

Technology in support of wargaming

Connections UK 2016



Introduction

“Computer simulations are not evil, just misunderstood....”

- Who are NSC?
- This talk will cover
 - How technology can support an educational Wargame
 - Lessons we have learnt
 - Future concepts

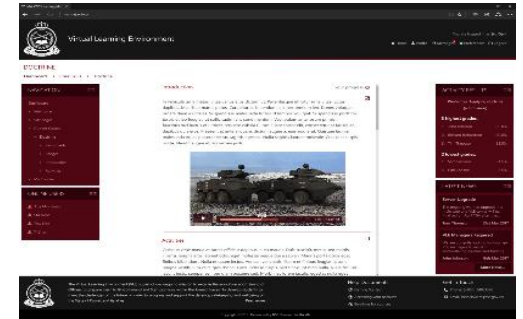
The Educational Wargame Process

Command and Control Exercises

- Turn based
- Provide context for the Training Audience decision making process
- Allow the Training Audience decisions to drive the narrative
- The wargame is a shared experience

Enhancing the student experience

- Communication
 - Email
 - Video Conferencing
 - Social Media
 - Mass Media
- Information Library
- Common Operational Picture



Common Operational Picture

iNET
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About
DH16 CWE
COP
Media Player

User Name: J2
 Syndicate: CJTF
 Side: CJTF
 Language: English

Overlays

Overview

ORBAT

Operations

Timeline

Bookmarks

Find location

Display

Save View

Print View

40N 206997 1869358

Unit Information

Unit CallSign	CTF/Mne Bn 3	 SFGPUCIN--FTFG
Unit Type	UNIT TYPE - INFANTRY	
Unit Category	CJTF	
Unit Size	Battalion	
Unit Posture	HASTY DEFENCE	
Unit Position	39N 809987 1878541	
Unit Strength	99	

Details
Resources
Links

Name	Value	
Commander	CTF/Mne Bde HQ	
Supplier	CTF/Mne BSG	
Objective	1658N 5354E(39QZU100786)	
Engaged	No	
Strength	99%	
ITCIS	05 May 00:00	

Map showing various military units (CTF/Mne Bn 1, 2, 3, HQ, etc.) and threats (IED Attack, Mortar Attack, Grenade Attack, etc.) on a terrain map.

Displaying: 23 May 0600

Timeline: 02 May 0600, 03 May 0600, 04 May 0600, 05 May 0600, 06 May 0600, 07 May 0600, 08 May 0600, 09 May 0600, 10 May 0600, 11 May 0600, 12 May 0600, 12 May 1800, 13 May 0600, 14 May 0600, 15 May 0600, 15 May 1800, 16 May 0600, 16 May 1800, 17 May 0600, 17 May 1800, 18 May 0600, 19 May 0600

Expand EXERCISE

Supporting EXCON

- People, tools & process
- Responsible for controlling the exercise
- Supporting technology
 - Simulation(s)
 - OA Support Tools
 - After Action Review (AAR) Tools

Simulation

Why computerise the simulation?

- Speed of calculation
- No emotional bias
- Book keeping & data analysis
- Not always expensive (honest!)
- Validation through use
- One simulation, many uses
- Human-in-the-loop

Simulation Adjudication

Mistakes will be made so...

- The 'fog of war' response
- Allow 'rollback'
- Simulation must allow override
- Use several cycles to build each student picture
- ... but only fix what is really needed

AAR Tools

- Aid analysis of events
- Tools often built-in
 - Visualisation
 - Bookmarks
 - Media capture
 - Event data export
- Assessment and Scoring tools



Lessons Learnt...

Computer 'assisted' exercises

- Hide the simulation
- Choose an appropriate simulation
- Reduce complexity
- Emulate functionality of the C3I systems

“Technology exists to support SMEs, not replace them”

Future Concepts

- Distributed Exercises
- Crowd Sourced OPFOR
- Computer based assistance for manual gaming
- Electronic Battle-box



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QUESTIONS?