

THE DESIGNER of the Airfix kit of HMS Belfast deserves congratulation from every modeller with a taste for fine detail. For the first time Airfix have been bold enough to attempt the moulding of single and twin Oerlikon guns, 'fishbone' style radar aerials, and much better masts, davits, ladders and detail generally than hitherto. Some of the parts are capable of improvement yet, such as the shields of the single 20 mm guns, but ship kit design has taken a healthy step forward. One may hope not only that modellers also will be stimulated to even higher standards of detail and authenticity.

As far as conversion possibilities are concerned, the *Belfast* enables the modeller to produce any of the several classes and groups of cruisers with 6-inch guns in triple turrets, although with some extra work because *Belfast* herself was the only one of those ships to have bulges, and these must be removed for the rest. In this article the three groups of 'City' Class cruisers will be considered; the 'Colony' and 'Swiftsure' Classes will be dealt with

Beginning in 1933, five ships were built to carry 12 × 6-inch guns on a hull almost equalling the size of the 'County' Class heavy cruisers. Their proposed mythological names (*Polyphemus*, etc.) were changed during building to city names, *Southampton*, *Glasgow*, *Sheffield*, *Newcastle* and *Birmingham*. The firstnamed was sunk by dive bombers near Malta in January 1941; the others, after serving in every theatre of the war, survived until the late 1950s, though *Sheffield* was not scrapped until 1969.

Sheffield, undoubtedly the most famous of the group, is the subject of the drawing. After the Norwegian campaign, she joined with Renown (which the author has modelled from the Hood kit) and Ark Royal to form Force H, based at Gibraltar. That force took the decisive part in the Bismarck action in May 1941 (during which Sheffield nearly became the erroneous object of attack by Ark Royal's aircraft!); one of the German ship's tankers, the Friedrich Breme, was sunk by Sheffield a few days later. Along with Belfast and Duke of York she also took part in the sinking of the Scharnhorst in December 1943.

Turning a kit of Belfast into a model of Sheffield is not difficult, since not a great deal of superstructure rebuilding is required. The hardest job is the first: as mentioned before, those beautifully moulded bulges have to come off! A razor saw followed by a file will accomplish this, taking care not to damage the 'knuckle' of the bow plating in the process - unless you want to have to make the Birmingham! This process leaves an enormous hole in the hull sides, which is unfortunate, but this can easily be enlarged to a convenient shape and then filled in with plastic card and faired in with putty. Only those areas not covered by the armour belt need to be filled, but do the job carefully and patiently. Such difficulty as there is lies not so much in the nature of the operation as in resisting the temptation of haste. For absolute accuracy the hull should be shortened by two cuts across the waist 12 mm apart; however, since this is such a small amount (four per cent of the overall length), it is not

## 'City' Class cruisers

Conversions from the Airfix kit of HMS Belfast described by lan Fleming

really necessary, as long as one bears the slight discrepancy in mind when taking measurements from the drawing, which shows the correct length. The fo'c's'le sides should be extended by 19 mm after cutting away the moulded framing, and to complete the hull, the armour belt should be added each side from 10 thou plastic card, with an extreme depth of 12 mm, the outline being shown on the drawing.

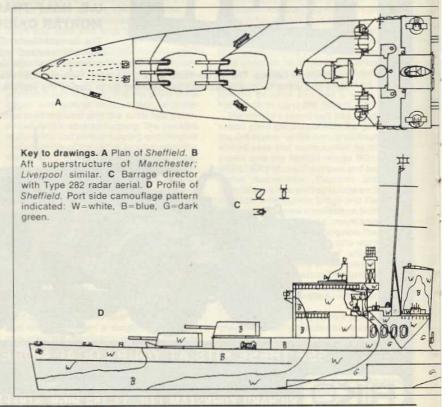
Remove from the quarterdeck all locations except those that will be covered by superstructure, but install parts 80 to 82 The fo'c's'le deck is cut across at the location for part 117, and the forward section cemented in place. When these two have been painted, the shelter deck can be made from the remaining part of the fo'c's'le deck: cut off the portion abaft the second pair of 4-inch turrets and the locations for part 234, the 20 mm guns and the rafts, and install the deck such that the catapult and 4-inch guns are in the correct position. Parts 65-67 are used for 'X' gundeck, with the forward end trimmed to fit against the after end of the shelter deck; triangular fillets will be required at that join to give the deck its correct plan shape. Plastic card is also used for the side plating beneath each 4-inch gun position, and for the low screens that extend forward from these.

