# 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 <u>Planning And Conducting</u> Counterinsurgency

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



### **Working Group 4 Participants**

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



### **Working Group 4 Participants**

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



### **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'I
Mr.	Thomas Spoon	Center for Army Analysis
Mr.	<b>Cortez Stephens</b>	MCCDC OAD
Ms	Pattie Vedder	U.S. Army TRADOC Analysis Center
MAJ	<b>Brittian Walker</b>	USSOCOM, J9
COL	Scott Waterman	USJFCOM JIWC
Mr.	<b>Robert Wiebe</b>	<b>Boeing Research and Technology</b>



# **Working Group 4 Presentations - Wednesday**

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



# **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	<u>Maj. George Holland, USAF, J8</u> <u>WAD</u>	



#### Past

- Interdisciplinary teams
- Past combat models based on physics



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- Deployed analysts
  - Vietnam
  - Bosnia/Kosovo
  - OIF/OEF



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  - 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

