

# Modelling HMS Rodney in 1:600 scale

Attractive conversion from the Airfix *Nelson* kit described by Peter Hodges

UNTIL THE APPEARANCE of the individual *Rodney* and *Nelson* kits by Tamiya towards the end of 1974, only the long established Airfix *Nelson* was readily available as an example of this unique two-ship class; and since I dislike 'mixed' scales (but very much enjoy conversions) it seemed a worthwhile exercise to purchase the Japanese version of *Rodney* with a view to transforming a standard Airfix *Nelson* to her sister ship. The two ships showed many differences by the time hostilities had ended in 1945; and I noticed that the illustrations on the box lid of the two Tamiya products indeed showed that they were not identical.

Bearing in mind the considerable time scale that had elapsed between the production of the British and Japanese kits, the Airfix *Nelson* has much merit — quite apart from the price differential. She is modelled with an authentic armament including four US Mk II ('Quad') 40 mm Bofors mountings — one pair on sponsons forward of 'Queen Anne's Mansions' (the bridge superstructure) and a second pair to port and starboard'abaft the funnel. Her six 8-barrelled Mk VI 2 pdr pompoms are also well depicted, as are the triple 16-inch and twin 6-inch Mk XVIIIs; and the individuality of the 16-inch guns (not a Tamiya feature), makes it possible to set the barrels of one mounting at different elevations to

model 'salvo' firing condition. The six single 4.7-inch Mk XII HA guns are good, too, being moulded with gunshields that were added to the original totally open aspect of this mounting. And although no 20 mm Oerlikon mountings are provided in the Airfix kit, at least one of their gundecks — part 101, called a 'projector platform' in the instructions — is a kit part to which replicas of three Oerlikons on each side can be added.

HMS *Nelson* had a 'State's-side' refit between June 1944 and January 1945, and the Airfix model shows her appearance *after* that event. She should not, therefore, be displayed as if in the Mediterranean or Home theatres, unless, of course, her armament is suitably modified.

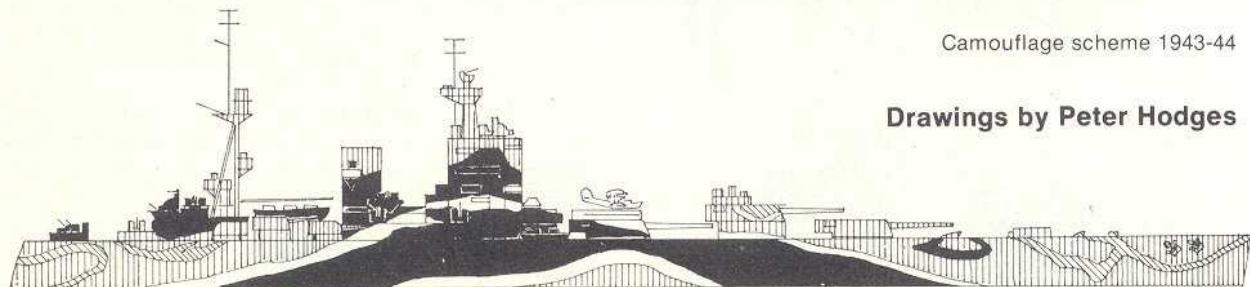
Perhaps the most easily discernible wartime difference between the two sister ships was that *Nelson* had two High Angle Control System directors on her Air Defence Platform on the bridge tower (parts 117 and 118), whereas *Rodney* had a slimmer support to the platform, and only the one HA director.

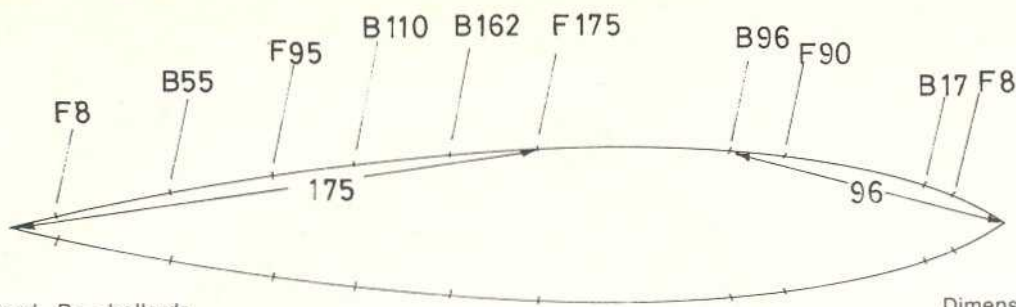
When the ships were first built, the six 4.7 AA guns were locally controlled and had very complicated geared HA sights carried on a heavy framework on the mounting. They were the first hydraulic powered guns of 4.7-inch calibre in RN service and



