Replenishment from Ships to Point of Need Delivery (RESPOND)

**Project Summary:** A ship launched autonomous system capable of delivering fuel or supplies of up to 4000 lbs at ranges up to 100 miles. The system will be capable of deployment from a variety of high speed connector vessels, such as the Expeditionary Fast Transport (T-EPF - formerly called the Joint High Speed Vessel) as well as commercial offshore supply vessels (OSVs), and potentially ground installations. Once launched the system navigates autonomously to its predetermined destination where payload delivery occurs via one of several potential modes including: 1) landing with the payload and 2) precision dropping the payloads and autonomously returning to the launch vessel. The precision drop mode may include drops at multiple locations using technology already being developed by the U.S. Army RDECOM, Natick Soldier RDEC for the Autonomous Aerial Insertion and Resupply into Dense, Urban, Complex Terrain (AAIRDUCT) Joint Capability Technology Demonstration (JCTD) program.

**Benefit:** This effort will result in the demonstration of a new capability to deliver cargo directly from naval vessel to the shore-side warfighter without the use of high value and vulnerable assets such as helicopters and amphibious craft.

**Duration of project:** FY20 – FY21

**Participants:** Naval Surface Warfare Center (NSWC) and Research Development and Engineering Command (RDECOM)

**Project advocacy (funding or otherwise):** RDECOM, NSWC and United States Transportation Command