

BEYOND LINE-OF-SIGHT COMMUNICATIONS FOR RAN DESTROYERS

Hobart Class guided missile destroyer (DDG)

The Hobart Class guided missile destroyers (DDG) of the Royal Australian Navy (RAN) provide air defense for accompanying ships in addition to land forces and infrastructure in coastal areas, and for self-protection against missiles and aircraft. It is equipped with the mission proven AEGIS combat system used by NATO and its allies.

KEY FACTS

- Displacement: 7000 t full load
- Length: 146.7 m
- Beam: 18.6 m
- Speed: 28+ knots (top speed)
- Range: 4500 nmi (18 kt)

SYSTEM DESIGN ECS
INCL. TOP DECK DESIGN ECS

RADIATION HAZARD PROTECTION

LOS COMMUNICATIONS SYSTEM INCL. ECCM

BLOS COMMUNICATIONS SYSTEM

HF BROADBAND SYSTEM



"In today's naval forces, higher technical and procedural complexity has to be mastered to maintain mission readiness. Reliable communications are of the upmost importance in any operation. Navies can enhance their capabilities through key technology drivers like High Frequency (HF) systems. We at Rohde & Schwarz are very proud to have our equipment deployed on RAN vessels and we strive to deliver a future-ready capability on time and on budget."

Gareth Evans, Managing Director of Rohde & Schwarz (Australia)

POWERFUL DEFENSE FOR AUSTRALIAN

The Hobart Class of ships comprises three of the world's most capable naval vessels which are ready to respond to a more complex and contested maritime domain. They are providing the Royal Australian Navy (RAN) with advanced layered offensive and defensive capabilities to counter conventional and asymmetrical threats.

OVERVIEW

In naval applications, Rohde & Schwarz provides fully integrated communications systems. NAVICS® by Rohde & Schwarz is a secure and fully-IP based system solution for internal and external communications (voice and data) across all security domains for all classes of ships working in a joint or combined environment. The independent company supplies beyond line-of-sight (BLOS) communications for Hobart class destroyers and communications systems for other RAN vessels, with capability sustainment available from the Rohde & Schwarz Australia engineering facility. Rohde & Schwarz has provided more than 40 navies with state-of-the-art communications technology.

THE COMMUNICATIONS SYSTEM: ROHDE & SCHWARZ HF BLOS COMMUNICATIONS

The R&S® M3SR Series4100 high frequency (HF) software defined radio (SDR), part of the SOVERON® radio family, fulfills the latest naval communications requirements and standards. Several military standards, including frequency hopping and automatic link establishment, and data transmission methods, such as LINK 11, LINK 22 and broadcast ship shore in the modern IP capable stage, are supported. The R&S® M3SR Series4100 offers IP support via ethernet connection and over the air. It is extremely flexible and can be adapted to a wide range of deployment conditions. The maintenance effort and logistic supply is low because the modular concept that allows the use of many identical system components.

ADVANTAGES OF A MODERN HF BASED COMMUNICATIONS SOLUTION

HF BLOS communications provide extended range and voice communications and the exchange of high-grade messages. HF allows worldwide communications due to its unique propagation characteristics. Rohde & Schwarz HF communications systems offer a unique, high-performance HF radio solution. The systems make it possible to easily establish shortwave communications and are highly valued by naval operators all over the world. The R&S® M3SR Series4100 is a powerful radio platform that can be extended at any time and is a safe, mission ready and future viable investment. Radio equipment by Rohde & Schwarz already includes HF wideband functionality to establish long-range data links.

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