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FIELD MANUAL FOR EVALUATING USABILITY OF PORTS AND HARBORS FOR UNITED STATES NAVAL VESSELS DURING HUMANITARIAN MISSIONS

ABSTRACT

This report outlines a systematic approach for assessing the usability of ports and harbors for U.S. Navy surface vessels in a natural disaster-stricken country. By examining the U.S. Navy's responses to the 2010 earthquake in Haiti and the 2004 tsunami in Indonesia as case studies, two major lessons learned were identified: aerial delivery of supplies may encounter logistical chokepoints as it is limited by the aircraft's carrying capacity, weather, and the host nation's potentially damaged supporting infrastructure (e.g. airports, control towers, etc.); and the importance of optimizing the selection of responding vessels - while the aircraft carrier is the most capable platform for delivering large amounts of relief aid and supporting personnel, it may not be particularly efficient for distributing aid due to its daily operating cost of \$6 Million. An optimized solution for reducing the lag time between disaster and relief aid is proposed through this field assessment manual, to be utilized by forward-deployed engineering reconnaissance teams, that will help shape the team's recommendations for the types of surface ship best suited for the Humanitarian Aid and Disaster Recovery (HADR) mission. The manual includes checklists and tables that will streamline the inspection and field assessment, given the local site's predominant ocean conditions and infrastructure's condition and available assets.