



## Operations Research Seminar

# Modeling Fleet Forward Presence Using the Fleet Response Plan and the Latest PERSTEMPO Rules

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CNA developed a model that calculates fleet forward presence for a given force structure in accordance with the Navy's new PERSTEMPO Instruction and the Fleet Response Plan. We envision the model as a collection of spreadsheet tools for estimating the force structure required to meet specified presence demands. An additional capability is to use the model to assess the force structure residing in the 313-ship Navy while accounting for the new changes in PERSTEMPO. The model is tailored to specific applications and ship types, including large-deck amphibious ships with integrated Marines, aircraft carriers with integrated air wings, surface combatants, and submarines. Our recent work has focused on determining the impact of the new PERSTEMPO rules on scheduling assumptions, as well as calculating and displaying notional schedules that provide the maximum forward presence for a given force structure under the PERSTEMPO rules, independent of the presence demand.

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### **Bio**

Dr. Neil Jenkins received his PhD in Chemistry from Cornell University in 2006, following undergraduate degrees in Physics and Chemistry from Wake Forest University. He has been on the Research Staff at the Center for Naval Analyses (CNA) for one year. His research at CNA has focused on ship scheduling; electronic warfare; and intelligence, surveillance, and reconnaissance.

**Date: Thursday, February 14, 2008**

**Time: 15:00-16:00**

**Location: Glasgow 115**