NRL BAA Announcement
 # 74-09-03

MAPPING, CHARTING, AND GEODESY

The research focus is on development and exploitation of new technology and techniques to support all aspects of mapping, charting, and geodesy including advanced sensors, algorithms, and processing techniques for hydrographic and geophysical surveying, navigation science, digital cartography, map design and displays, and data extraction and compression techniques. Research interest areas are:

1) Mapping science research and development is conducted in image processing methods and techniques to extract environmental information such as bathymetry, seafloor bottom type, and acoustic provinces from remote optical and acoustic system data.
2) Research in Geographic Information Systems, map compression, data base design and standardization, and data interpretation and display is conducted to generate more accurate, less cluttered, digital mapping and charting products. Development of image maps, bathymetry/shoal extraction techniques, and compressed aeronautical charts developed at NRL is also performed.
3) Advanced sensor research and development is performed on active and passive sensors and navigational systems with survey charting applications primarily in support of Navy requirements. Hydrographic sensors and data extraction/processing using acoustic, electromagnetic and optical instruments are developed and tested in an effort to collect information faster, with better accuracies, and higher densities than existing techniques provide. Research in geophysical sensor development, algorithms and processing techniques emphasize mapping of magnetic and gravity fields and their variability.

Address White Papers (WP) to Code 7440, or e-mail, telephone (228) 688-4197. Allow one month before requesting confirmation of receipt of WP, if confirmation is desired. Substantive contact should not take place prior to evaluation of a WP by NRL. If necessary, NRL will initiate substantive contact.