# **Department of the Navy SBIR/STTR Transition Program**

Statement A: Approved for Release. Distribution is unlimited.

Topic # N131-029
MAGIC (R) Filter Anti-Jamming Capability for RT-1944/U Radio Adaptive Dynamics, Inc

### **WHO**

SYSCOM: NAVSEA

Sponsoring Program: Littoral

Combat Ship (LCS)

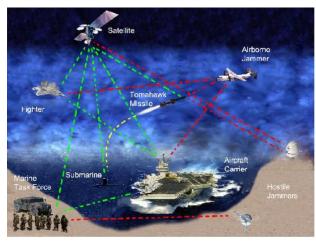
Transition Target: LCS, PMS 420

TPOC:

(850) 235-5883

Other transition opportunities: Transition to PMS-420 Multiple Vehicle Communication System (MVCS) project. MVCS is used of communications between LCS and its unmanned systems.

**Notes:** Generated by Adaptive Dynamics, Inc. No restrictions on use.



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### **WHAT**

**Operational Need and Improvement:** Ability for LCS to communicate with its unmanned systems in a radio frequency jamming environment

**Specifications Required:** Retrofit anti-jamming capability into a radio that wasn't designed for it at the outset

**Technology Developed:** Innovative anti-jamming capability developed for a circuit board that fits into the slots available in the designated shipboard radio

Warfighter Value: Maintains operational capability in a severe jamming environment

## WHEN Contract Number: N00024-14-C-4588 Ending on: September 28, 2016

Milestone	Risk Level	Measure of Success	Ending TRL	Date
Premliminary Design Review	Low	COTS prototype for proof-of- concept demonstration.Initial design of custom hardware that meets operational needs	5	April 2015
Critical Design Review	Med	Complete design to meet, thermal, radio frequency and space constraints	5	September 2015
Delivery of Prototype with Initial Operational Capability	Med	Deliver boards for prototype testing. Succesful demonstration of out-of-channel anti-jamming capability	6	January 2016
Testing of prototype boards with MAGIC Filtering Capability	Med	Sucessful demonstration of co- channel and out-of-channel anti-jamming capability	7	August 2016

### **HOW**

**Projected Business Model:** Adaptive Dynamics will supply boards to NAVSEA for integration into the RT-1944/U radios

**Company Objectives:** Expand the set of tactical applications for our anti-jamming technology and become a leading supplier of interference mitigation systems to the DoD

**Potential Commercial Applications:** The RT-1944/U radio operates in the commercial WiFi band. Consequently the technology can potentially be adapted to a number of commercial systems to minimize interference.

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