2016 NATO Urban Wargame

28 September – 7 October 2016

First Impressions Report

Introduction

The 2016 NATO Urban Operations Wargame occurred 28 September to 7 October aboard the NATO Defense College in Rome, Italy. The wargame utilized personnel from 18 member countries, dividing them into four brigade teams, each of which worked a MEB-level problem set placed in a 2035, smart city, of 5.7 million people.

The wargame addressed offensive, defensive, stability, and expeditionary activities using three vignettes; joint forcible entry into an urban area, offensive and defensive actions to defeat an enemy in an urban area, and transition to host nation government. The brigade teams analyzed proposed 2035 capabilities, and discovered new ones, by fighting each vignette twice – first as today's force against a 2035 enemy, and then again with 2035 capabilities.

While the wargame would have identified capability requirements and gaps, the presence of Marines proved instrumental in maximizing the event's potential. This presence, to include a substantial number of practitioners from the Operating Forces, allowed the Marine Corps to fully exploit the game and develop a draft operating concept for the urban environment that will nest under the *Marine Operating Concept* and join the rest of the Marine Corps family of operating concepts.

The purpose of Marine Corps stakeholder involvement in this game was to leverage NATO resources to meet service equities. This objective was fully realized, and arguably, surpassed.

Urban Operations Concept

The wargame design and scenario provided the necessary catalysts for Marine Corps participants, and specifically the Marine Corps led brigade team, to grapple with the urban problem and address how naval forces will project power ashore, gain access to the urban space, generate presence effects, and effectively operate. In working their way through the problem, the Marine brigade team rapidly recognized that new capabilities – taken individually or as a list – provided little utility in and of themselves and merely resulted in today's force with more technology. Only when these capabilities were binned together in different ways did they provide today's force with the opportunity to attack the urban problem set using entirely new methods.

The Concept – Urban I3

The urban operating concept, *Urban I3*, developed by the Marine brigade team provided a draft framework for addressing the employment of military forces, in operations across the conflict continuum, in urban and complex terrain. It rests on a foundation that requires the tight nesting and synchronization of –

- Integration the task-organized integration, not merely alignment or coordination, of all functions and capabilities within the force
- Interoperability the rapid development of command structures and relationships across JIIM actors to achieve seamless fusion of effort
- Interdependency the identification and development of resiliency factors that will maximize the amalgamation of civilian and military efforts to solve the problem set

In turn, this basic framework requires that military forces excel in a family of subordinate concepts necessary to successfully conduct *Urban I3*. Many, if not most, of these subordinate concepts possess exceptional utility in operations outside of the urban environment—

- Reconnaissance/Counter-Reconnaissance maximize use of sensors and semi-autonomous systems to contribute to a whole system reconnaissance approach while actively seeking, targeting, and destroying enemy reconnaissance systems
- Signature Management to not merely understand and manage friendly signatures, but to understand and exploit the signatures that exist with the urban environment and city systems to both find the enemy and mask friendly actions
- Flow Control the ability to identify how systems and networks create urban flows throughout the environment, and then target those flows to deliver specific effects from supporting them to destroying them
- Hollow Space Maneuver to find, and then contest and exploit using sensors and movement, maneuver in the voids and hollows of the urban environment. Voids and hollows may consist of physical space such as tunnels and parks, but also cognitive elements such as friendly neighborhoods that create avenues of approach and temporary sanctuary
- Information Operations Fires completely integrate and gain the initiative in the cognitive element by not only generating specific effects against target audiences in a combined arms manner, but also broadcast operations in real-time, using an "NFL game day" approach to achieve message dominance
- Spike to Strike the ability to pressurize the city system in the physical, cognitive, and moral realms and force enemy actions that can be targeted for engagement – from further information exploitation to destruction. Variations on this concept allow for identification of weaknesses and gaps in resiliency factors that enable effective civ-mil responses
- Urban Foraging enabling small, dispersed units to live off existing city systems for basic life support and maintenance allowing them to maximize their movement and staying power while minimizing their signatures and the vulnerabilities of external sustainment
- Resiliency Response the ability to use smart city systems to both track, and respond in realtime, to variations in resiliency factors and operate at the speed of perception

