



OFFBOARD COUNTERMEASURE TECHNIQUES AND TECHNOLOGY RESEARCH AND DEVELOPMENT

The U.S. Navy is interested in exploring the use of Offboard Countermeasure techniques and technologies for purposes of Naval Electromagnetic (EM) Spectrum Dominance and EM Maneuver Warfare (EMMW). Proposals that incorporate NRL capabilities are encouraged. Proposals may include, but are not limited to:

- 1) Wideband, highly linear RF (primarily C, X, Ku, K, Ka, and W bands) technologies and concepts for Size, Weight, and Power (SWaP) constrained applications:
 - a. Isolation technologies and concepts;
 - b. Antennas and antenna feed structures and technologies;
 - c. High speed receiver technologies and concepts (detection, classification, etc.);
 - d. Signal processing technologies, techniques, and concepts;
 - e. Transmitter technologies and concepts;
- 2) Integrated, multi-platform (all onboard, all offboard, or combination on and offboard) EW techniques and concepts;
- 3) Extreme temperature materials for decoy towlines;
- 4) Highly efficient power generation;
- 5) Size, Weight, and Power (SWaP) constrained, highly efficient cooling technologies;
- 6) Novel and innovative IR and visible obscurant materials for use in offboard decoys;
- 7) Concepts and technologies supporting low cost, expendable/semi-expendable unmanned vehicles; and
- 8) Field experiments to evaluate and quantify the performance of:
 - a. Single offboard EW systems;
 - b. Multiple offboard EW systems operating for a common goal;
 - c. Integrated on and offboard EW.

NRL is interested in proposals offering initial increments comprised of short term studies (6-8 man-months) which can then be used to decide if the research deserves further investment.

Address White Papers (WP) to 5710Proposals@nrl.navy.mil . 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.