



***Irregular Warfare Analysis Workshop***  
***WG 4: Counterinsurgency***  
**Military Operations Research Society**  
***Working Group Out Brief***

***3-6 February 09***

**Mr. Steve Stephens, LTC Tedd Dugone, Mr. Fred Cameron,  
Capt Arun Shankar**

# Agenda



- **Purpose/Charges**
- **Participants**
- **Presentations**
- **Past**
- **Present**
- **Future**

# Working Group 4 Purpose/Charges



**Purpose: Explore Various Analytical Tools And Methods For Use In Planning And Conducting Counterinsurgency**

1. What analytical efforts have been done in support of COIN activities in the past and what was the result? What works and doesn't work?
2. What is the present state of the art in analytical efforts for COIN and how are they progressing? What are we doing right now?
3. What are the gaps in analytical efforts and analytical planning that we need to address in the future? Where do we need to go?

# Working Group 4 Participants



<b>Mr.</b>	<b>Jaime Alfaro</b>	<b>USJFCOM J-7</b>
<b>COL</b>	<b>Jeffrey Appleget</b>	<b>U.S. Army TRADOC Analysis Center</b>
<b>Maj</b>	<b>John Bancroft</b>	<b>MCCDC OAD</b>
<b>Ms</b>	<b>Justine Blaho</b>	<b>Center for Army Analysis</b>
<b>Maj</b>	<b>Dave Blankenship</b>	<b>USSOCOM, J10</b>
<b>Mr</b>	<b>Frederick Cameron</b>	<b>OR Advisor to Director General Land Capability Development (CA)</b>
<b>Mr.</b>	<b>David Collins</b>	<b>Lockheed Martin</b>
<b>LTC</b>	<b>Tedd Dugone</b>	<b>Joint Staff (J8/WAD)</b>
<b>Mr.</b>	<b>Pat Eberhart</b>	<b>USSOCOM, J9</b>
<b>Ms</b>	<b>Nancy Evans</b>	<b>USJFCOM, Joint Irregular Warfare Center</b>
<b>LTC</b>	<b>Paul Ewing</b>	<b>Naval Postgraduate School</b>
<b>Mr.</b>	<b>Doug Garbark</b>	<b>Lockheed Martin</b>
<b>LTC</b>	<b>Thomas Glover</b>	<b>U.S. Army TRADOC Analysis Center</b>
<b>Mr.</b>	<b>Michael Hall</b>	<b>Lockheed Martin</b>
<b>Mr.</b>	<b>Anthony Hermes</b>	<b>Institute for Defense Analysis</b>

# Working Group 4 Participants



<b>Mr.</b>	<b>Dwayne Hill</b>	<b>US Army Test and Evaluation Command</b>
<b>Dr.</b>	<b>Seth Howell</b>	<b>JIEDDO</b>
<b>Mr.</b>	<b>Bill Inserra</b>	<b>MCCDC OAD</b>
<b>Capt.</b>	<b>Chris Jeffreys</b>	<b>HQ USAF A9A</b>
<b>Ms</b>	<b>Lisa Kaiser</b>	<b>Center for Army Analysis</b>
<b>Mr.</b>	<b>Gregory Keethler</b>	<b>Lockheed Martin Missiles and Fire Control</b>
<b>MAJ</b>	<b>Marvin King</b>	<b>Center for Army Analysis</b>
<b>Ms</b>	<b>Regina Kistner</b>	<b>Army Material Systems Analysis Activity</b>
<b>Mr.</b>	<b>Michael Mazzocco</b>	<b>NSWCDD</b>
<b>Lt Col</b>	<b>Kirsten Messer</b>	<b>OSD PA&amp;E SAC</b>
<b>Mr.</b>	<b>Joseph Mlakar</b>	<b>MCCDC OAD</b>
<b>Mr.</b>	<b>George Monroe</b>	<b>Air Force QDR Office</b>
<b>Mr.</b>	<b>Joseph Nowak</b>	<b>U.S. Army TRADOC Analysis Center</b>
<b>Mr.</b>	<b>Nicholas Pioch</b>	<b>BAE Systems</b>
<b>Mr.</b>	<b>Morgan Polk</b>	<b>SOCCENT/CEG</b>

# Working Group 4 Participants



LTC	RussellSchott	TRADOC Analysis Center, WSMR
Capt	Arun Shankar	MCCDC OAD
Ms	Brittlea Sheldon	Northrop Grumman
Mr.	Steve Shields	Lockheed Martin
Dr.	Adam Shilling	Center for Army Analysis
Mr.	Bruce Simpson	SRA Int'l
Mr.	Thomas Spoon	Center for Army Analysis
Mr.	Cortez Stephens	MCCDC OAD
Ms	Pattie Vedder	U.S. Army TRADOC Analysis Center
MAJ	Brittian Walker	USSOCOM, J9
COL	Scott Waterman	USJFCOM JIWC
Mr.	Robert Wiebe	Boeing Research and Technology

