



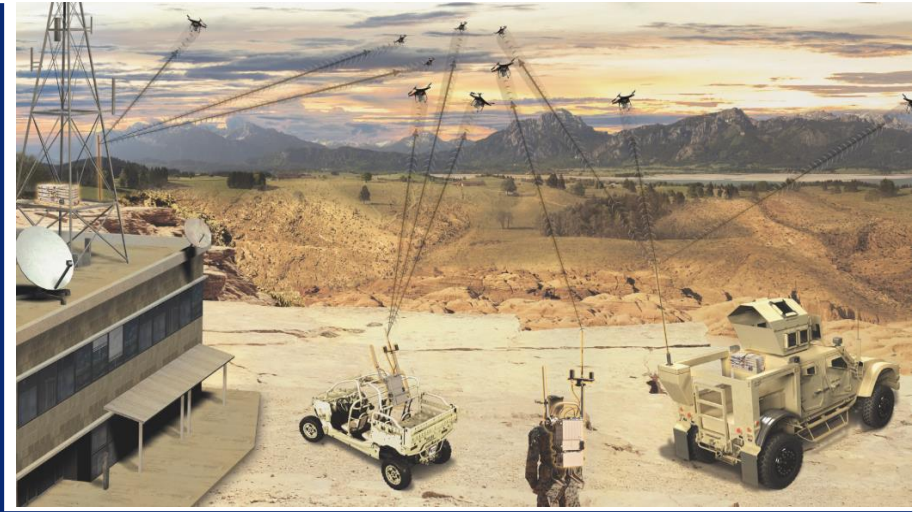
Counter UAS Capability

Jerry Coburn -- November 2017

SkyCAP – SNC's Counter UAS System

Dismounted:

- CUAS & RCIED force protection in austere environments
- User-selectable load set provides on-the-fly adaptability to changing threat environments
- Rapidly programmable to maintain effectiveness against new & evolving threats
- Omni & directional antenna configurations available to meet multiple mission profiles



Mobile:

- Scalable solutions for light, medium & heavy tactical vehicles
- Provides autonomous protection as a stand-alone system against UAS threats & IEDs
- Fully integrated with radar, EO/IR sensor & C2/GUI solutions on customer tactical vehicle platforms



Fixed-Site:

- Fully integrated with multiple radar & EO/IR sensors for single user interface
- RF environment sensing feeds Joint Engagement Sequence & Operator with advance threat alerts
- User-selectable omni & directional antenna arrays to address various threat profiles from single UAS threats to swarms
- Network-capable for single interface control of multiple systems

Industry Observations on Joint Service Capability CUAS Development

Threat Intelligence:

- *Single most important aspect of defining defeat solutions & capability*
- Requires commercial UAS technology market trends combined with technical exploitation
- Determines pace of defeat tools & techniques development
- Currently no single DOD organization tasked with developing, maintaining & providing access to a database...Several appropriate candidates

Demonstration & Test Events:

- No existent Joint Test Protocol for CUAS testing
- Variation between Service-specific testing and Joint Exercise venues:
 - Threat types & prioritization
 - Specific threat configurations (aircraft & C2)
 - Flight profiles & geometry
 - Electromagnetic environment
 - Qualitative vs. Quantitative
- End User involvement/participation/performance requirements

Considerations for Compatibility & Operational Feasibility (i.e. CONOP):

- Three essential operational environments:
 - Static or Fixed-site
 - Mobile platform
 - Dismount / Austere environment
- Automated vs. Man-in-loop:
 - Clearance procedures for kinetic & non-kinetic effects, multi-layered vs. single system
 - Mission & environment dictated
 - Sub-system dependence & engagement TTPs impact on cycle time of engagement (non-kinetic vs kinetic)
 - Electronic platform protection across multiple threat categories (CIED, CUAS, Counter C2, etc.)



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