The parts for 'B' gundeck are now in-

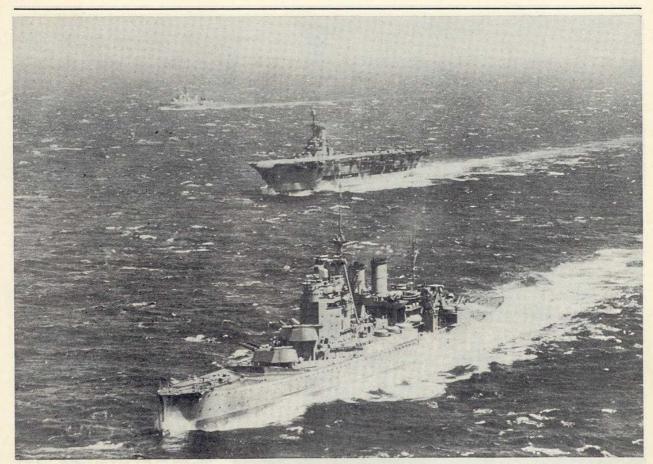
stalled, but need to be extended outwards to the hull sides. Make the sides of this deck of one piece with the hangar sides, not forgetting (as I did) the fillet at their aft end. Add the rest of the hangar structure from plastic card, including its floor, and the walls around the fore-funnel, which extend down to fo c's'le deck level.

For the bridge structure, kit parts can be used with suitable modification. This may be ascertained from the drawing and from the close-up of Newcastle's bridge. The chief thing to note is that the front is a flat curve, not rounded as on Belfast.

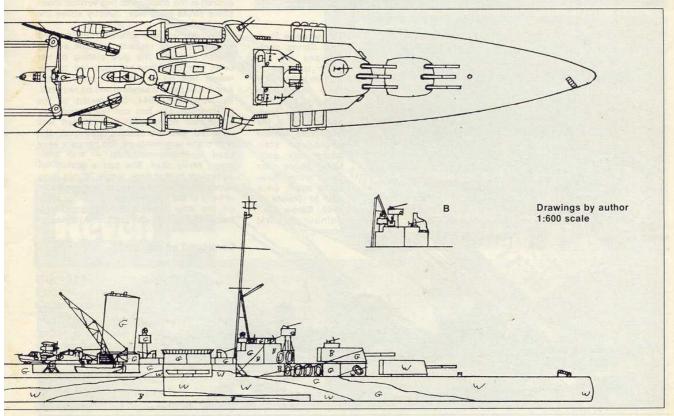
Refer to the drawing for other items of superstructure and fittings. The after funnel, shortened a little, is mounted on the air-intakes provided for the kit fore-funnel and cemented in position on the existing deck location. The fore-funnel needs to be extended by 6 mm and then installed between the hangars. Directors are sited as in Belfast, except for the after 6-inch director. Sheffield's radar was similar to Belfast's: Type 284 on the main 6-inch director; this had two aerials, one of which is represented by part 181, while the other was slightly shorter and mounted across the front of the director, from which the range-finder arms, correct for Belfast, should be deleted for Sheffield; Type 285 with 'fishbone' style aerials on the three High-Angle







'Force H' in the Mediterranean with Sheffield in the background and Ark Royal and Renown to the fore.







directors (parts 171, 174 and 194); Type 273 Surface Warning (parts 175-7); and Type 281 Air Warning (similar to parts 244, 248).

Install the 6-inch guns, using part 22 for 'X' turret and mounting 'Y' turret on a plastic card disc. Nine single 20 mm guns were carried (it is a simple matter to make up the extra one thus required): one each side on the lower bridge, one on top of each hangar, four around the aft director, and one on top of 'X' turret, offset. The pompoms were four-, not eight-barrelled mountings, and must be made up from scrap and fine rod. Again, this is not dif-

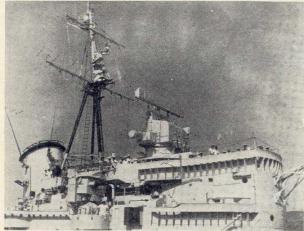
ficult, but requires patience. The torpedo tubes are fitted below the 4-inch guns. Do keep the various spare guns; all are invaluable, especially the very fine twin Oerlikons. Finally, add remaining items such as winches, ladders, boats and rafts. Note the raft-rack behind the fore-funnel. The positions of rafts varied from ship to ship, and the individual photographs should therefore be studied.

