

# *Counterinsurgency Wargame Development*

## *Estimating Security Force Requirements*

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# Agenda

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# *Briefing Purpose*

- To present an innovative method for evaluating security force size options for a counterinsurgency

# Wargame Objectives

CAA has developed a wargame methodology that has been used in multiple venues to:

- ❑ Determine the requirement for security forces to overmatch an insurgency
- ❑ Better understand risks associated with various levels of host nation security forces, Coalition assistance to the host nation, and levels of insurgent activity
- ❑ Advance the state of counterinsurgency wargaming and analysis at CAA

# Wargame Overview

- ❑ Theater-level, Brigade-resolution multiplayer wargame
  - Includes Host Nation Army and Police, and Coalition forces in combat and advisory roles
  - Two Insurgent factions
  - Division of Theater into provinces
  - Insurgent attacks can have effects on infrastructure and sensitive religious sites
  - Portrays effects of civil violence, intra-faction violence, and criminal activity
  
- ❑ Protecting the population and infrastructure are key tasks
  - Derives population protection requirement from FM 3-24 Counterinsurgency
  
- ❑ Uses data from Iraq to develop parameters
  - Effects of insurgent operations
  - Effects of COIN operations
  - Effects of meeting or failing to meet the requirement for population protection

# *Players and Objectives*

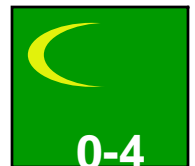
- ❑ **Host Nation government – Stable government with forces adequate to protect population, infrastructure, cultural/religious/historical sites, deter/defeat external threats**
  
- ❑ **Coalition forces – Stable, democratic Host Nation at peace with neighbors and able to defend itself against internal and external threats**
  
- ❑ **Insurgents – Overthrow of the present government by escalating violence beyond the ability of the host nation to control**

# Components – The Map

- ❑ The game map contains:
  - Provinces and cities
  - Major infrastructure
  - Sensitive cultural/religious/historical sites
  
- ❑ Units move between provinces
  - Host Nation and Coalition forces have unlimited movement
  - Insurgents may move into adjacent provinces
    - ✓ Reflects the requirement for insurgents to establish new support networks when moving into a new area, prior to commencing operations

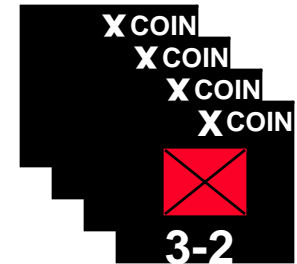
# Components – Unit Counters

- ❑ Units represent Host Nation Brigades/Battalions, Coalition force Brigades/Advisor units, and Insurgent forces
- ❑ Host Nation and Coalition forces have combat and intelligence values
  - Two possible states
    - ✓ Configured for conventional operations
      - ◆ Concentrated for maximum combat power, at the expense of HUMINT
    - ✓ Configured for counterinsurgency operations
      - ◆ Dispersed among the population, for maximum HUMINT capability at the expense of combat power
- ❑ Insurgents have two unit types
  - Cadre
    - ✓ Has intelligence value only
    - ✓ Can represent different insurgent factions
    - ✓ May attack infrastructure or population
  - Resistance
    - ✓ Has combat and intelligence values



# Components – Combat Resolution **Center for Army Analysis**

- ❑ **Massing on insurgent concentrations effective for destroying them or forcing insurgents to flee**



- ❑ **Failure to mass results in insurgents maintaining their presence and continuing their operations**



# Components – Population Protection Track

- ❑ The number of forces required to control a given violence level (varying by population for each province) is shown on a population protection track
- ❑ Conditions that escalate violence:
  - Successful insurgent operations
  - Inadequate forces protecting the population and maintaining order
- ❑ The highest possible level of violence was bounded as the violence level that would require a ratio of 25 security troops/police per 1000 population



Province	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9
Erehwon	1	2	3	5	7	10	14	19	25
Faraway	4	6	10	16	22	32	44	61	77

The highest violence levels in these provinces require 25 and 77 battalions to control, due to the difference in their population

Collected data is used to establish trends and parameters that underpin the mechanics of the wargame.

