

12<sup>TH</sup> ICCRTS  
“Adapting C2 to the 21<sup>st</sup> Century”  
A Quantitative Model-Driven Comparison of Command Approaches  
in an Adversarial Process Model

**Tracks:** Modeling and Simulation, C2 Metrics and Assessment, Organizational Issues

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**Abstract**

In this research, we will demonstrate that for a given mission, certain Command Approaches [1] are more effective against other Command Approaches (e.g. Control Free *may* be more effective against Interventionist than Problem Solving). Lenahan [1] identified metrics and techniques for adversarial C2 process modeling. We intend to further that work by developing a set of adversarial process models that will allow us to “compete” Command Approaches (Control Free, Problem Solving and Interventionist) against each other. We will evaluate the conflict outcome, abstract process metrics [2] and resource utilization rates (materiel and human). The intent is that this work will quantitatively examine the effect of varying Command Approaches for a specific mission and lay the foundation for future work in the area of C2 process and organization research. In the future, we would like to develop hybridized or unique command approaches that are most effective for specific mission portfolios.

[1] Dr. David S. Alberts and Dr. Richard E. Hayes, “Command Arrangements for Peace Operations”, National Defense University, NDU Press Book, May 1995

[2] Lenahan, Jack “An Abstract Process and Metrics Model for Evaluating Unified Command and Control, A Scenario and Technology Agnostic Approach”, CCRP CCRTS, June 2004

Please note that this research is not yet complete. It is planned to be complete in time for submission.