Camouflage scheme 1943-44

Drawings by Peter Hodges





**Fig 1** Position of fairleads and bollards on deck edge. Distances marked off with compasses from bow and stern.

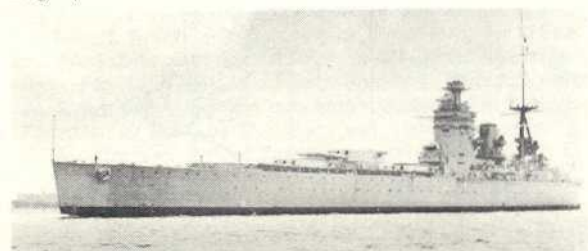
had a maximum elevation of 90 degrees. They were, however, rather unpopular — at least their loading numbers — because they fired 'fixed' ammunition (that is, shell and cartridge case attached) whose all-up weight was 33.6 kg/74 lb.

Both ships later had a single High Angle control system fitted, with its director on the Air Defence Platform; and later still *Nelson* got a second HA director mounted on the same platform, linked to separate control system. This gave her the ability to engage targets on two beams at the same time in controlled AA fire, but *Rodney* lacked this capability. She had her single HACS director linkable through the calculator to either port or starboard 4.7-inch battery, and specially adapted Barrage Directors for the control of the 4.7-inch battery not so linked.

A second HA director was authorised for *Rodney* in mid-1941, but such was her arduous war service that it was never fitted. She was, in fact, a little 'behind' *Nelson* in some aspects of her armament generally, and did not receive the pair of 8-barrelled pompoms abreast the mainmast until 1941, while *Nelson* had them fitted much earlier. These pompoms replaced the 'first-fitted' after 6-inch DCTS in much the same way that the forward pair of pompoms just forward of the funnel had replaced a pair of rangefinders for the 4.7-inch HA batteries.

Perhaps the area where the Airfix kit is rather 'bare' is that of the main deck where little detail is moulded; and there are the (unhappily) usually trivial, but nonetheless annoying, errors in the

*Rodney in the fairway, entering Portsmouth Harbour in October 1936, with a very tall main top mast and pompoms replacing the 4.7-inch rangefinder (Wright & Logan).*