- There are four contributors to the level of violence in a province/governate
  - **Inadequate population protection**
  - **Overmatch of the Threat**
  - **Insurgent Campaign of Violence**
  - **Major Coalition/HN Campaigns**

**Level of Violence Increases**



**Level of Violence Decreases**



# Parameters-Inadequate Population Protection **Center for**

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Not providing adequate security forces to protect the population will cause violence levels to increase 

The minimum number of security forces needed is determined by the threat

High- 20:1000  
Medium- 15:1000  
Low- 10:1000

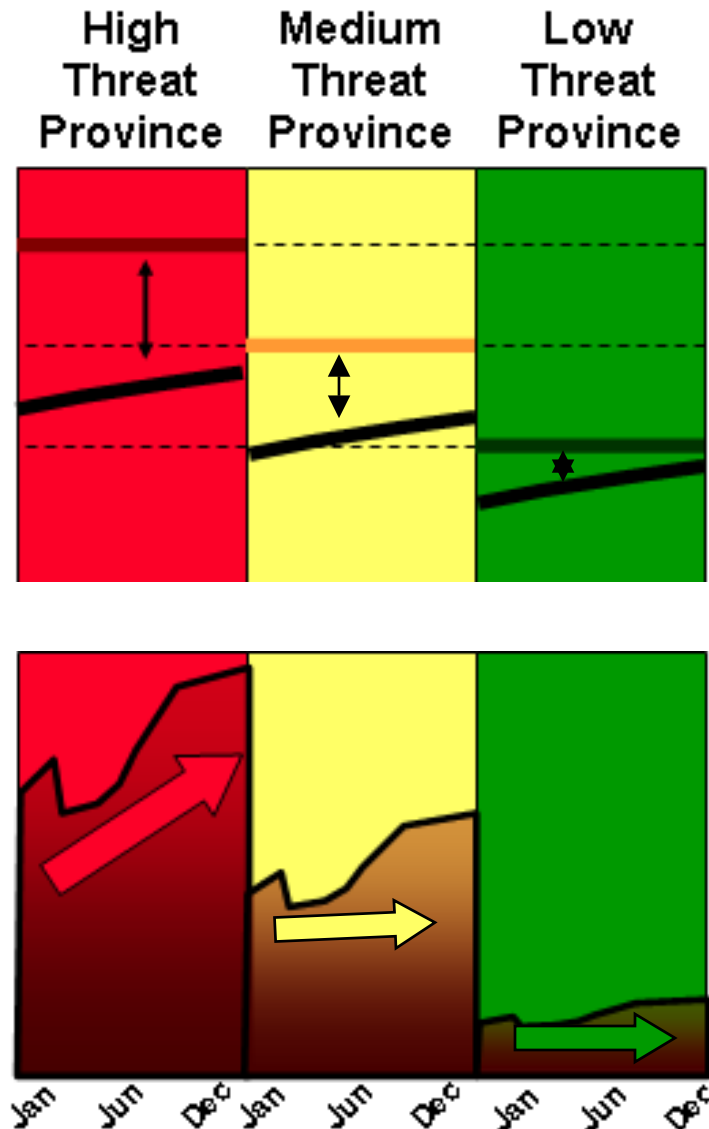
If the minimum is not met, violence will continue to increase

