NRL BAA Announcement
 # 71-09-03

TOPIC CANCELED 5/1/10

ACTIVE SONAR SIGNAL PROCESSING BASED ON TIME-REVERSAL OR PHASE-CONJUGATION

The Naval Research Laboratory (NRL) is conducting a research and development program to generate new technologies that improve the performance of active sonar in dispersive and reverberation-limited littoral environments. The frequency bands of interest include low-frequency (below 1 kHz) and mid-frequency (1 to 5 kHz). The program is concentrating on technologies based on the principles of time-reversed signals from single sensors and arrays. NRL is interested in innovative research proposals on:

(1) signal processing techniques that mitigate signal spreading from dispersion and multipath without the use of *a priori* environmental information,

(2) signal processing techniques that increase signal to reverberation levels, and

(3) signal processing techniques that apply to multistatic sonar geometries.

Deliverables should consist of theoretical, numerical or experimental studies rather than system studies that are focused on evolutionary improvements of specific existing systems.

Address White Papers (WP) to Code 7142, e-mail, telephone (202) 404-4670, or e-mail, telephone (202) 404-4811. Allow one month before requesting confirmation of receipt. Substantive contact should not take place prior to evaluation of a WP by NRL. If necessary, NRL will initiate substantial contact.