

# Detailing HMS Hood in two scales

Modifying the Airfix 1:1200 and 1:600 scale kits described by Peter Hodges

THE RECENT appearance of HMS *Hood* in 1:1200 scale (together, of course, with *Bismarck*) in the new Airfix Naval History series was a very welcome addition to the growing numbers of warships available to the small-scale modeller.

Many Airfix 1:600 scale models of the famous British battle-cruiser must have been assembled since it first emerged on the market; but any modeller who has made replicas in both scales cannot have failed to notice the marked difference in her secondary armament between the new and the earlier kit. For the 1:1200 scale model shows her with the 5.5-inch batteries suppressed and her principal anti-aircraft armament 'up-gunned' to seven twin 4-inch HA Mk XIX mountings. This change was, in fact, the only armament modernisation that circumstances finally allowed and it was fortunate that the ubiquitous twin 4-inch was available.

The original 5.5-inch low angle secondary armament was very much outdated and the mountings — which closely resembled the shielded single 6-inch Mk XIVs of the 'D' and 'E' class cruisers — had no anti-aircraft capability. They were, indeed, typical of the secondary armament concept of the First World War and were intended to beat off

massed destroyer attacks by out-ranging the destroyers' own gun armament and effectively engaging the attacking ships before they were able to launch torpedoes. The 'between wars' anti-aircraft armament comprised four single 4-inch HA, controlled by a centre-line HACS director, two 8-barrelled 2-pdr pom-poms and multiple machine-guns.

Five of the six 5.5s on each side were sited at fo'c'sle deck level, with a sixth — rather unusually — set one deck higher. In terms of the topweight considerations so important in any vessel, it was therefore a case of balancing ten 5.5s set 'low', two 5.5s and four single 4-inch set 'high', against seven twin 4-inch set 'high'. The removal of the original 5.5-inch directors abreast the funnels was more or less balanced by the two extra HACS Mk III\* directors on each side of the forward superstructure.

With three HA directors, *Hood* went to war with a better anti-aircraft armament than any other capital ship, save those fortunate enough to be properly modernised. The disposition of her twin 4-inch allowed her to bring four mountings to bear which was twice as many as, for example, *Warspite*. What sort of changeover arrangements were fitted to 'cross-connect' mountings with

directors is not clear, but it is probable that the forward HACS director on each side normally controlled the forward pair of 4-inch and the after director, the remaining three. In case of action damage, it was usual to arrange for the cross-connecting referred to above, and it is very likely that, say, a forward HACS director could control all three beam HA mountings on its own side and the centre-line after guns; and that, by a changeover switch, the after director could do the same.

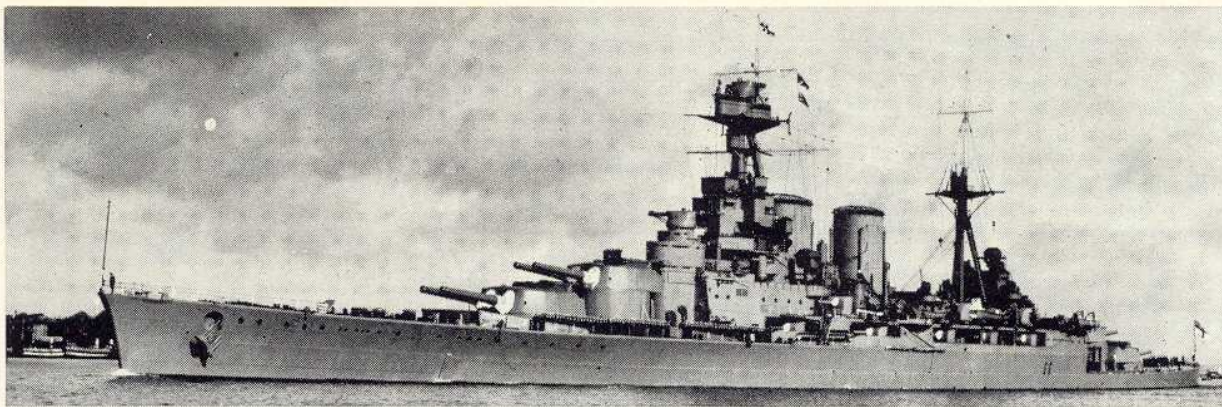
This sort of scheme had mixed blessings, for while it provided for flexibility in the control of the weapons, at the same time it increased the complexity of the fire control circuit wiring and often made the checking of the alignment between directors and guns a very time-consuming business.

