2010 CNR Challenge

Next Generation Technologies for Today's Warfighter

Seedling Research Funding

Bring your innovative ideas here and help us uncover the "next big thing." Funding will be provided for innovations that fit the theme of the conference and the six featured science and technology topics

Code 35

Directed Energy in Maritime Environments

Characterize the beam distortions through varying weather, sea states, and diurnal variations for the maritime boundary layer, and develop approaches to compensate for wet optics, blooming, and tracking through line-of-sight obscurations.

ONR

Revolutionary Research . . . Relevant Results

OFFICE OF NAVAL RESEARCH

2010 CNR Challenge

Next Generation Technologies for Today's Warfighter

Code 35 Guidelines:

Title: Directed Energy in Maritime Environments

Objective: Characterize the beam distortions through varying weather, sea states, and diurnal variations for the maritime boundary layer, and develop approaches to compensate for wet optics, blooming, and tracking through line-of-sight obscurations.

Description: Naval applications of directed energy weapons, sensors and communications links requires characterization of, and compensation for, the marine boundary layer. Varying humidity, density fluctuations in the beam path, and intermittent line of sight to the target complicate the use of directed energy systems and lead to wavefront distortions, blooming, and tracking errors. In addition, operation at sea leads to the potential for wet optics on the beam director or transmission window.

POC: Sarwat Chappell

The 2010 CNR Challenge will award up to 10 awards, each totaling up to $100K, to open funding opportunities for a larger pool of participants. Before submitting your white paper, take time over the course of the 2010 Naval Science & Technology Partnership Conference to meet ONR subject matter experts at the Information Exchange and in breakout rooms to discuss their needs. Submit your idea on site at the Director of Innovation's break-out room (must be on CD). Once received on site, ONR will provide you with a receipt acknowledging your submission. Entries will be reviewed after the conference with all submissions evaluated based on individual merit, applicability, relation to naval energy and research needs.

Specific white paper guidelines and the Award Timeline are available in the Director of Innovation's break-out room.