AIRFIX magazine annual

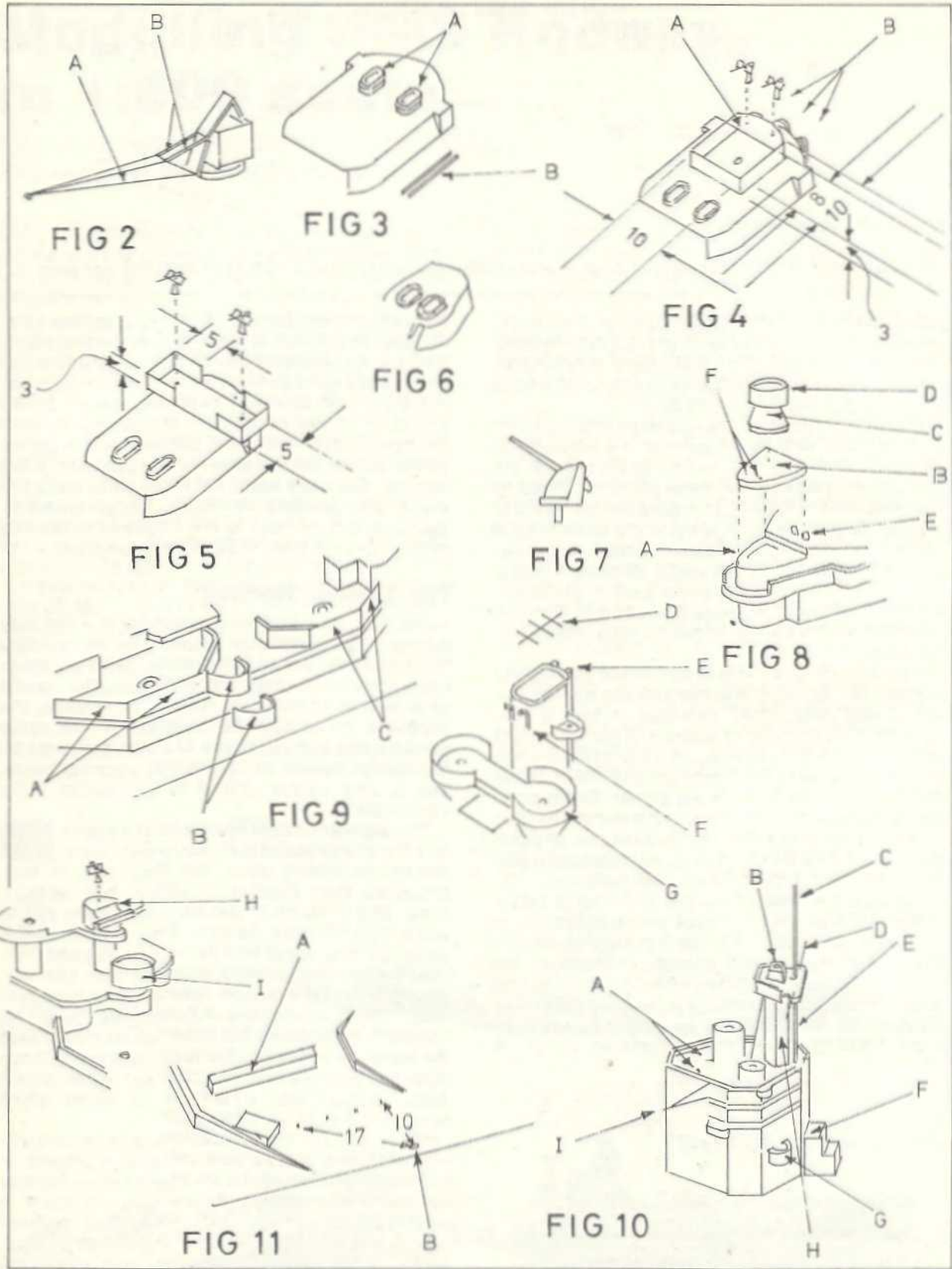
instruction sheet panels. On panel 4, for example, the after twin 6-inch is missing from the side elevation, the Air Defence Position has no directors and the forward quad Bofors platform is wrongly sited. In the plan, the forward 4.7s are not shown and the pompom is positioned on the wrong 16-inch gunhouse roof. The paint scheme is not appropriate except for the ship's short post-war active service; and once again the modeller is invited to paint the anchors 'bronze'. Trivial mistakes, perhaps, but no help to the beginner in warship modelling, and least of all to the youngster.

### The Tamiya 'Rodney'

The first thing to say is how evident is the vast difference in model size between the Airfix 1:600 scale and the Tamiya 1:700 scale; and how absolutely 'unmixable' they are in display. But having been critical of the Airfix *Nelson*, in fairness, the Japanese kit should be subject to the same scrutiny; and one ought, too, to briefly comment on the Tamiya *Nelson* by saying that armament-wise, she is very similar indeed to her earlier Airfix counterpart.

The Japanese score heavily on their deck detail, and the sharpness of their equipment items which are extraordinarily good; but they have, in fact, produced their *Rodney* in almost her 'as-built' state; and in terms of *period*, she is quite out of place against their *Nelson*. They provide detail parts on two sprue-frames — one marked *Nelson/Rodney* and cleverly arranged with common details — and the second special to the particular ship. Their unshielded 4.7-inch AA guns are wonderfully modelled but there are no close range AA weapons whatever. Tamiya's *Rodney* is, therefore, not only pre-war, but pre-1937 (when an aircraft catapult was added on 'X' turret which remained in position until 1943).

