

**MORS**  
**Irregular Warfare II**  
**Workshop**  
Military Operations Research Society

**Synthesis Group Out Briefing**

**Chair: Michael W. Garrambone, General Dynamics**

**Co-Chair: Dr. Michael P. Bailey, MCCDC**

**3 - 6 February 2009**

**Davis Conference Center**

**MacDill AFB, Florida**

# Agenda

- ◆ **Introduction**
- ◆ **Tutorial and Plenary Session**
- ◆ **Observations**
- ◆ **Assumptions, Definitions, and Terms**
- ◆ **Key Issues and Discussion Items**
- ◆ **Recommendations**

Mr. Michael W. Garrambone  
Dr. Michael P. Bailey

- ◆ **WG 1. Global Engagement**
  - ◆ Mr. Tim Hope
  - ◆ LTC Clark Heidelbaugh
- ◆ **WG 2. Stability, Security, Transition, & Reconstruction Ops**
  - ◆ Mr. Miles “Doug” Edwards
  - ◆ Dr. Tom Allen
  - ◆ Mr. Billy Sentlinger
- ◆ **WG 3. Information Ops/Psyops/Social Sciences**
  - ◆ Mr. Kirk Michealson
  - ◆ Dr. Stuart Starr
- ◆ **WG 4. Counterinsurgency (COIN)**
  - ◆ COL Jeff Appleget
  - ◆ LTC Paul Ewing
- ◆ **WG 5. Thinking Models About Irregular Warfare**
  - ◆ Mr. Tom Hughes
  - ◆ Ms. Deborah Lott
- ◆ **WG Floating Members**
  - ◆ Mr. Donald Timian
  - ◆ Mr. Greg Keethler
  - ◆ Mr. Leroy Jackson

# Charter

- ◆ **SynGp Provides**
  - Workshop oversight and objectivity
  - Assistance to working groups in achieving their objectives
  - A perspective across working groups
  - Insights back to working group and workshop chairs
- ◆ **Synthesize**
  - Common themes across groups
  - Identify trouble spots, missing information
  - Highlight gaps between groups and ideas
  - Track critical issues of sponsor interest
- ◆ **Provide Overarching Recommendations**
  - Captures the efforts of five groups
  - Identify their high payoff findings
  - Summarize ideas and recommended actions

## Tutorial, Plenary, and Keynote Speakers

- ◆ **Irregular Warfare Joint Operations Concept**  
Mr. Jeffery (Gus) Dearolph, Deputy Director Internal  
SOCOM J10
- ◆ **Lessons from the Irregular Warfare Methods, Models,  
Techniques**  
COL Jeff Appleget, TRAC
- ◆ **Summary of Improving Cooperation Among Nations for  
Irregular Warfare Analysis Workshop**  
Dr. Al Sweetser, Director, OSD-PAE SAC
- ◆ **Systemic Operational Design**  
LTC Reb Yancey, SOCOM SORR-J8-Studies
- ◆ **Keynote Speaker**  
Mr. William J. A. Miller  
Dir, Strategy, Plans, and Policy, SOCOM

## Initial Tutorial Thoughts

- ◆ Very high level of participation ~ 71 attendees
- ◆ High level of interest in the subject of IW
- ◆ Suggests desire for greater basic understanding
- ◆ Greater need to understand the:
  - IW language
  - IW concepts
  - IW players

**Tutorials create knowledge and uniformity**

# Irregular Warfare Joint Operations Concept Mr. Dearolph

- ◆ There is continuing friction with the IW definition across Services, agencies, interagency, and among allies
- ◆ There is a lack of grand strategy and a failure to understand population
- ◆ Key IW factors are: indirect, enduring, persistent, proactive, **population-centric**, respect of legitimate sovereignty linked to over-arching strategy
- ◆ Consists of :
  - Key missions (e.g., FID, UW, COIN, CT, Stab Ops)
  - Key activities (e.g., Strategic communications, IO, PSYOPS, Intel, Counter- intel, Support to law enforcement)
- ◆ IW Military Leadership
  - JFCOM for General Purpose Forces (GPF)
  - SOCOM for Special Operations Forces (SOF)

