

# AWDs in Operation: Hobart Class Combat System

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## *Hobart Class Air Warfare Destroyers*

Australia's new Air Warfare Destroyers will be called the Hobart Class.

The Hobart Class destroyers have a platform (ship) design based on the Spanish F100 series destroyers and the Aegis Weapon System developed for the US Navy.

The specialised 'Hobart Class Combat System' combines specific Australian-selected additions with the core Aegis Weapon System; brought together through the Australian Tactical Interface, which was developed by Kongsberg and Raytheon Australia.

The Australian additions to the combat system include communications, electronic warfare, sonar, Nulka missile decoy system and short-range defence systems.

The Hobart Class destroyers will provide air defence for accompanying ships; protect land forces and infrastructure in coastal areas and self-protection against missiles and aircraft.

## *Radars*

### AN/SPY-1D(V) Radar

The AN/SPY-1D(V) or 'SPY' sky-search radar is the main sensor for the Aegis Weapon System and is easily identified by the four octagonal-shaped array faces that are located on the superstructure of each ship.

The four array faces send out beams of electromagnetic energy in all directions, providing a continuous search and tracking capability for hundreds of targets. The SPY radar can distinguish targets that are moving from stationary ones and reject non-targets such as clouds and flocks of birds.



### AN/ SPQ-9B Radar

The AN/SPQ-9B or 'Spook' horizon-search radar is located on the main mast of each destroyer and can track over 200 radar contacts simultaneously.

The SPQ-9B radars can search and track targets immediately above the sea surface, such as low-flying aircraft, unmanned aerial vehicles and missiles.

### *Surface warfare weapons*

The surface warfare weapons on the Hobart Class destroyers include long range anti-ship missiles for over-the-horizon sea and land targets and close-in weapons systems.

Each Hobart Class destroyer will have six Vertical Launch System (VLS) modules. Each module contains eight cells (compartments) available to store and launch missiles. There are a total of 48 cells in each ship. A single cell can be armed with either a single Standard Missile 2, or four Evolved Sea Sparrow missiles.



*AWD Alliance CEO Rod Equid shares truck space with VLS modules for the Hobart*

For closer targets, each ship has a Mark 45, five-inch naval gun, two Typhoon weapon systems and a Phalanx Close-in Weapon System (CWIS).

The five-inch gun is mounted towards the bow of the ship and will be able to hit targets on land, air and at sea. The Navy's ANZAC Class frigates have similar guns.

Together with the Harpoon missile, the five inch gun will provide naval gunfire support for troops close to shore and for destroying enemy coastal infrastructure.



*'Mark 45 five-inch naval gun*

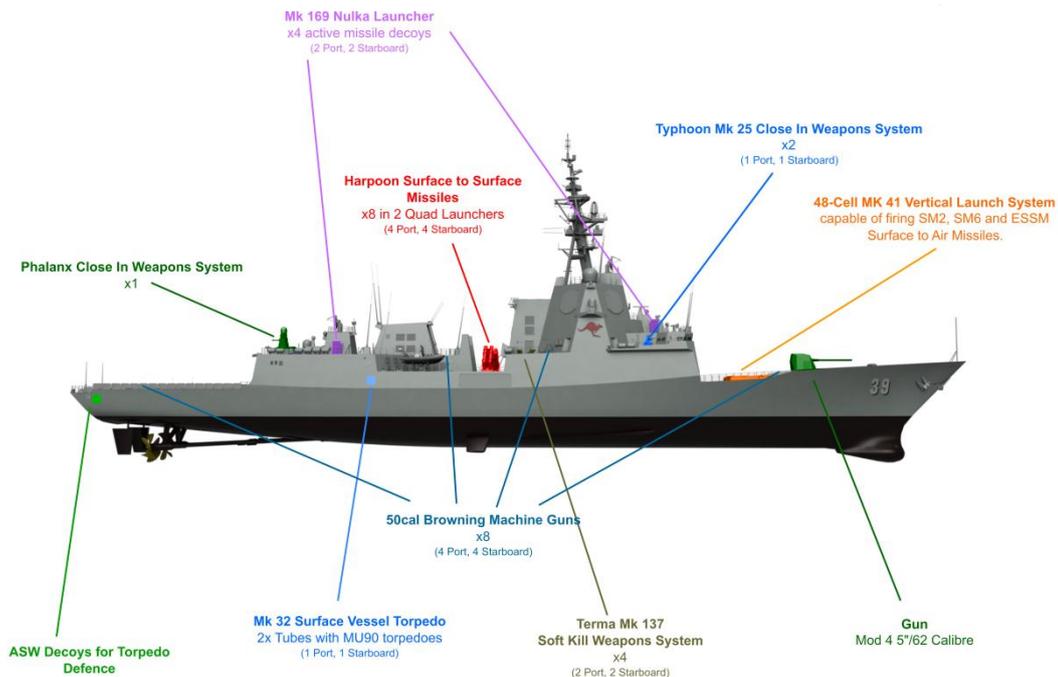
The Phalanx Close-In-Weapon-System includes a fast-reaction 20mm Gatling gun that will provide the destroyers with a last line of defence against anti-ship missiles, land-based attacks and aircraft at short range.

The Phalanx CIWS is made up of a rotating cluster of six barrels that fire ammunition at a rate of up to 4,500 rounds per minute, as well as search and track radars and an integrated electro-optic sensor.

The Phalanx CIWS is located at the rear of the ship on top of the helicopter hangar, overlooking the flight deck.

### *Under the sea*

The Hobart Class Undersea Warfare capabilities include an Integrated Sonar System, consisting of a hull mounted sonar, an active and passive towed variable depth sonar, a torpedo detection system, decoys and surface launched torpedos.



### *Seahawk on board*

The Hobart Class has facilities to operate and maintain a single Seahawk multi-role helicopter, such as the MH-60R, for Surface and Under Sea Warfare, surveillance and response tasks.

The helicopter facilities include the Aircraft Ship Integrated Secure and Traverse (ASIST) system. This secures the helicopter to the deck in rough seas and enables the helicopter to be moved on deck with no need to connect any extra equipment or guide cables to the helicopter.



See the [\*Air Warfare Destroyers: the Big Picture\*](#) for more information on the role of the AWDs.