The Japanese kit instructions give a portside view of *Rodney* in a wartime camouflage scheme — but not the pattern on the starboard side — thereby inviting the modelled erroneously to paint a 'balanced' design on both sides; but perhaps worse, actually show *Nelson* in this drawing, apparently in the belief that *Rodney* was eventually



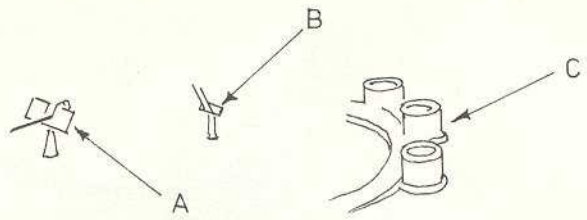
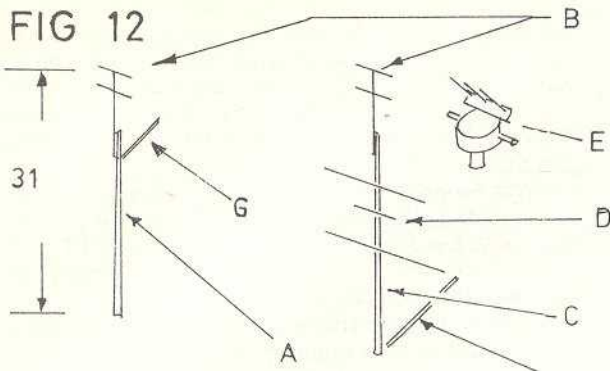


FIG 13

**Fig 2** Modified crane. **A** Jib, reversed and reset just above horizontal. **B** Twin ties, from plastic sprue. **Fig 3** 'A' Mounting. **A** Two Double Carley Float stowages. **B** Two booms, 10 mm long on deck, port and starboard. ('X' mounting similar). **Fig 4** 'B' Mounting. Dimensions in millimetres. **A** Crew shelter, with curved overhang in rear and Oerlikon positions. **B** Three double Carley Float stowages. **Fig 5** 'X' Mounting. Dimensions in millimetres — showing Oerlikon splinter shields and two single Carley Float stowages. **Fig 6** Typical 6-inch mounting with two single Carley Float stowages. **Fig 7** 4.7-inch mounting, with barrel re-set and sprue 'pip' on rear of shield. **Fig 8** Modified forward superstructure. **A** Undercut. **B** Sheet plastic panel. **C** Conical Armoured Director — 6 mm diameter base, 4 mm height. **D** Pompom Director 'tub' — 6 mm diameter, 2 mm height. Note All 'guntubs' are of similar dimensions. **E** Locating pips for bridge tower. **Fig 9** Port 4.7-inch gundeck and funnel. **A** Extended splinter shields for forward 4.7-inch. **B** Upper and lower 20 mm Oerlikon 'guntubs', both semi-circular, upper with base. **C** Extended splinter shields for centre 4.7-inch. **D** Funnel grid. **E** Two waste steam pipes. **F** Two sirens. **G** Paper splinter shields for mid-ship pompom gundeck. **H** After 16-inch DCT with 20 mm Oerlikon. **I** Pompom director 'tub'. **Fig 10** Bridge tower. **A** Two single Oerlikon positions. **B** Modified Air Defence Platform, with position for one HA Director. **C** See Fig 12 for topmast and aerial details. **D** 5 mm stub yard, port and starboard. **E** Fore topmast, passing through ADP. **F** Modified 'office'. **G** Re-positioned sponsons, port and starboard. **H** Narrowed ADP support. **I** Struts and supports, port and starboard, 7 mm long from plastic sprue, lower strut horizontal. **Fig 11** Fo'c's'le breakwaters, port side (Starboard side similar). **A** Trunking 2 mm square, 15 mm long. **B** Plugged hole for paravane davit, datum for dimensions of 20 mm single Oerlikons (in millimetres). Space four positions equally, Oerlikons trained outboard. **Fig 12** Fore and Main topmasts and HA Director. **A** Fore topmast; total height from bridge deck to radar aerial top, 31 mm. **B** Twin Air Warning Radar aeriels, 5 mm wide, 4 mm between horizontal struts, 8 mm aerial mast. **C** Kit main topmast. **D** Additional yard, 8 mm wide. **E** HA Director: aerial reflector 4 mm wide, 2 mm deep. 'Fishbones' from plastic sprue, 3 mm long. **F** Gaff, 8 mm long. **G** Fore gaff, 4 mm long. Note See Airfix Magazine Annual 1973 for 'super detailing' radar aeriels. **Fig 13** **A** Single 20 mm Oerlikon: shield 3 mm wide, 2 mm deep; barrel 4 mm long; pedestal 3 mm high. **B** Pompom or Barrage Director; twin 'fishbone' aerial, 2 mm long from kit Bofors barrels; pedestal 3 mm high. **C** Expended plastic toy pistol 'cap' moulds as 'gun tubs' source. Retain or omit base as necessary. Slice off twin circular discs as windshields for part 88.

identically modified.

