## An Multi-Level Model of Command and Control (C2)

Steven L. Forsythe, Ph.D.

POC: Steven L. Forsythe
Johns Hopkins University Applied Physics Lab
11100 Johns Hopkins Road
Laurel MD 20723-6099
FAX: 240-228-6627
Phone: 240 228-6879

 ${\it Email: Steven. For sythe@jhuapl.edu}\\$ 

## **ABSTRACT**

This paper presents an approach developed by the Johns Hopkins University Applied Physics Laboratory (JHU/APL) to reconcile the various models of C2 with the requirement of individuals and organizations to function at multiple levels (e.g. strategic, operational, tactical). It also addresses the requirement for continuous data inputs. The model addresses several key issues such as the need for a leader to decide how much time and resources to allocate to planning functions at the various levels the enterprise must operate. What tools and characteristics are needed to plan effectively at each level? How are these tools integrated? What happens if they are not integrated? The basic framework of the Multi-level model of C2 (MLMC2) can be applied to any of the standard single level C2 models such as OODA and MAAPPER. Understanding C2 in a distributed, collaborative environment will be key to managing future enterprises which themselves will be geographically dispersed and highly net-centric.

Key words: C2 Theory, OODA, MAAPPER, Net-Centric