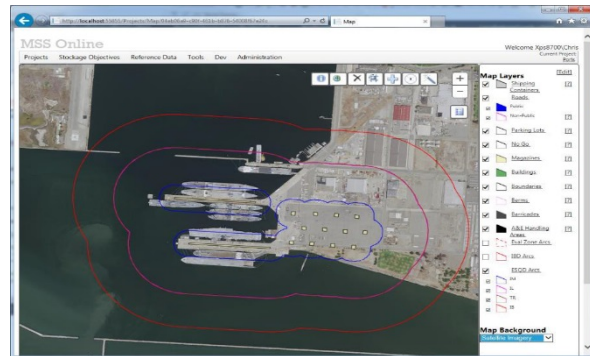




### **Web Based Seaport Explosives Safety Planning**

**Project Summary:** The Department of Defense (DoD) has conducted extensive research on the movement of military forces securely through commercial U.S seaports as a potential augmentation capability to existing military ocean terminals, while causing minimal disruptions to commerce. However, with the continuous flow of inbound and outbound cargo at



commercial seaports, any DoD related activity could generate potential conflict between the military and the local port authorities on how the strategic seaport infrastructure could be utilized to meet national security requirements while balancing commerce. This problem is further complicated by the fact that most of the commercial seaports are operating at or near capacity and they might not be readily available to the DoD to plan troop deployments along with the massive quantity of logistics assets that follow in support of a global conflict or a humanitarian mission. This proposed effort will deliver a capability that will expand on the functionality developed in web based Munitions Survivability Software application to help planners manage the Net Explosive Weight considerations by Hazard Class/Division for munitions that are flowing through military or commercial seaports of embarkation and/or debarkation. Furthermore, it will also help design layout plans for the temporary storage of ammunition when establishing and initially operating a seaport in an expeditionary environment.

**Benefit:** An ammunition storage and explosive safety application for users in a mobile or deployed environment. A website along with a helper mobile based application could be utilized to display maps and a series of wizards that would guide the user through the process of designing a layout of ammunition storage magazines, taking into account explosive safety Quantity-Distance criteria.

**Duration of project:** FY18-FY19

**Participants:** Army Logistics Research & Engineering Center

**Project advocacy (funding or otherwise):** U.S. Army Armament Research, Development and Engineering Center (ARDEC); Engineer Research and Development Center (ERDC)