# IW II      Lessons from the Irregular Warfare SynGp

## Methods, Models, Techniques

### COL Jeff Appleget

- ◆ “IW focus is on the population”
- ◆ “COIN” is the Key when insurgents exert more influence on local populations than the national government”
- ◆ IWMmAWG Study established a 7-element framework
  - Identified 35 gaps, 34 related to data and social sciences
- ◆ Analytical Approach
  - Now, Top-down, Western perspective (DIMEFIL-PMESII)
  - Soon, Bottom-up employing social sciences expertise
  - Track strategic level Methods, models, Tools (MmTs)
- ◆ Iterative development of “key data” is central
- ◆ Over-all needs
  - Create credible, relevant MmTs to address decision maker issues
  - Make social scientists integral members of the analysis team
- ◆ Continue community-wide dialogue through IW Working Group



# **Improving Cooperation Among Nations for Irregular Warfare Analysis Workshop (NPS)**

**Dr. Al Sweetser, Director, OSD-PAE SAC**

- ◆ **There is value having international participants from many different nations**
- ◆ **Emphasized importance of “Whole of Government” approach**
- ◆ **Useful to conceptualize the problem as “Complex Adaptive Systems” (e.g., act, react, re-react,...)**
- ◆ **Consider a hybrid approach (e.g., wargame – model – wargame)**

# **IW II Systemic Operational Design (SOD) SynGp**

## **LTC Reb Yancey, SOCOM SORR- J8-Studies**

- ◆ **IW is a “wicked problem”**
- ◆ **Akin to relearning COIN analysis approaches (Vietnam / Iraq)**
- ◆ **SOD employs a structured method of inquiry that enables a commander to:**
  - **Make sense of a complex situation**
  - **Capture understanding**
  - **Share the resulting visualization**
- ◆ **SOD is a method of inquiry, is based on discourse, creates a learning system**
- ◆ **Requires accepting humility and valuing heresy**
- ◆ **Means challenging the information and the boss**
- ◆ **To deal with a dynamical complex system, one needs to explore the interactions among the key parts (“hermeneutics”)**

**Mr. William J. A. Miller, SOCOM  
Dir, Strategy, Plans, & Policy,**

- ◆ **“IW is about populations”**
- ◆ **In analyzing IW issues, a Lanchester view is not useful**
- ◆ **“Behave” not kill our way to victory**  
**Shape vs. exploit, synthesis not analysis, transforming is**  
**satisfising whereas solutions are optimizing, presence**  
**changes the problem**
- ◆ **Be as “un-wrong” as can be in conceptualizing a global**  
**perspective on issues**
- ◆ **Globalization challenges and threats to the US—Migration,**  
**Crime, Extremism**
- ◆ **SOCOM Challenges: Be up-stream (leverage), turn down the**  
**heat (affect), engage in dialogue with senior decision makers**

## Working Group Observations

- ◆ The working groups (WG's) were highly partitioned by their titles and topics areas (tough to find overlap)
- ◆ WG's employed from 4 to 9 presentations in their sessions—a total of 30 different workshop presentations
- ◆ WG's ranged in size from 16 to 50 members—the “modeling IW WG” had the highest numbers
- ◆ WG's recognized that they have more challenges and tasks than they can handle in a three-day workshop
- ◆ WG's have heart and intellectual energy but are limited by clock time and “soak time”
- ◆ WG's would like to “sit in” on other working groups (series vs. parallel information meetings)

# General Observations

- ◆ We are still struggling with the exact meaning and breadth of irregular warfare (bounding and characterization)
- ◆ “Models and Tools” do not equal “computer programs and computer models”
- ◆ We are not familiar with the agencies that understand or have jurisdiction for DIMEFIL and PMESII
- ◆ Wargaming with the right players offers a powerful technique for discovery
- ◆ Graphics in a storyboard approach has a prominent place in IW for displaying and understanding influences
- ◆ Everyone is talking about data, its definition, its meaning, its form, who is collecting it, processing it, and storing it
- ◆ No consensus on what information does exist, should exist or who is or should be responsible—regardless, the complexity of the situation transcends the data
- ◆ VV&A is still the topic on IW models and data