These late armament changes took place in three main stages. In 1939, the single 4-inch HA were removed and replaced by two twin 4-inch on each side, later protected by splinter screens, while the boat-deck was rebuilt to cover the previously open position of Nos 4 and 6 5.5-inch mountings. The original torpedo director (often mistakenly thought to be an after 15-inch DCT) was taken out and its platform used to support a third 8-barrelled pom-pom, supplemented by five multi-barrelled rocket launchers. Next, the forward three 5.5s on each side were removed, their gunports in the superstructure plated over, and the three after twin 4-inch added; and finally, the remaining 5.5s were suppressed and a few single 20 mm Oerlikons replaced existing multiple machine-guns.

So much for the broad outline of the changes made to what was, at the time, the biggest warship in the world. If we now look through the instruction sheet of the new

*In the mid-1920s — when this photograph was taken — Hood had a flying-off platform (as distinct from a catapult proper) spread between the gunhouse roof and the gun muzzles of 'B' turret on which a Fairey Flycatcher is poised. Notice the big rangefinder projecting from the 15-inch armoured director tower, and a similar tower (but with a shorter base-length rangefinder) above the spotting top. One of the original single 4-inch HA guns can be seen pointing skywards between the starboard whaler and the starboard cutter — both turned out on their radial davits.*





HMS Hood, August 1939, in Portsmouth Harbour, flying a rear admiral's flag from the foremast. She still has her full outfit of 5.5s, and mounts a pair of twin 4-inch HA above the midship battery. HACS Mk III\* directors have been added abreast the forward superstructure, while the after HA director is conspicuous abaft the mainmast.

1:1200 scale model, we can see how to improve it with a few simple modifications and at the same time, discuss some more aspects of the ship.

#### Panel 1 (parts 1 - 7)

The first thing to do here is to add the anchors to part 2. These can be easily made from scrap plastic in the form of a 'V' with a slightly flattened point, and ought to be of about 2mm wide. Position them forward of their respective hawse holes and angled backwards at about 45 degrees. There will, of course, be three anchors, for at that time the larger warships had the extra sheet anchor on the starboard side. When the hull is painted, they will be 'moulded in' by the paint.

Part 4 — 'B' turret — should have a rocket launcher on the gunhouse roof, immediately forward of the rangefinder, made up from scrap, and patterned on parts 22/23 (or 42/43). I found that one of the turrets in my kit had a slight dimple in its roof and it occurred to me that perhaps a rocket launcher was intended for it but was somehow omitted during kit production.

The rocket launchers were extemporary devices used at sea in the early part of the war to put up a wire barrage as a deterrent to low-flying aircraft. Each rocket carried a payload of wire which was suspended from a parachute from which it trailed. A second parachute remained folded at the lower end of the wire but if an attacking aircraft fouled the cable, the second parachute automatically opened, and the drag of the two 'chutes was sufficient to make the cable lethal. The launchers were 20-barrelled affairs and malfunction could result in a fine old tangle!

Whilst on this section, don't forget to paint the wooden deck of the redundant 5.5-inch broadside gundecks while they are still exposed. A point worth noting about part 5 is that the stout pedestal into which the after 8-barrelled pom-pom platform fits (as shown on panel 7, part 63) is markedly off the centre line. To rectify this, the pedestal should be cut off flush with the deck before part 5 is cemented into position. It can then be shifted over to port, until it is truly on the fore-and-aft line.

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#### Panel 2 (parts 8 - 14)

This shows the assembly of the bridges and foremast and is topped by the aloft 15-inch director tower, set on the spotting top. This hydraulically-powered tower was a special feature of *Hood*, and no other capital ship of First World War design had such a high sited main armament director with its own integral rangefinder. Many of the older battleships did, however, eventually have an HA director in the same position.

The bipod legs of the foremast — part 11 — need slight modification by filing off the bosses near their feet so that they pass *through* the holes in part 9 and seat on part 10. As moulded, they make the bipod too high against the height of the foremast (part 8), and in any case ought to pass through to the Admiral's bridge below. Lastly in this section, another yard is needed, 18mm wide and cemented at the intersection of parts 11 and 8. The main roof wireless aerial yard provided on part 14 is rather thick and it is not a bad plan to lop this off — and the similar yard on the mainmast — and replace them with stretched sprue.

#### Panel 3 (parts 15 - 25)

Parts 15 and 16 represent the Vickers multiple machine-guns, perhaps finally exchanged for 20mm Oerlikons; but in either event the kit parts are very much oversize. To scale, a 20mm gun barrel comes out at about two-thousandths of an inch — the thickness of a fine hair — so it is best to forget all about modelling such sizes. Simply cut the barrel off these two parts and install the remainder as a stub.

