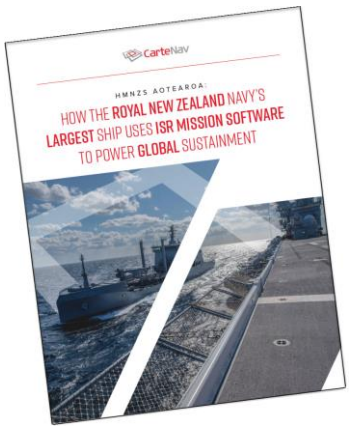
CLIENT CarteNav Solutions

PROJECT Case study: HMRNZN Aotearoa

OBJECTIVE Describe the benefits the Royal New Zealand Navy gained by installing AIMS-ISR mission software on their largest vessel

COPY EXCERPT

How the Royal New Zealand Navy's Largest Ship Uses ISR Mission Software to Power Global Sustainment



Call or write CopyEngineer to receive a PDF of the complete case study.

Or view/download it online at: cartenav.com/case-study/hmnzs-aotearoa/

When the Royal New Zealand Navy commissioned a new, state-of-the-art sustainment vessel, it turned to CarteNav Solutions for a commercial off-the-shelf (COTS) solution to its integrated sensor management requirement. Through seamless sensor integration, CarteNav's AIMS-ISR provides a comprehensive local operating picture that optimizes the crew's situational awareness and contributes significantly to its mission effectiveness.

The Royal New Zealand Navy upgrades its logistics support fleet

In July 2020, the Royal New Zealand Navy (RNZN) commissioned the latest addition to its fleet, the HMNZS Aotearoa. (Aotearoa is the Māori name for New Zealand, commonly translated as "the land of the long white cloud.")

The Aotearoa is a Polar-class Maritime Sustainment Capability (MSC) vessel built by Hyundai Heavy Industries (HHI). Its primary mission is to provide global sustainment to New Zealand and coalition maritime, land and air units and to United Nations security operations through resupply of ship and aviation fuel, dry goods, water, parts and ammunition.

Aotearoa is built to polar class 6 certification (Summer/ autumn operation in medium first-year ice) as its roles include Southern Ocean monitoring and Antarctic operations including the resupply of McMurdo Station and Scott Base.

Effective sensor integration was a key requirement

Due to the nature of her mission, the Aotearoa frequently finds herself in potentially hazardous situations, even in peacetime.

Her refueling and resupply duties necessitate frequent proximity to other ships. Close-to-coast operations, like Antarctic base supply and Humanitarian Assistance Disaster Relief (HADR) missions, can put her in dangerous waters—near icebergs, storms, and even active volcanos.

The Aotearoa also takes part in joint task force operations. These multinational endeavors necessitate the coordination of movements with many other ships during re-supply operations and in the handing off of positions of unknown vessels and aircraft to other task force members.

In all these scenarios, the performance of a ship and its crew benefits from effective sensor integration. The ability to quickly and accurately bring multiple sensors to bear on a single target track—and having data from each of those sensors collated for each track on a single screen—clarifies the local operating picture and optimizes the crew's situational awareness…