# Working Group 4 Presentations - Wednesday



<u>Wednesday, 4 February</u>	
<u>C-IED Support to Canadian Forces</u>	<u>Dr. Philip Eles, Department of National Defence (Canada)</u>
<u>Crime Mapping and Analysis Techniques</u>	<u>Mr. Joseph Mlakar, USMC OAD</u>
<u>Operational COIN Databases</u>	<u>Maj. Marvin King, USA, CAA</u>
<u>Analysis of Counter-Insurgency Database</u>	<u>Ms Justine Blaho, CAA</u>
<u>Oz Wargame Integration Toolkit</u>	<u>Dr. Deborah Duong, OSD PA&amp;E SAC</u>
<u>Canadian OR Applications</u>	<u>Mr. Fred Cameron, Operational Research, Kingston, Ontario</u>

# Working Group 4 Presentations - Thursday



Thursday, 5 February

Africa IW Corps/Div Scenario

LTC Tom Glover, TRAC  
Leavenworth

Irregular Warfare Analytic Baseline

LtCol Kirsten Messer, USAF, OSD  
PA&E SAC

Irregular Warfare Model Evaluation

Mr. William Inserra, USMC OAD

Peace Support Operations Model

Maj. George Holland, USAF, J8  
WAD

# Past



- **Interdisciplinary teams**
- **Past combat models based on physics**

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- Interdisciplinary teams
- Past combat models based on physics
- **Deployed analysts**
  - Vietnam
  - Bosnia/Kosovo
  - OIF/OEF

# Past



- Interdisciplinary teams
- Past combat models based on physics
- Deployed analysts
  - Vietnam
  - Bosnia/Kosovo
  - OIF/OEF
- Interagency cooperation with DoD
- Historical databases and historical research

# Present – COIN Execution



- **COIN analytical techniques applicable to general purpose forces (GPF) are equally applicable to special operations forces (SOF)**
  - **IED Analysis, Polling, Social Network Analysis, ISR Network Analysis, Assessment Analysis, Trend Analysis, Criminal Activity Profiling, RIO Analysis, Etc.**
- **Strengths and weaknesses of COIN analytical support for GPF are the same for SOF**
  - **Assessing influence on population**
- **Problem Area – at times data obtained from host nation untrained collectors**

# Present – COIN Planning



- **Human-in-the-Loop (HITL) computer-supported wargaming**
  - Adequate way to provide insights now
  - Federations of specialized simulations
  - Wargame Integration toolkits
  - Must use caution; not mature enough for some contexts
  
- **Models and Simulation**
  - Warm and fuzzy – not!
  - Emerging but still in its infancy

# Present – COIN Planning (Contd.)



- **Substantial efforts ongoing**
  - M&S as well as Non M&S
  - Data is problematic across the board
  
- **Context specificity**
  - **Strategic, operational, tactical**
    - **Difficult to separate analytical implications between levels of war (“Strategic Corporal”)**
    - **Realize need for a conceptual framework for understanding and integrating causality across all levels of analysis**
    - **Iterative process/dialogue**

# Future - COIN Execution



- **Recommend USSOCOM develop a structure to provide analytical support to COIN forces**
  - **Established during planning – every operation is different**
  - **Diverse operating environments – varying footprints**
  - **Reachback analytical support**
  - **Support through GPF - when GPF are available**
- **Recommend SOF training/education/familiarization with benefits of analytical support**

# Future – COIN Planning



- **Recommend USSOCOM consider interdisciplinary teams**
  - **Centralized**
  - **Decentralized**
  - **Hybrid**

# Future – COIN Planning



- Recommend USSOCOM consider interdisciplinary teams
  - Centralized
  - Decentralized
  - Hybrid
- **Recommend USSOCOM look into a conceptual analytical framework to provide analytical support to USSOCOM COIN planning**
  - **Mr. Miller's Trinity (crime, migration, extremism)**
    - Left of boom
    - Forecast next hot spot
    - Correlation, not causality

# Future – COIN Planning (Contd.)



- **Scenario development for COIN is different than scenario development for conventional warfare**
  - **Whole of government**
  - **Relevant populations are the focus**
  - **Legitimacy is the center of gravity**
  - **Include progress/success metrics**
    - **Must be specified in the campaign design**
  - **800lb guerilla – data!**

# Future - DOD Analytical Community



- **Interdisciplinary expertise is critical**
  - **Doing it now but could do it much better**
  - **M&S as well as Non-M&S, including wargaming**
  - **Organizational, Disciplinary, Commercial/Industry, Geographic**
  - **Required expertise depends on the situation**
  - **Early and throughout the process**
  - **Conflict and disagreement among experts**
  - **Cooperative decision making instead of competing decision making**

# Future - DOD Analytical Community (Contd.)



- **COIN M&S Validation**
  - There are different levels of validation – “Fit for purpose”
  - Buffalo Chip Principle
  - Stradivarius Syndrome
  - Human Behaviors (Dr. Wong)
  - Data
    - Taxonomy of data elements
    - Not just COIN issue
    - Whole of government issue
    - Joint Data Support (JDS) – central repository

# Foot-Stompers



- **Human involvement is critical**
- **Broaden horizons beyond the physical science paradigms to include the social sciences**