- ◆ Line of Effort
  - ◆ Systemic Operational Design
  - ◆ Adaptive Learning
  - ◆ Holistic Analysis
  - ◆ Irregular Warfare
  - ◆ Periodicity of Reframing
  - ◆ Whole of Government
  - ◆ Translational Issues
  - ◆ ...
- ◆ SSTRO
  - ◆ PMESII
  - ◆ DIMEFIL
  - ◆ GPF
  - ◆ MIST
  - ◆ MmT
  - ◆ NEXUS
  - ◆ ATLAS
  - ◆ ...

These **three\*** items are needed and are hard to find

- ◆ There are no “interagency” people at the workshop and we need input from their areas of expertise
- ◆ We need to invite more people from the Liberal Arts and Social Sciences to help us with our thinking about people/populations
- ◆ We need more tools and methods that go beyond the quantifiable aspects of war
- ◆ Our current metrics don’t capture the qualitative aspects of conflict that commanders need
- ◆ We have voids in our data and very little cause and effect data (e.g., temporal effects require years/decades of observations)
- ◆ There is no “owner” of a common lexicon
- ◆ We lack sufficient analysts/SMEs with DIMEFIL (Diplomatic, Informational, Military, Economic, Financial, Intelligence, Law Enforcement) experience

- ◆ Identifying the differences between “indicators” and “effects” and understanding some effects are not quantifiable (e.g., measuring persuasion and influence)
- ◆ MmT is not ready for Prime Time-- there is no SIMTAX for IW, but there needs to be such a taxonomy that describes the characteristics of these models
- ◆ Should crime, extremism, and migration be considered as “standard” military problems
- ◆ We have not retained our history of IW, how do we bring it back—we need to leverage that operational experience and those earlier insights
- ◆ The value and methodology of reach-back has been questioned as well as the importance of an analyst collecting the data
- ◆ There are different levels of IW that require very different tools



- ◆ **There is a gap between our analytical capability and our commander's operational needs**
- ◆ **The repository of the IW "body of knowledge" has not been clearly identified (IW online Library)**
- ◆ **There is a relational, supportive, and authority gap between the military and "the interagencies" on IW**
- ◆ **We do not understand interagency lines of communications**
- ◆ **We don't understand how to balance government capacity for "restoration of services," security, or economic development**
- ◆ **We do not know the modeling requirements for IW analysis**
- ◆ **Many do not know about IW Community Hubs, Potential Data sources or samples of IW Activities available by Joint Data Support**

# Recommendations (1)

- ◆ **Identify, create and sustain credible IW data**
  - It will require iteration to decide on the data needed
  - Steps must be taken to characterize the data (e.g., metadata; pedigree) and convert it to meet the needs of the analyst
- ◆ **Develop a lexicon of key terms**
  - Current definitions are not acceptable to the interagency, coalition partners
  - New terms must be developed (e.g., “operations against irregular adversaries” Huba Wass de Czege)
- ◆ **Continue the dialogue on MmTs to support IW analyses**
  - This workshop represents a significant step forward
  - More dialogue is needed w/ whole of government participation
- ◆ **MORS convene a IW Joint/Special Session at FLVN**

## Recommendations (2)

- ◆ **MORS provide a forum to help organize the needed information**
  - Create a common template to compare and contrast key IW models and tools
  - Continue to support efforts to identify key gaps and priorities to guide future actions
- ◆ **MORS and Sponsors assist in bringing the various IW Communities of Interest (COI) together; e.g.,**
  - IW Working Group
  - MEDEA
  - Human, Social Cultural Behavior (HSCB) modeling
  - MORS Social Science Community of Practice (COP)
- ◆ **Support Service initiatives to put Operations Research Analysts in SOF operational staffs**
- ◆ **Invite more allies and the interagency to these meetings**
- ◆ **Consider MORS IW COP and/or a workshop campaign**