Parts 18 and 19 represent a pair of rangefinders that were certainly in position in 1937, but are not provided in the 1:600 scale *Hood* kit. They are just discernible in a 1940 photograph and are therefore best left as they are. They may possibly be pom-pom directors and early versions of this unit had an integral rangefinder, so nothing is lost by retaining them. However, I found that they fouled the adjacent HACS director at their moulded height, and are better if cut down by about 2mm and cemented directly to the

deck. The HACS Mk III\* directors are parts 20 and 21, and were added with the installation of the first group of twin 4-inch mountings. Together with the third HA director (part 59), they were scheduled for fitting with radar Type 285 and its characteristic 'fishbone' aerial, but this was still pending in March 1941 and it is therefore most unlikely that *Hood* ever received hers, for she blew up only two months later. Between these directors and the two original 8-barrelled pom-poms — parts 24 and 25 — are the forward pair of broadside rocket launchers, but panel 3 depicts them facing inboard. They should be turned through 180 degrees before cementing into position (which also applies to parts 52 and 43 on panel 4). Oddly enough, they are correctly shown on panel 7.

Part 17 represents the rangefinder of the 15-inch armoured director on top of the conning tower. For an 'action' model of the ship — that is with the guns trained on to a firing bearing — don't forget to set both 15-inch rangefinders to the same bearing as the turrets so that they are all 'looking' at the target.

#### Panel 4 (parts 26 - 43)

This shows the assembly of the funnel parts and the majority of the ship's boats. A searchlight platform between the funnels themselves was removed and the cutters, previously suspended from 'radial' davits on the ship's side immediately above No 5 5.5-inch guns were suppressed. The other boats stowed inboard in this area were handled by the two 40-foot derricks (parts 34 and 35), two of them — parts 26 and 27 — being 25-foot Fast Motor Boats. Thus we come to the first of the twin 4-inch in parts 36 and 37, but like all their partners of similar calibre, the barrels are too long and should be cut down to a length of 2mm. Parts 42 and 43 are shown 180 degrees out in bearing, as noted earlier.

#### Panel 5 (parts 44 - 53)

The rest of the boats, the second pair of HA twins and the mainmast are detailed in this



HMS Renown was a battle cruiser contemporary of Hood, but was fortunate enough to undergo full modernisation and survived the Second World War. This photograph was taken in May 1934, well before her re-build, when she still closely resembled her ill-fated sister-ship Repulse. Like Hood, she had an armoured 15-inch director tower, but had an earlier mark of twin 15-inch mounting; a secondary armament of 4-inch LA guns (in triple mountings); and lacked the aloft power operated director tower. Above her spotting top is an HACS director for the fire control of her early anti-aircraft armament. The vulnerability of her hull by the presence of a multitude of scuttles in the ship's side is most noticeable.

panel, parts 52 and 53 being the whalers. In large warships, it was normal for a cutter to be used as the 'seaboat' — and the original position of the cutters' davits has already been mentioned. Smaller ships — like destroyers — employed the whaler in this capacity, carried in 'scwjack' davits; but in Hood, the whalers would have been carried in radial davits, turned outboard, ready for rapidly launching the boats in an emergency. Their height above the waterline in a big ship kept them clear of the seas which would not have been the case in a destroyer.

Thus, Hood must have used her whalers as 'seaboats' once her ship's side cutters had gone: and to be accurate, if davits are to be modelled, they should be turned out, with the whalers suspended from the falls. This is a bit tricky to do neatly in this scale and so as a reasonable compromise, one can cement the whalers to the deck as shown on panel 5 and add davits made from fusewire turned inboard. The wire will adhere to the ship's side with ordinary cement and is 'sealed in', so to speak, when the hull is painted.

An ensign gaff — cut from the same piece of stretched sprue as was used for the yards — can well be added to the mainmast. It needs to be 5mm long and to be cemented at the intersection of parts 48 and 49 at an angle of 45 degrees. A rather nice touch in the Airfix model are the slots in the angled after superstructure almost immediately

below the whalers, which were intended as the embrasures for a pair of 5.5 inch guns on each side to cover the after arcs. These would have met the projected secondary armament of 16 5.5s, but before completion the after four were omitted in favour of the four 4-inch single HA, sited one deck higher in the same general area.

All the boats stowed inboard and forward of the mainmast were handled by the heavy boom, itself supported by a multi-sheave wire purchase. The small bosses on the forward side of the mainmast represent the associated blocks.

