

Following Ian Whitehead's instructions, you can add a completely new class of destroyers to your warship collection. This is HMS Crossbow, fleet radar picket, converted from the Airfix Daring kit.

## The 'Weapons'

## 'DARING' CONVERSIONS BY IAN WHITEHEAD

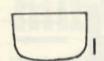
THE 'Weapon' class destroyers which are the subject of this month's conversion article were conceived to radically new ideas of the traditional destroyer function. Capital ships, by the end of the second world war, had become practically immune from surface torpedo attack, the main threats being posed from the air and below the surface. Thus, the fleet destroyer function was becoming modified to an anti-submarine and anti-aircraft role, necessitating the replacement of low angle guns by dual purpose weapons, capable of being used against aircraft. The torpedo tubes, however, were retained, and a new anti-submarine weapon, the 'Squid', was mounted. This consisted of a three barrelled mortar which projected charges ahead of the attacking vessel.

The 'Weapon' class was thus formulated, and was to have formed two flotillas. However, the end of the war intervened and of the 13 ships laid down in 1944 only four were completed, and these commissioned in 1948. The boiler and engine rooms were arranged en echelon, a new idea giving rise to two funnels again after a long line of single funnelled destroyers. The forward funnel was slender enough to be carried up inside the lattice mast. The same arrangement was adopted for the 'Daring' class and results in what are considered to be rather ugly looking ships. In 1958-59, the 'Weapon' class ships were converted into Fleet Radar Pickets, the torpedo tubes being finally dispensed with, and the spaces they occupied covered in. A second lattice mast was erected on the forward tube position, and this carries a very conspicuous 'bedstead' air warning radar scanner, enabling the fleet to obtain early warning of air attacks and fighters to be directed to the threat. The four units of this class were Battleaxe (D118), Broadsword (D31), Crossbow (D96) and Scorpion (D64). The flag superior was originally G, and Battleaxe was completed as G18; she was badly damaged in a collision in 1962, subsequently marked for disposal, and scrapped in 1964. Scorpion was originally named Tomahawk but was renamed in 1945 as a compliment to Viscount Cunningham who had commanded the previous Scorpion in 1910.

The first pair carried the squids in place of 'B' turret, and 'X' position was chosen in the others. The aft position proved to be the more satisfactory and was perpetuated in the 'Darings'.

The 'Weapons' were about 15 feet shorter than the 'Darings' and the first stage in the conversion is to cut 3/10 inch out of the forecastle section. This step may worry some modellers and if you are not too particular about length it can be omitted, since the model is also about 1/10 inch too broad, and I did not attempt to rectify this.

However, the method I used was to make two identical bulkheads to the pattern shown from 20 thou card. Cement one of them into the hull 5 mm forward of the fo'c'sle break, having cemented the hull halves together from the stern forward to this point only. Now mark 3/10 inch forward of this bulkhead on both sides of the fo'c'sle, and saw the hull in two between these marks and the bulkhead. Next, take the two loose halves of the bows and cement them together, inserting and cementing the remaining bulkhead at the marks previously made. The fo'c'sle halves will not meet on the keel at the after end, but this gap can be filled with body putty. It is vital to ensure that the two bulkheads are parallel and vertical. Lay the hull pieces aside to set and, when dry, using the bulkheads as guides, cut and file away the waste till the two halves of the hull match. They can now be cemented together on the faces of the bulkheads, and when set, the joint is well rubbed down with flour paper or



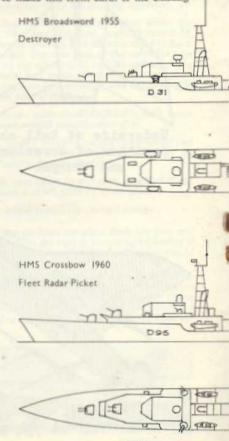


fine 'wet and dry' paper.

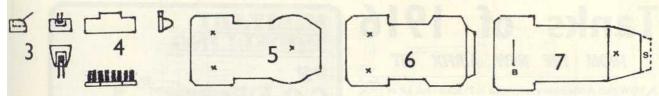
The deck section is now sawn off 40 mm from the bow and also 3/10 inch further aft. The bulkheads supporting the bridge deck are now cut back a further 5 mm and the two pieces of the deck section joined, reinforcing them underneath with a piece of card. A little further attention to the sides of this component with a file will ensure a good fit in the hull.