Four alternatives are open to the modeller who wants a replica of HMS *Rodney*: a 'straight' build of the Tamiya kit; a conversion of the same kit to wartime armament standards; a direct copy of the Japanese kit to the Airfix *Nelson*, to produce a pre-war 1:600 scale *Rodney*; or a modification of the Airfix *Nelson* kit to make a 1:600 scale wartime *Rodney*. Because modifications are easier in the larger scale; to 'match-up' with other Airfix kits; and for the sheer economics of the matter, I went for the last option.

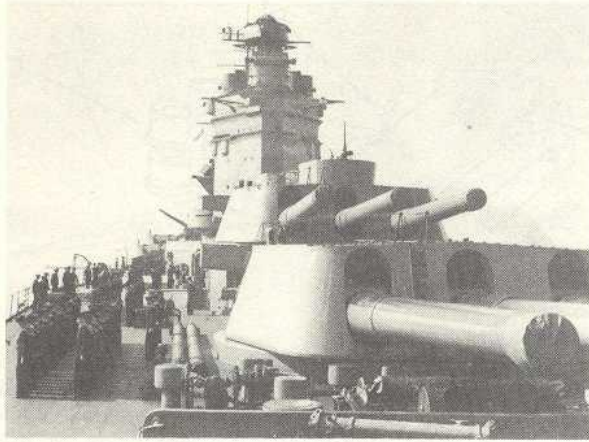
It is worth pointing out that *Nelson* gained considerable benefit as an outcome of her late-war North American refit and remained active as a training battleship until 1946, while poor old *Rodney* was less fortunate. She was already in some engine and boiler trouble when she stormed to engage the German battleship *Bismarck* in May 1941, and afterwards diverted to the United States for a 'Lease-Lend' style main engine refit (America then being still a neutral country). She left the States to join Force H in September 1941, but at this time, the massive output of US twin and quadruple 40 mm Bofors mountings had not got under way. These excellent close-range mountings later became a mark of a North American visit, and the modeller should note that the *Nelson* kit shows her with the 'Quad' variety and that she had a State's-side refit in late 1944.

By mid-1944 *Rodney* was becoming quite worn out and although her weaponry and fire control might well have been programmed to match *Nelson's*, in the event, *Rodney* was little altered except for the addition of large numbers of 20 mm Oerlikons in the fashion of the day.

*Nelson* deployed to the East Indies and arrived at Colombo in July 1945, fresh from her refit, and in appearance, as she is modelled by Airfix. At the same time, *Rodney* had passed into reserve and was no longer active, so it is impossible to 'match' her operationally to *Nelson*, unless two conversions are undertaken. I chose therefore, to produce a replica of *Rodney* as she appeared at the end of her active career in 1944.

## Modifications to the 'Nelson' kit

**Kit Instruction Panel 1.** (1) Make up fairleads and bollards for the deck edges of the hull sides and



An early wartime shot from the fo'c's'le taken during Divisions. There are now two single Oerlikons on 'B' gunhouse roof and 0.5-inch Vickers multiple machine-guns on sponsons added to the bridge tower. The only davit remaining on the starboard side has been rigged to support the gangway, the boats having been removed to improve the 6-inch arcs of fire. Note the dark grey top surface of the 16-inch barrels and the twin booms stowed alongside 'A' barbette (IWM).

cement into position (Fig 1). (2) Plug, or fill, the locating holes for the following: (a) the two paravane davits (parts 121 and 122) on fo'c's'le; (b) all the boat davits to port and starboard; (c) the ensign staff (part 26); and (d) the crane (part 30).

(3) Add a square trunking between the breakwaters (Fig 11). (4) Drill a new hole for the crane 14 mm abaft the original hole. (5) Fill the locating holes in the deck of one cutter (part 28) and drill holes for a similar cutter stowage on the starboard side, to match the locating pegs below part 29. (6) Cut off the crane jib (part 30) and the plastic web supporting it. Reset the jib and modify the crane as shown on Fig 2.

(7) 'A' Mounting (part 46). Add four Carley Floats (from flattened slices of Biro tube) on the gunhouse roof (Fig 3). Cement two booms alongside the barbette to port and starboard.

