service Reps, Joint Staff, OSD(CAPE)) Short (10 min) comments from each – their view of major issues and how their component is addressing

Moderator [With or Stevens]
1115 Charter to the Working Groups – [With or Stevens]
1300 Breakout to Working Groups
1200 Working Lunch
1300-1700 Working Groups meet
 See individual WG agendas (sample below)
 Mid-afternoon Break (as directed by Working Group Chairs)
1700 Adjourn to Mixer

Wednesday (0700-1700)

0700 Continental Breakfast
0730 Working Group/Synthesis Group Summary with Program Chairs
0800 Working Group Sessions
 See individual WG agendas (below)
 Mid-afternoon Break (as directed by Working Group Chairs)
1200 Working Lunch
1300-1700 Working Groups meet
 See individual WG agendas (sample below)
 Mid-afternoon Break (as directed by Working Group Chairs)
1700 WG/ Synthesis Group Summary with program chairs

Thursday (0700-1700)

0700 Continental Breakfast
0800 Working Group Sessions (Prepare Working Group Outbriefs)
 Mid-morning Break (as directed by Working Group Chairs)
1200 Working Lunch
1300 Working Groups Chairs present Outbriefs, (25 minutes per WG + Synthesis)
1600 Recognitions and Sponsor's Concluding Remarks

Friday (0800-1400) [Working Chairs/Program Leadership Only] Pentagon, ME800

0800 Working Group and Workshop Chairs Wrap-up and Discussions reference
 PHALANX Article and Workshop's Proceedings/Final Report
1300 Senior Leader Out-Brief (specific time and location TBD)

Working Group 1

Session 1 (25 Jan 1300-1700): Problem Definition and Analytical Framework Development

- Conduct senior leader panel with representatives from OSD, JS, and Services.
- Conduct detailed problem definition discussions to break out the problems to be addressed by the working group.
- Develop the framework for analyzing the problems as defined earlier in the session.

Sessions 2 & 3 (26 Jan 0800-1700): Analytical Tools and Metrics

- Discuss analytic methods and tools which address the problems (from Session 1) and discuss methods to provide meaningful analytical products.
- Discuss metrics and metric development to be used to evaluate
 - Force sufficiency
 - Force proficiency
 - Balance (AC vs. RC; Combat vs. Enablers; General Purpose vs. Special Purpose)
 - Flexibility
- Discuss data availability and collection to be used for analysis

Session 4 (27 Jan 0800-1200): Final discussions and briefing preparation

- Conduct final discussions to clarify/solidify positions
- Conduct final trade space discussions
- Identify road ahead for analysis
- Work on final presentation

Working Group 2

Session 1 (25 Jan 1300-1700): Problem Definition and Analytical Framework Development

Conduct senior leader panel with representatives from all services and from OSD.
 Conduct detailed problem definition discussions to break out the problems to be addressed by the working group.
 Develop the framework for analyzing the problems as defined earlier in the session.

Sessions 2 & 3 (26 Jan 0800-1700): Analytical Tools and Metrics

Discuss analytic tools and methods and decision-making processes which address the problems (from Session 1)
 Discuss methods to provide meaningful analytical products
 Discuss metrics and metric development to be used to evaluate
 Force sufficiency
 Cost effectiveness of the supporting infrastructure
 Discuss data availability and collection to be used for analysis

Session 4 (27 Jan 0800-1200): Final discussions and briefing preparation

Conduct final discussions to clarify/solidify positions
 Conduct final trade space discussions
 Identify road ahead for analysis
 Work on final presentation

Working Group 4:

Session 1 (25 Jan, 1130-1630): Problem Definition & Analytical Framework Development

- Conduct senior leader panel with representatives from OSD, JS, and Services
- Conduct detailed discussions clearly defining the problems to be addressed by the WG
- Develop the framework for analyzing the problems as defined earlier in the session

Session 2&3 (26 Jan, 0800-1700): Course of Action Development

- Identify models and modeling approaches addressing the issues (from Session 1) and discuss methods provide meaningful analytical products
- Briefings and discussion on how to leverage analytic efforts of Services and Allies (UK)
- Discussions characterizing the risks of current and proposed methods/processes

Session 4 (27 Jan, 0800-1300): Final discussions and briefing preparation

- Conduct final discussions to clarify/solidify positions
- Conduct final trade space discussions
- Identify road ahead for analysis
- Work on final presentation

Working Group 5:

Session 1 (25 Jan, 1130-1630): Working Group Overview and Assessing Peace Time Demands

- Review Working Group charter and objectives
- Assumptions, challenges, and philosophies in supporting force structure analysis
- Tools for foundational activities (presence, security assistance, HA/DR)
- Data and modeling of platform maintenance and unit training cycles

Session 2 (26 Jan, 0800-1200): Methods, Tools, and Data for Assessing Personnel and Support

- Personnel – the essential component of Force Structure
- Tools for evaluating the peace- and war-time combat logistics forces
- Assessing the value of pre-positioning, forward bases, and agreements

Session 3 (26 Jan, 1300-1700): Methods, Tools, and Data for Assessing the Fight

- Methods, tools, and data for determining the Force Structure for major contingencies
- Measuring and modeling force proficiency and sufficiency
- Determining the demand for combat logistics and C2 forces

Session 4 (27 Jan, 0800-1200): Integrated Force Structure Methods & Tools

- Trade methods for various force components
- Balancing the near- and far-term forces
- Integrating the capabilities of allies and partners

