



# THE LOGBOOK

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September 1, 2003

## A Publication of the Wayne E. Meyer Institute of Systems Engineering

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### RESEARCH UPDATE



USS ESSEX

The Commander Seventh Fleet is deploying the USS ESSEX ARG and the 31<sup>st</sup> MEU (SOC) as a Forward Deployed Naval Force-Expeditionary Strike Group. Several events are occurring simultaneously during the early deployment, including Trident Warrior 03 (TW 03) and the ESSEX ESG Pre-deployment Exercise (PDX). These two

exercises are of particular interest to NPS.

TW 03 includes the FORCENet Integrated Prototype Demonstration (IPD), through which several programs of record are undergoing accelerated fielding, and the ESG-Limited Objective Experiment (ESG-LOE), which is examining CONOPS and TTPs for ESG Fires, C2, and IM/KM. Several stakeholders and their agents (NETWARCOM, SPAWAR, NWDC, EWTGPAC, NCIC, NPS, CNA, and TF Web) are conducting data collection and analysis during TW 03. The NPS Information Science Department and the Meyer Institute are providing Analysis Working Group leadership, overall data collection and analysis integration, Knowledge Management for analysis, and Fires analysis for TW 03.

JTF WARNET is fielding its own advanced IT system for the PDX and is conducting its own data collection and analysis. Both events are sharing common simulation, scenario/MSELs, JECG, and White Cells. The NPS team is also coordinating and deconflicting these two analysis efforts.

NPS faculty and staff working on the project include Shelley Gallup, Bill Kemple, Nelson Irvine, Rich Kimmel, Steve Pilnick, Sue Hutchins, Randy Maule, Gordon Schacher, Jack Jensen, Bryan McClain, and Kristina Hamill.

**Congratulations to PD21 Summer  
Quarter 2003 Winners of the Meyer  
Institute Award for Excellence in  
Systems Engineering!**

*Michael Gomes, Naval Air  
Systems Command  
and  
Steven Bullard, Space and Naval  
Warfare Command*

### MEYER INSTITUTE OPENS NEW UV LAB

The Meyer Institute recently opened a new unmanned vehicle lab in Bullard Hall at NPS. The UV Lab was established to provide faculty and students the opportunity to get involved with S&T and field experimentation, which will provide near-term benefits to the warfighter. In the first two years, the efforts will be directed primarily at Special Operations Forces, with an emphasis on UAVs and AUVs. Eight companies and several government facilities are working with NPS to experiment with a surveillance and target acquisition network that links multiple UAVs, ground sensors, and ground troops with two-way voice, data, and streaming video.



### NPS POISED TO RENDER UV TACTICAL PLANNING ASSISTANCE



Silver Fox Launcher

In response to the stated need of Commander Cruiser Destroyer Group TWELVE and COMSECONDFLT, the Navy Warfare Development Center tapped the Meyer Institute of Systems Engineering to generate tactics and procedures for optimally employing emerging UV assets to Naval missions, such as achieving a Recognized Maritime Picture (RMP), Surface Search and Control (SSC), Maritime Interdiction Operations (MIO), and Armed Surface Reconnaissance (ASR).

NPS will develop and deliver to the Fleet a Tactical Memorandum and Tactical Aid for planning missions and employing unmanned vehicles in support of maritime tactics.

NPS is uniquely positioned to meet the Fleet's needs. The project will receive analytical support from the faculty, and students with operational experience will have an opportunity to fully consider C4I, tactical, and technical parameters. Through functional decomposition, problem formulation, and model development, researchers expect to gain insight into how best to employ unmanned vehicles and what planning factors are most relevant.

The Institute is establishing direct liaison with the USS ENTERPRISE Carrier Strike Group via their SIPRNET Knowledge Web (K-web) and anticipates generating a weekly update via NIPRNET e-mail. Interested parties are invited to contact the NPS project lead, LCDR Russell Gottfried (831-656-7858) at Gottfried@nps.navy.mil.