(8) 'B' Mounting (part 54). Add a square splinter shield from 5 thou plastic sheet on to the gunhouse roof, shaping the bottom edge of the forward and after faces to conform to the 'ridged' roof. 'Plate-in' the rear of the splinter shield to form a crew shelter and add two single 20 mm Oerlikons above it. Add a 'quad' — *not* an eight-barrelled pompom — inside the splinter shield, and six Carley Floats on the gunhouse rear face in three pairs (Fig 4).

The quad pompom can be made from an '8-barreller' by cutting off the outboard pairs of guns, slightly reducing the width of the ammunition trays, and filing flat the curved sides of the gunmounting. Add Carley Floats as shown.

(9) 'X' Mounting (part 50). Build up splinter shields over the projecting rangefinder 'arms' on each side

and add a single 20 mm Oerlikon on each. Add Carley Floats as shown (Fig 5). Cement two booms alongside the barbette to port and starboard.

(10) *Twin 6-inch Mountings*. Add two Carley Floats to the gunhouse roof of all six mountings (Fig 6).

(11) *4.7-inch Mk XII Mountings*. Leave a piece of sprue stub in the rear of each 4.7-inch AA gun (to represent the loading tray). Cut off each 4.7-inch gun barrel and re-cement at approximately 45 degrees elevation (Fig 7).

**Panel 2:** Modifications to the main superstructure. (1) Cut off and retain the two projecting sponsons on the forward edge of the conning tower platform deck (part 65) and file the front edge to a curve. File a 'step' on the upper surface immediately before the bridge locating studs, cover in the recessed pocket with sheet plastic and file up to contour (Fig 8). (2) Fill or plug the locating holes for the midship quad Bofors (parts 71 and 75), omitting these mountings and their circular 'bandstand' gundecks (parts 72 and 76).

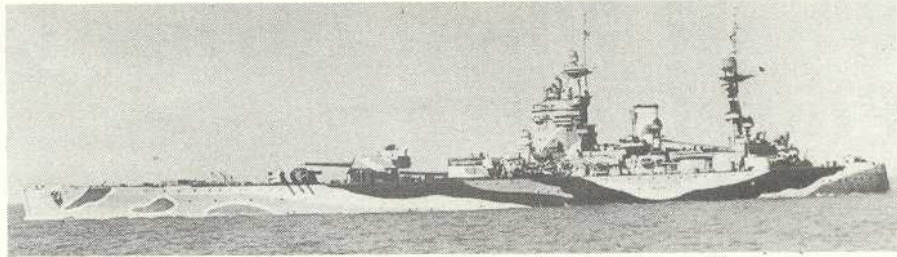
(3) Cement the bridge halves together (parts 99 and 100) but omit part 101 and also part 102 and its associated 40 mm mountings. Cement the bridge deck (part 109) into position, omitting the directors until late in the model construction. Cut off the lug on after face of the bridge and file the surface flush. Cement the two redundant sponsons from part 65 on to the bridge tower angled after faces, the sponson top level with the central 'office' (Fig 10). Cut off the 20 mm gundeck wings from part 101, leaving only the central 'office'. Reverse the 'office' so that the step is towards the funnel and cement directly abaft the bridge.

(4) Cement together the halves of the Air Defence Position Support, parts 114 and 115, and reduce its length on the fore-and-aft line until the after face almost reaches the moulded slot in the top, thereby narrowing the support. File off the location lug beneath the Air Defence Platform, part 116, and cut off the after end of the platform itself leaving only the forward pair of small projecting lugs. Drill a locating hole in the rear of the modified platform 7 mm from the forward edge (for the foremast) and cement the platform on to the support with the locating hole for the forward HA director, part 117, vertically over the centre of the support, ensuring that the platform is level and accurately centred before the cement sets (Fig 10). Delay cementing the HA director until final completion, and save the second director, parts 118, for future conversions.

(5) Make up an armoured director tower from scrap and cement into position immediately before the bridge (Fig 8). Cement a tub-shaped splinter shield for the director of 'B' turret pompom on top of the armoured director.

(6) Continue the moulded splinter shields around the forward four 4.7-inch mountings and add a projecting 'guntub' for a 20 mm Oerlikon on each side (Fig 9). (7) Cement a second 20 mm Oerlikon 'gun-

Rodney in 1943, with a slightly enlarged Air Defence Platform, but still only one HA Director. She still has her catapult on 'X' mounting but mounts few 20 mm Oerlikons. Observe the White Ensign from the 'sea position', on the main gaff (IWM).



tub' on the main deck on each side immediately below the upper ones, and offset 2 mm outboard. (8) Add a 'guntub' abaft the after 16-inch DCTs position for the director of the quarter deck pompom (Fig 9).