It is now necessary to decide which group is to be modelled, since the shape of the fore and aft gun decks depend on this. Patterns are given for both groups and the destroyer *Broadsword* is taken as an example.

The forward gun deck can be made from the one in the kit, but a great deal of work is involved, and it is as quick to make this from card. If the existing







deck is used, it should be shaped to pattern and all projections, with the exception of the screens round the after end, removed. The life rafts should be cut carefully from all decks and kept till a later stage. The after gun deck is now made from card and 2 mm high screens cemented round the forward end. The two twin 40 mm AA mountings and a twin 4 inch DP mounting are fitted to this deck in the positions shown on the plan. A searchlight platform fitted between these guns, and an 11 mm pole mast complete this deck. The forward director is taken off a Cossack bridge, which is then fitted to the forward gun deck in the position shown. This deck is now cemented in place with its after edge coincident with the bulwark moulding. The bulkheads at the forward end are now made from card and a

piece of 1/8 inch balsa, shaped to fit the tapered fore end of this deck, is cemented in place. All balsa components are best treated with a coat of sanding sealer, and then sanded down before painting. It is important not to let the sealer come into contact with the plastic, as it will cause damage.

Two squids are fitted in 'B' gun position, and a twin 4 inch DP in 'A' position. The 'Daring' lattice mast and forefunnel are assembled and the radar control is fitted, after removing the support, to the after bridge control support. The curved overhang is now removed from the deck carrying the after funnel, and a bulwark fitted to this end to match the other three sides. This component is cemented in place the reverse way round and a 5 mm diameter ×10 mm high funnel made from sprue. The torpedo tubes, cranes and boats are now fitted, and a small embellishment to the original kit is the provision of the 'catwalks' over the tube spaces. The forward one is 17 mm  $\times$   $1\frac{1}{2}$  mm and the aft one 18 mm  $\times 1\frac{1}{2}$  mm. These catwalks are fitted to the starboard side of the 'island' and appropriate openings should be made in the screens. Whip aerials are cemented to the sides of the after funnel and, in this connection, I have a time expired tooth brush in my 'bits' box, which will supply enough aerials to equip many model navies. The rafts are now fitted and I found a more realistic effect was obtained by chamfering the inboard edges to make them slope slightly as in the prototype. The gantry supports on the outboard side were made from stretched sprue.

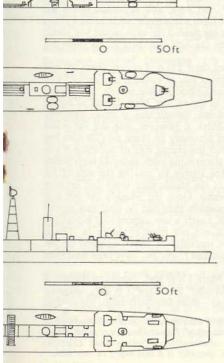
The other conversion is *Crossbow* as a radar picket. In this ship 'B' turret is mounted, and also the AA guns in the bridge wings. I used the smaller AA

Top of page: Full-size drawings for 'Weapon' class conversions. Key: 1—bulkhead, make two for each model. 2—lattice mast for radar pickets; trace two and make up lattice over tracings. 3—4 inch DP guns, 4—'bedstead' radar aerial for radar pickets. 5—aft superstructure deck for Broadsword. 6—aft superstructure deck for Crossbow 7—forward superstructure deck for Broadsword; Crossbow shown dotted. B—back of bridge; S—blast screen.

mountings for these guns. The after gun deck is modelled to the pattern given, and single AA guns fitted to the larger AA mountings. The extreme after end is built up in 1/8 inch balsa and two squids fitted in 'X' position. The tube spaces are 'plated in' with card and a second lattice mast fitted over the forward position. This mast was made to pattern from 10 thou card cut into 10 thou strips, assembled on a drawing, model aircraft fashion. It carries a scanner similar to that in the Devonshire kit, and a pattern is given. The radar director is replaced by part 15 from the kit, mounted on a block of scrap. A small balsa deckhouse 1/8 inch high × 3/16 inch long is mounted immediately behind the foremast, and runs the full width of the superstructure deck. The life rafts are the same pattern as used in Tiger, and are disposed as shown on the diagram. The dinghy is carried on a small overhead deck in the position used by the starboard motor launch. If the destroyer version is preferred, the tubes are fitted and the second mast and aerial omitted.

The finish is standard grey with black masts above funnel height, and white topmasts with black pennant numbers, but at one time the destroyers were finished in very light grey and carried G pennant numbers.

Left: General arrangement drawings for 'Weapon' class ships. Below: HMS Broadsword in model form. Note the effective addition of catwalks above the torpedo tubes.





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