- Infestation Tactics (Immersion Tactics) the employment of swarms of small teams that dramatically complicate an enemy's ability to act while maximizing the friendly force's ability to maneuver to engage or assault
- Just-in-Time/Just-on-Target Logistics employing commercial business models, advances in semi-autonomous unmanned vehicles, and the existing systems of the city (such as self-drive transport), to leverage just-in-time and just-on-target delivery methods to sustain dispersed forces while minimizing risk to mission or forces
- Perception-Based Operations use intelligence-based operations, effects-based operations, and attitude and behavior targeting that enable friendly forces to operate at the "speed of perception," retain the initiative in the information environment, and generate physical and cognitive effects on target audiences
- Agile Authority empower specific actors, units, and commanders to comprehensively operate across multiple domains and civ-mil functions to support integration, interoperability, and interdependence enabling both decisive effects against the enemy but also decisive actions that support resiliency factors
- Subliminal Battle exploit the maneuver and effects space available to military forces in the gray areas short of overt hostilities to shape the battlespace utilize information warfare and maneuver to create ambiguity and prepare the battlefield for decisive actions
- Matrix Organization flatten and extend command and control while utilizing an agile, versatile task organization and authorities model to achieve seamless fusion and integration across the force a variation on team of teams
- Multi-domain Maneuver utilize all domains as maneuver space, not merely effects space
- City as a Weapon weaponize city systems and the population to create maneuver opportunities (from flash mobs to civic action organizations) and generate effects (pressurizing city flows and systems)

Urban Model

An important parallel effort was the development of the existing urban model into a tool that supports operations planning and intelligence preparation of the battlefield. This model was exported to MCWL for future use in wargaming and simulations work in 2016. As envisioned, this model would serve as a basic tool, into which the data of any city of interest may be entered, generating a three-dimensional, multiple layer, instrument for developing understanding and awareness of the city in question.

When coupled with the Marvel resiliency factor mapping tool, that graphically demonstrates links and probable second and third order effects of various actions or inaction on targeted resiliency factors, the model holds significant promise as a planning tool that supports *Urban 13*.

Future Work

At a minimum, MCTOG will support MCWL's continued refinement of the *Urban I3* urban operating concept while continuing to support advances in current urban doctrine and training within the ground combat element. Concurrently, MCWL and MCTOG will advocate that the Supreme Allied Commander Transformation use the money already set aside to support a 2017 effort be used to develop and wargame an urban operations concept; and that, specifically, the *Urban I3* concept be part of that effort. If done correctly, the Marine Corps will receive a wargamed urban operations concept and associated set of capability requirements and gaps.

Such an effort would indicate that the Marine Corps continue its current "stakeholder" level of effort.

Way Ahead

Over the coming three months, MCTOG will-

- Provide a Quick Look Report with deeper analysis into the methodology, conduct, and outputs of the wargame
- Participate in creating a draft Urban I3 Operating Concept for further MCWL development
- Participate in the Initial Planning Conference for the 2017 effort in Norfolk, VA (Dec 16)
- Participate in the Analyst Workshop for the 2016 Wargame in Norfolk, VA (Jan 16)
- Participate in the revision and update of the NATO Urban Conceptual Study (Jan-Mar 16)

Conclusion

The service decision to be a stakeholder in the 2016 effort delivered significant benefits. These benefits accrued only because the service placed itself in a position to directly participate and influence planning, provide critical members of the wargame support and execution team, and provide very talented individuals to participate in the brigade teams.

If the 2017 NATO effort focuses on producing a functional operating concept – in effect allowing the Marine Corps to wargame *Urban 13* as part of MCWL's overall wargaming and concept development effort – then continued stakeholder efforts are warranted. To that end, the Marine Corps has already written the baseline 2017 planning document – adopted in its entirety by NATO as an initial position. If, despite this initial success, the 2017 NATO effort focuses on something different, then the Marine Corps should revert to participant or observer status. The decision point for this will be at the Initial Planning Conference in December 2016.