(9) Add a splinter shield to the 'bandstands' of the forward port and starboard pompoms (parts 82 and 83), made from thin paper cemented to the circular edges of the gundeck (part 81). Dampening the paper causes it to 'curl' and it is then easier to cement it into position (Fig 9).

(10) Make a grid for the funnel from extended plastic sprue. Add two sirens, adapted from unwanted boat davits, and two waste steam pipes from extended sprue (Fig 9). (11) Add shallow circular wind shields to the circular platforms of the 'look out platform' (part 88). (12) Add an Air Warning radar aerial on the main topmast and a gaff from the main top (Fig 12). (13) Add a fore topmast, fore gaff, and a second Air Warning aerial to the Air Defence Platform; projecting yards from the ADP wings and projecting struts from the main bridge tower (Fig 10).

**20 mm Oerlikon positions.** (1) Four to port and starboard between the fo'c's'le breakwaters. (2) Two side by side on the crew shelter roof abaft the pompom on 'B' turret. (3) Two on the roof of 'X' turret over the rangefinder 'arms'. (4) Two (side by side) forward of the scratch-built armoured director on the conning tower roof. (5) One on each side of bridge forward of the 16-inch Aloft Director (part 110). (6) One on each side in the 'guntubs' between the forward pair of 4.7s. (7) One on each side in the 'guntubs' below 6. (8) One on top of the after 16-inch DCT in place of the radar aerial (part 94). (9) Two (side by side) on top of the after pompom crew shelter (part 24).

**Carley Float positions.** Gunmountings: (1) Four, in two pairs, on 'A' gunhouse roof, level with the rangefinder arms, 'long' axis forward. (2) Two (side by side) on 'B' gunhouse roof forward of the pompom splinter shield, long axis forward: six, in three pairs, on the rear face of 'B' gunhouse level with each 16-inch gun barrel, 'long' axis vertical. (3) Two, side by side on 'X' gunhouse roof, 'long' axis forward. (4) Two, side by side on each twin 6-inch gunhouse roof, 'long' axis forward.

(5) Port main superstructure: One, horizontal, on the added 4.7-inch splinter shield inboard of the crane cab; one at the same height abreast the middle 4.7-inch; one just forward of the moulded

splinter shield of the port after 4.7-inch.

(6) Starboard main superstructure: Three, horizontal, along the angled main superstructure beneath the added forward splinter screen of the starboard forward 4.7; two, side by side, level with the same gunmounting; two, side by side, level with the middle starboard 4.7-inch; one just forward of the moulded splinter shield of the starboard after 4.7.

**Pompom Directors, Barrage Directors and Searchlights.** Fig 13 shows the make-up of a pompom or barrage director. These are required as follows: (1) One in the tub on top of the armoured director. (2) One on each of the repositioned sponsons on the angled after faces of the bridge tower. (3) One on each 'wing' of part 89. (4) One on each 'pip' on part 92. (5) One in the tub abaft the after 16-inch DCT. Two searchlights are already provided for the funnel platforms; add a similar pair on the 'look-out' platform, part 88.

## Painting

Hull sides to camouflage scheme with black boot topping and hull red beneath the waterline. Main deck; all horizontal deck surfaces and platforms; 6-inch and 16-inch gunhouse roofs; top surface of 16-inch barrels — dark grey. Funnel grille, main mast tripod between platforms and surface warning lantern — black. Topmasts — light grey. All pompom and Oerlikon barrels — black. Boats — light grey with off-white canopies.

## Summary of redundant parts

Jack staff (27) and Ensign staff (26). All boat davits; two cutters and two whalers. Four quad Bofors mountings and their gundecks. One HA director, the radar aerial (part 94), from the after 16-inch DCT.

## General hints

Complete the hull assembly first, including the anchors, propellers and rudder, and continuing building with the model resting uncemented in the stand.

Apart from the single 20 mm Oerlikons and the pompom and HA directors, do not *cement* any other gunmountings or DCTs in position.

Work upwards in the building of the main superstructure, and leave the topmasts until last in assembly.