Force:  
Population  
Ratio of  
Coalition  
and HN  
security  
forces

25: 1000  
20: 1000  
15: 1000  
10: 1000  
5: 1000  
0

Number  
of attacks  
in each  
Province

High  
Med  
Low



Source: FM 3-24 p1-67

# Parameters- Insurgent Campaign of Violence and Major Coalition/HN Campaigns

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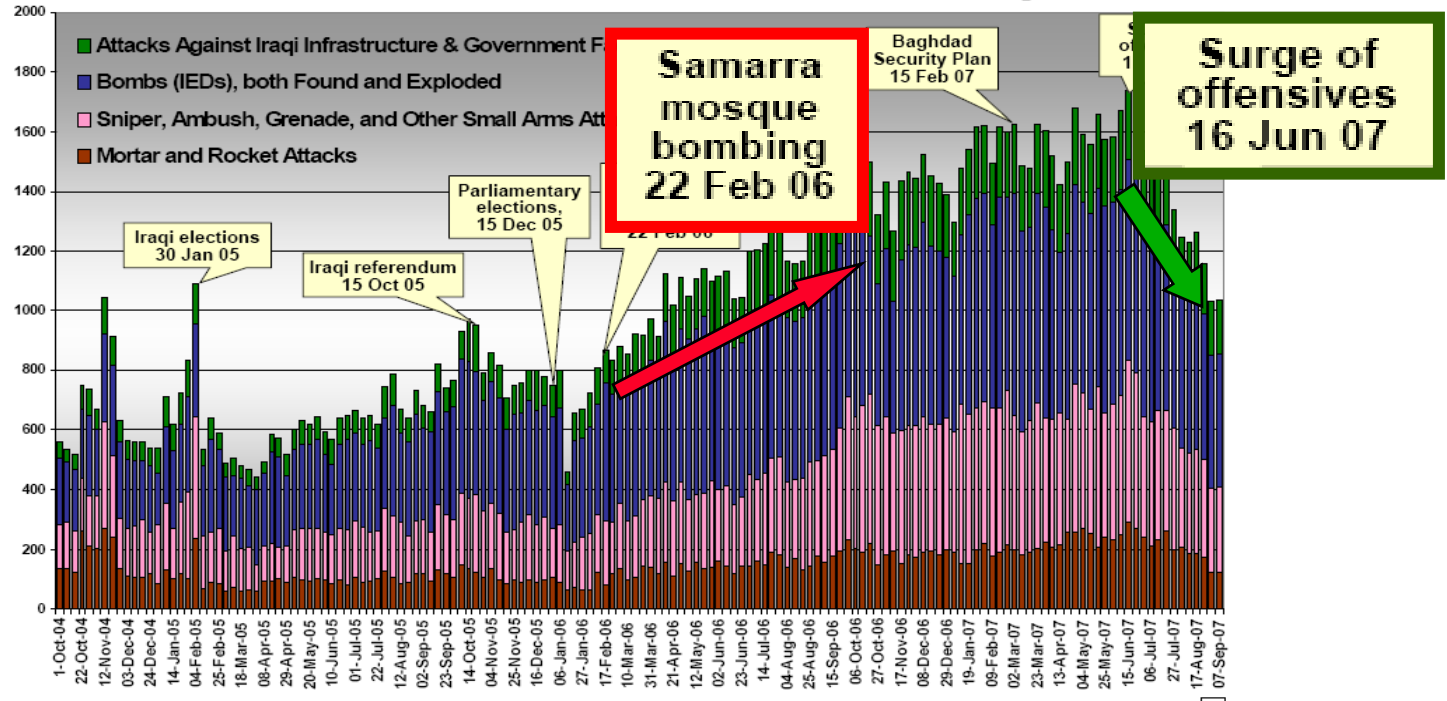
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## Overall Weekly Iraq Attack Trends 1 October 2004 – 7 September 2007

An example from Iraq for:

- An insurgent attack on a sensitive religious site or campaign of violence

- Coalition/ Host Nation operations



Successful friendly COIN operations drive violence down

Insurgent campaigns of violence or attacks on critical infrastructure drive violence up

Source: GEN Petraeus testimony to Congress, 10-11 September 2007

# Parameters- Combat Adjudication **C**enter for **A**rmey **A**nalysis

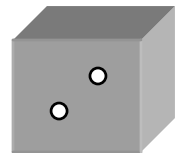
Example of Combat Adjudication between **Coalition/ Host Nation forces** and a large **insurgent force**

## Historical Examples

Operation	Time	Result	Number of Units
Najaf	AUG '05	Indecisive	Few
Fallujah I	APR '04	Indecisive	
Ramadi	JUN '06	Success	Some
Fallujah II	NOV '04	Success	
Mosul	NOV '04	Success	Many

## Wargame Approximation

Number of Battalions	Chance of Success
	1/6
Few	2/6
	3/6
Some	4/6
	5/6
Many	6/6



**The more units committed to a particular operation, the greater the chance it has of being successful (reducing violence)**

“As a total phenomenon its dominant tendencies always make a war a remarkable trinity-composed of...the play of change and probability...” -Clausewitz

# Conclusion

- ❑ **CAA has developed a successful method for sizing security forces for a counterinsurgency**
- ❑ **To underpin the credibility of the analysis, parameters for the wargame must be derived from relevant operational data**
- ❑ **This innovative method provides significant insights for senior decision makers**