Problem overview

How do Battalion Main Command Posts evolve to be mobile, redundant, and survivable with existing equipment on hand?

The past twenty years of warfare has focused on Counterinsurgency (COIN) operations with adversaries that did not have the same capabilities. The lessons learned and best practices from this asymmetric warfare serve as the foundation for the next phase of anticipated conflict. The US Army has accepted Large Scale Combat Operations (LSCO) as the methodology of conflict with near-peer adversaries such as Russia or China. As the world watches the on-going LSCO in Ukraine, warfighting lessons become apparent to all echelons of our servicemembers….and our adversaries. The way we fought in Afghanistan and Iraq for COIN will not work for LSCO.

Near-peer adversaries have similar capabilities to the Department of Defense (DoD) across all five domains of warfare: land, sea, air, space, and cyberspace. Large Scale Combat focuses on massing combat power to attrit enemy forces and acquire territory to deny enemy advantage. In COIN, Tactical Operation Centers (TOC) were the means of controlling the fight. TOCs had robust capabilities and encouraged warfighting functions to synchronize efforts against the enemy. After twenty years of fighting, we fell victim to what all bureaucracies develop with time. TOCs became too big and lack mobility, the term “TOC-mahals” is commonplace because of their complexity. TOCs primary issue within the LSCO framework is the lack of mobility.

LSCO adversaries maintain indirect fire, air attack, and cyber and electronic warfare (EW) capabilities. They have the means of discovering the location and destroying Main Command Posts (MCP). TOC = static. MCP = light and mobile. Both TOCs and MCPs are types of command posts and provide a physical location for planners, combat systems, and the required IT network.

The process of military acquisitions is slow. Years even. If the threat of near-peer adversaries exists today, the military cannot wait for the acquisitions process to fill emerging requirements. We need to figure out potential solutions to this problem set with the already appropriated equipment and capabilities.

High Level Description

Produce a practical site layout, equipment list, manning requirement, inclement weather durable, and quickly fully operationally capable MCP guide that is tailorable through modularity.

This project is a temporary endeavor to create the unique result of the LSCO MCP. Using the existing allocation of vehicles, equipment, and assigned Soldiers for a Light Infantry Battalion, develop a mobile, survivable, and flexible MCP to complete the warfighting methodology transition from TOC to MCP.

This project goal is to develop the means of MCP employment, driving toward specific doctrinal changes in tactics, techniques, and procedures (TTP) for the MCP. Create the tested and proven rework of MCP layout without diminished capability.

From Army Technical Publication 6-0.5 Command Post Organization and Operations:

Command Post Functions

* Conducting knowledge management and information management
* Building and maintaining situational understanding
* Controlling operations
* Assessing operations
* Coordinating with internal and external organizations
* Performing Command Post administration

Main Command Posts Functions

* Controlling operations
* Receiving reports for subordinate units and preparing reports required by higher headquarters
* Planning operations, including branches and sequels
* Integrating intelligence into current operations and plans
* Synchronizing the targeting process
* Planning and synchronizing sustaining operations
* Assessing the overall progress of operations

Design Layout

* The ease of information flow
* User interface with communications systems
* The positioning of information displays for ease of use
* The integrating of complementary information on maps and displays
* Adequate workspace for the staff and commander
* The ease of displacement (setup, tear-down, and movement)

Benefits Summary

* Agile command post that retains warfighting capabilities
* Survivable command post that reduces EW threat
* Flexible and modularity to fit needs of Commander
* Redundant capabilities
* Doctrine changes for Light Infantry
* Method of Command and Control (C2) change without complete acquisitions process
* Increase efficiency of displacement
* Practical “How-to” guide products

Project Costs Summary

* Labor of Soldiers
* Time of Soldiers
* Borrowed Equipment
* Prototype Fabrication Materials
  + Wood
  + Power tools
  + Hardware
  + Dry-Erase Boards
  + Overlays
  + Misc
* Satellite Time
* EM Spectrum allocation
* Presentation Showcase
  + Team Member travel
  + Equipment transport
* Software / Firmware
* Maintenance
* Knowledge Management
* Product Development
  + Video/Photo
  + PPT
  + Excel

Project Risks Summary

* Personnel changeover (PCS)
* Deliverable result ambiguous
* Lack of authority to allocate resources
* Missing suspense deadlines has no consequence
* Waterfall approach requires step completion before moving onto next phase
* Commanders disapprove progress touch points
* Equipment required for testing not organic to unit
* Scope of project snowballing into ever growing scale