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Topic: TNT Maritime Interdiction Operation Experiments: Enabling Radiation Awareness and Geographically Distributed Collaboration for Network-Centric Maritime Interdiction Operations

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## **Abstract**

The paper addresses technological and operational challenges of developing a global plug-and-play Maritime Domain Security testbed. This joint NPS-LLNL project, supported by partners from Sweden, Austria, and Singapore is based on the NPS Tactical Network Topology (TNT) comprised of long-haul OFDM networks combined with self-

forming wireless mesh links to radiation detection sensors, and real-time radiation awareness collaboration with geographically distributed partners. In the center of our discussion are networking, sensor, and collaborative solutions for the Maritime Interdiction Operation (MIO) Experiments in which geographically distributed command centers and subject matter experts collaborate with the Boarding Party in real time to facilitate situational understanding and course of action selection. The most recent experiment conducted in the San Francisco Bay jointly with partners from Sweden, Singapore, and Austria proved feasibility and good potential of the proposed key technologies aimed at improving MIO.

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