#### Panel 6 (parts 54 - 60)

Parts 54 and 55 are the after close-range AA weapons, whose barrels should be cut off to conform with their counterparts forward; and, like the other twin 4-inch, the barrels of parts 56 and 57 need reducing in length. The after HACS Mk III\* director should be cemented into its platform so that its sloping front surface faces aft. The Mk III\* director was fitted to a number of capital ships and cruisers and could fulfill a dual purpose role, enabling it to control its associated 4-inch mountings in either surface or anti-aircraft fire. The asterisk after the mark number signified the fitting of a Rate Officer's seat for surface fire and most — including Hood's — had automatic roll stabilisation provided for the director layer.

Part 60, the aftermost twin 4-inch, replaced the original torpedo director, but although the battle cruiser's submerged torpedo tubes were removed in 1939, she retained her above-water fixed tubes. They emerged through ports in the ship's side below No 2 twin 4-inch (parts 46 and 47) and it was in this area that Hood was hit by Bismarck. Many believe that it was the detonation of her own torpedoes that caused the loss of the British battle cruiser.

#### Panel 7 (parts 61 - 64)

The extended sprue made up for the yards and the gaff can well be utilised to provide replacements for the jackstaff and ensign staff (parts 61 and 64) because both kit parts are rather thick. These were actually steel tripods to which wooden staffs were fitted when flags were to be flown, but tripods in this scale would be very minute and it is therefore best to leave them as single — but thinner — lengths. Finally, part 62 represents a repositioned searchlight platform.

#### Painting

In this scale it is particularly important to paint all the fittings which are to be set on wooden deck areas before they are removed from the sprues; and so far as painting projections on the decks is concerned, it is much the best plan to make no attempt whatever to paint their sides. The breakwaters on the fo'c'sle are a typical example and should be given a very fine grey line once the deck 'teak' colour is thoroughly dry. And, by using a very fine brush and waiting until its minute load of paint was partially dry, I managed to pick out the links of the anchor cables without difficulty. Similarly, very small dots of paint on top of each bollard or fairlead on the deck edges will pick them out quite adequately.

Great care is necessary to ensure a clean line at deck level between the teak deck colour and the grey ship's side. The trick here, is

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Another battleship only partially modernised before the war was HMS Malaya.



to paint the deck *outwards* with brush strokes across the deck edge; then paint the ship's side *upwards* from the waterline.

Actually, the deck areas present a bit of a problem because some big ships (with wood decks) painted them over during the war so as to lessen the risk of detection from the air. The trouble is that most available photographs are shots at surface level when, naturally, the decks are not visible; and in fact, only from aerial views — or such rare chances as when *Hood* passed beneath the Forth Bridge — would they be seen by the distant observer. I debated what to do about this and finally decided to paint the decks in timber colour for the sake of contrast in the completed model. It goes without saying that if one elects to paint the complete ship grey it makes life very much simpler.

### The 1:600 scale kit

Using the modified 1:1200 scale model as a guide, a conversion of the earlier Airfix kit becomes reasonably straightforward. The boat deck needs modification by 'plating in' the area over Nos 4 and 6 5.5-inch mountings, and the ports for the forward 5.5s must be similarly treated. The broadside secondary armament directors can be modified and resited as HACS Mk III's; the lugs for the heels of the cutter davits can be removed; and thereafter, the job is really one of modifying the armament and plugging redundant holes in the moulded decks. An extra 8-barrelled pom-pom can be made up from scrap to the pattern of the units supplied as broadside weapons in the kit, and all that are really needed in addition are the seven twin 4-inch. There are plenty of examples of this mounting in other Airfix kits, but in 1:600 scale it is, in any case, not difficult to make from scratch.

The redundant 5.5s and the single 4-inch HA from a modified larger kit are well worth stowing away in the spare parts box. The similarity between this 5.5 and the single shielded 6-inch has already been mentioned, and these guns would provide the main armament for a scratch-built model of one of the older 6-inch cruisers. In the same way, the single 4-inch HA can be saved for, perhaps, a model of a wartime destroyer, where it frequently replaced the after set of torpedo tubes up until about 1942.

Much has been written about the *Bismarck* action and the loss of the great British battlecruiser: and if it was indeed *Hood's* own torpedoes that blew her in half, it was by an odd quirk of fate that *Rodney* actually torpedoed the German warship in the last phase of the episode. The value of fixed torpedo tubes in capital ships was always debatable, and their removal from *Hood* might well have saved her. Certainly, *Rodney* discharged several at the enemy battleship at successively decreasing ranges, and finally hit her with one 'tin fish' at what was tactically point-blank range. Nothing could have saved *Bismarck* then, whether *Rodney's* final attempt with her fixed 24.5-inch underwater torpedo armament had succeeded or not: but if nothing else, it remains on the record book as the only known occasion when one capital ship torpedoed another. □