

# PERTIP CLASS DDGS

Converting the Airfix Rommel to a Royal Australian Navy guided missile destroyer by Paul Beaver



Above HMS Hobart entering Sydney harbour. Note the Ikara missile, deck lockers and foremast detail. Below HMAS Brisbane at sea showing a view of the Ikara deckhouse and launcher (Photos RAN Official via Paul Beaver).

IN JANUARY 1963 the Royal Australian Navy announced a programme to build three guided missile destroyers (DDGs) in the United States by the Defoe Shipbuilding Company of Bay City, Michigan. They would be the largest and most advanced destroyers to be built for the RAN and the latter's first of the guided missile generation. (The RAN's main destroyer force at that time being modified Darings.) They would also form the 1st Destroyer Squadron, RAN.

Although generally similar to the USN's 'Charles F. Adams' Class, the 'Perth' Class, as they are known, have several differences. As Airlix have produced a kit of the FGNS \*Rommel\* the differences between the 'Perth' Class and the latter will be noted below, hopefully as far as the above deck detail can be judged.

The 1st Destroyer Squadron has the roles of ocean convoy defence and attacking enemy submarines.

Name	Pen No	Completed	Commis- sioned
Brisbane	41	24.1.68	16.7.67
Hobart	39	18.12.65	18.12.65
Perth	38	22.5.65	17.7.65

## Armament

The main armament consists of 2 x 127 mm Mk 42 rapid fire gun mountings fore and aft; a single Tartar SAM launcher aft; two single Ikara ASW launchers amidships; and 2 x 3 torpedo-tubes on either side under the bridge. (The Ikara is an Australian designed ASW system and it replaces the ASROC of the USN and FGNS vessels.) During refits the 127 mm mountings have been replaced by the Mk 10 model but this should make no difference for the modeller.

## Modifications

Again like the Rommel the general shape





is good but the systems need updating and Australian gear substituting. Working from the top of the foremast to the bottom; reshape the uppermost platform and add three vertical EW aerials in the three corners of the reshaped triangular platform. The EW dome in the centre should be enlarged. Two bracing struts go from the after end of the platform to the main mast. Delete the platform halfway between the top platform and the first radar platform. The uppermost radar platform houses the SPS37 air surveillance radar which is of a concave open mesh reflector type. This platform is enlarged forward to house a small horizontal bar type navigation radar scanner. A long braced aerial should be fitted horizontally abeam the SPS37. This is part of the electronic counter measures (ECM) system. On the lower radar platform is housed the SPS10 reflector which is of a similar concave design to the SPS37. Also from this platform an ECM aerial should be fitted. Still lower is another platform housing an EW dome on the after port side. The forward end of this platform should be shortened to delete the 'bump'

Halfway between this platform and the SPS10 platform is a new bracing strut to the main mast. The lowest platform houses two EW domes which, it is thought, are used to detect surface missiles. All of these platforms are braced forward as shown. The main supporting struts from the SPS10 platform are repositioned so their apex is lower and coincides with the new bracing strut. In the detail illustration the super-structure and forward funnel have been

deleted for clarity.

Perhaps the major difference between the 'Lutjens' Class and the 'Perth' Class is the deletion of the latter's ASROC ASW system which is replaced by the Anglo-Australian Ikara anti-submarine system. For this latter system a completely new deckhouse has been constructed amidships between the two funnels, hence it is necessary to delete the ASROC launcher. This deckhouse should be brought out to the full width of the hull with five struts on either side adjoining the deckhouse to the

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main deck (see photographs). The deckhouse runs from the aft funnel to a position approximately abeam of the deleted ASROC launcher. From this position to the main superstructure is a catwalk amidships. Abeam this catwalk are the Ikara launchers. Also the mast forward of the aft funnel is repositioned and placed on the deckhouse.

In common with other RAN warships the 'Perth' Class have a characteristic funnel top as shown in the illustration. Also, they do not have a main mast. The 3D air surveillance radar is situated on a platform forward of the funnel top with two bracing struts. This radar is of a plane reflector with perpendicular edge pieces. Below the grills on the aft funnel are situated two new EW

domes either side forward. Another mast similar to that positioned above the deck-house must be constructed to the stern of the aft superstructure. It is a vertical mast with a horizontal bar at the top and braced to the superstructure.

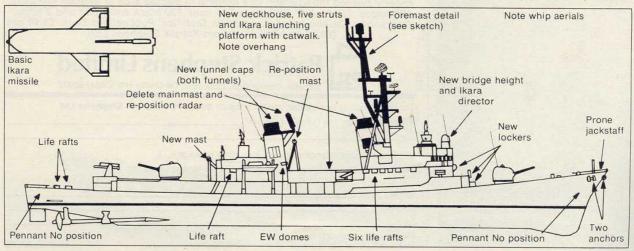
The Australian vessels have an open bridge for general navigation. Just after this bridge and just forward of the GFCS68 gun fire control director is the thimble dome of the Ikara director. This is similar in design and construction to the ones fitted to the Royal Navy's Ikara Leanders; for the model the barrel of the thimble can be made from dowel with a half-sphere on top — for the latter I used a small plastic novelty ball.

Six life-raft canisters are carried on the

HMAS Perth on exercise with other units of the Royal Australian Navy. Note the various differences between her and the FGN's 'Lutjens' Class — notably the Ikara deckhouse and lack of mainmast (RAN Official via Paul Beaver).

main superstructure on either side as illustrated. One is carried on either side of the aft superstructure behind the ship's boats. Another two (or three depending on the vessel) are carried on the after deck on each side.

Normally at sea the Jackstaff and Ensign Staff are stowed horizontally (as the Ensign is flown from the gaff), the Jackstaff is collapsed to the port side of a small aerial on the foredeck. Whip aerials are positioned



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on the funnels, turrets, etc as shown. Forward of the main superstructure several lockers must be constructed; these contain various stores, such as ready-use flares.

On the 'Perth' Class warships two anchors are carried, one on the starboard side of the bow and one on the stem, both are similar to part number 53. The Pennant numbers are of the standard Australian style of white with black shadows and are carried in four positions, on the bows and stern quarters. The boot topping is the same as RN warships, hence deeper than that of the 'Lutjens' Class.

Perth (38) and Hobart (39) have two domes on their main 127 mm turrets whilst Brisbane (41) has one on the port side only. This difference is probably due to the refitting of the mountings at different times.

## Colour schemes

Mid-grey Hull, superstructure, funnels, turrets, Tartar launchers, triple torpedo launchers, Ikara deckhouse and top, SPS-5 and GFCS-68 radars, aft EW domes, anchors, base of Ikara director, small radio mast on foredeck, rudder.

**Dark-grey** All decking, superstructure tops (except as mentioned above), after funnel grilles, SPS-37 radar.

**Black** Foremast and radars as shown, SPS52 radar, funnel caps, boot topping, Tartar missile, gun barrels, forward funnel grilles, bridge windows.

grilles, bridge windows.

White Life rafts, chains, capstan, bollards, fairleads, 'thimble' of Ikara director.

Dark-red Anti-fouling under waterline.
Bronze Propellers.

Navigation lamps: red (port) green (starboard) situated on the bridge sides. Ship's boats usually have white tops and hulls but hull colours can vary and lkara missiles appear to be dark blue with white fins.

## References

RAN photographs and information; Jane's Fighting Ships 1970-71, 1974-75.

# Acknowledgements

The author would like to thank the Australian Naval Representative in London and the DoD (Navy) Public Relations Office in Canberra for their prompt and kind assistance. Also the Editor of Navy News, Portsmouth, for kindly loaning the photograph credited.