**Questions?**

**Thank You  
For your  
Interest**

## Objectives at the Tutorials

- ◆ Identify specialized vocabulary (terms of reference)
- ◆ Extract the main learning objectives
- ◆ Pick out the key points within the presentations
- ◆ Look for the burning unresolved issues
- ◆ Identify current weak areas of knowledge
- ◆ Identify follow-on working groups topics

**Tutorials create knowledge and uniformity**

Ms. Renee Carlucci, Deputy Chief, CAA Force Strategy  
Mr. Donald Timian, Army Test and Evaluation Command

- ◆ **WG 1. Global Engagement**
  - ◆ Mr. Andy Caldwell (UK) , OSD Policy
  - ◆ Col Thomas Feldhausen, USAF, JCS/J5
- ◆ **WG 2. Stability, Security, Transition, & Reconstruction Ops**
  - ◆ COL Dean Mengel, CAA
  - ◆ Mr. Bill Krondak, TRAC FLVN
- ◆ **WG 3. Information Ops/Psyops/Social Sciences**
  - ◆ Mr. Mike Ottenberg, OSD PA&E SAC
  - ◆ Ms. Karen Gratten, MCCDC OAD
- ◆ **WG 4. Counterinsurgency (COIN)**
  - ◆ Mr. Steve Stephens, MCCDC OAD
  - ◆ LTC Tedd Dugone, Joint Staff, J8 WAD
- ◆ **WG 5. Thinking Models About Irregular Warfare**
  - ◆ Dr. Bob Sheldon, FS, MCCDC OAD
  - ◆ LTC Scott Smith, SOCOM, J8

**◆ SynGp Purposes:**

- For the WG: Attend, observe, assist, influence, & promote
- For the WS: Observe, gather, record, & create information

**◆ SynGp Goals:**

- Capture information before, across, and between groups
- Synthesize ideas, fuse concepts, shake loose descriptions
- Identify universals, seams, gaps, vocabulary, direction
- Create distillation, clarity, recommendations, documentation

**◆ SynGp Focus**

- Tutorials, plenary sessions, WG sessions
- Capture the talking and the thinking

## Other Observations

- ◆ **Discussions indicate someone went point-to-point to get collaboration with a “whole of government” resource**
- ◆ **SOD provides a more structured approach to a wicked problem**



- ◆ **The analytical community has only started to do the reaching out to social scientists in new and novel ways**
- ◆ **How tactical events can cause strategic effects**
- ◆ **Resolving the issue of the “disconnect” when we say “data” and “models” to a social scientist**
- ◆ **How do we open our western philosophical minds to seeing the consequences of our activities in initial or subsequent timeframes**
- ◆ **Choosing the wrong metric will lead you astray and waste your analytical resources**

- ◆ **The Army does not include SSTRO in its definition of IW although it is present in all aspects of warfare**

# Key Findings

- ◆ **There is not a Battlefield Operating System (BOS) type description or functional domain list of data for DIME and PMESII**
- ◆ **Cultural and societal experts are critical to wargaming and so are professional red teams**
- ◆ **We don't know ourselves, that is, all the agencies, jurisdictions, and helping services we need to know**

## Key Findings 2

- ◆ **There is no global list for the sources of information for wargaming**
- ◆ **We are paying lip service to bring social and cultural scientists to wargames and to MORs**
- ◆ **Wargames can be used to help identify model capability gaps and provide insights for operational dynamics**

## Key Findings

- ◆ **Very limited attention has yet been paid to coalition (international) wargaming**
- ◆ **Serious difficulties are seen with validity of red/green/? representations (often are blue interpretations of red/green/? behaviors)**

- ◆ **Inadequate representations of red/green/? players, concepts, and behaviors**
- ◆ **The wargaming process has not been formalized for irregular warfare**
- ◆ **Inadequate database of cultural-societal information**