Sheffield in 1942 was painted in the 'Western Approaches' camouflage colours of dark green, light blue and off-white. That is also the intention of Airfix's colour scheme

for Belfast; shades did vary, but dark grey is much less likely than dark green. Pat-terns for Sheffield — not the same each - may be taken from the photograph and drawing. What may not be apparent from these is that both cranes, the port 4-inch guns, and the inner hangar walls around the fore-funnel, are blue; and that the whole starboard side of the bridge, plus the forward upper corner of the hangar on that side, are white. Her fo'c's'le and lower main decks were wood, and all superstructure decks, plus the foremost area of the fo'c's'le deck, dark grey. Hangar doors, turrets, gun barrels, boats, rafts and masts all follow the camouflage pattern. The Walrus aircraft were camouflaged in Dark Slate Grey and Extra Dark Sea Grey, with Sky undersides, and 'B' type roundels on the upper wings and fuselage (up to May 1942, fuselage roundels were 'A1' type — if you elect to paint that, good luck to you!). One aircraft was often stowed as drawn; for launching, the catapult was extended to 90 feet, and the aircraft shot upwind. The one improvement that can be made to the kit aircraft is the addition of two vertical interplane struts each side, directly above the wingtip floats.

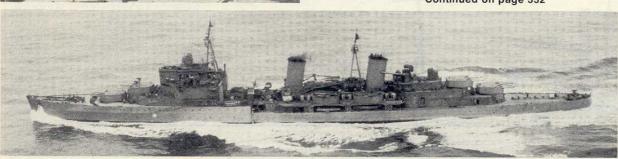
HMS Birmingham differed from Sheffield in a number of respects. Unique among British cruisers, the side plating of her bows was flared and not knuckled; to represent this on a model a considerable amount of patient sanding will be required. By November 1944, the period of the photograph, she had lost her aircraft and all related equipment: the catapult was removed, and the space plated over; the port crane was removed; the hangars were used for accommodation — with their doors firmly shut. She had a goodly AA armament at that time: single 20 mm guns appeared on top of 'B' turret; and each side in front of the hangars, on the hangar tops, on the after superstructure immediately below the searchlight platforms (although





Top of page Sheffield during preparations for the Torch landings in November 1942 Note camouflage pattern on this side. Above Newcastle early in the war. Note second anchor on starboard side only. Left Ideas for for detail work: Newcastle again, on a visit to Trieste in 1949. Below HMS Edinburgh (IWM photos).

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The unique colour scheme of Glasgow in mid-1941 (IWM).

the searchlights themselves were absent), and two side-by-side on the quarterdeck, with a screen similar to part 85. Two single 40 mm guns were mounted on a large platform built between the 4-inch guns (the boats thus displaced being moved to the former catapult position) and three in the position vacated by 'X' turret, which had been removed. The radar on her main director was as Belfast's; she also had Type 282 radar to control the pom-pom each side, located in the circular wells projecting from the sides of the lower bridge. This is not included in the kit, but is very easy to make up from a sliver of fairly thick plastic card and fine rod for its two prongs. A drawing of it is provided. Most of these points may readily be seen on the accompanying photograph, which also shows the colour scheme: pale grey with a dark blue band running between the muzzles of 'A' and 'Y' guns up to the level of the quarterdeck.

Newcastle and Glasgow are the simplest variants: early in the war they lacked all radar and 20 mm guns. The former ship carried, for a brief period, monstrous 20barrelled rocket launchers on 'B' turret and on the quarterdeck, which may be modelled from scrap, or omitted. The function of these was to put up rockets trailing lengths of wire, to the mortification of any aircraft flying into them. Both ships had their after High-Angle directors mounted on a shorter trunk, and had shutters over their torpedo tubes, like Belfast, but not the screens forward of these. The structure carried on Sheffield between the aft director and the searchlight platforms was also absent, since it was an 'office' for the 285 radar which was not yet fitted to these two ships. Newcastle was light grey; by contrast, Glasgow in mid-1941 had a most unusual rectangular pattern of pale and dark grey, which was the same each side. In view of the great variety of colour schemes used in the war, one is tempted to wonder whether some of them were really effective as camouflage!

Three years later, Glasgow had all radar as Sheffield, and single 20 mm guns on the lower bridge and hangar tops and on 'B' and 'X' turrets; also four on the aft superstructure, and one each side on the former aft searchlight platforms; and a platform with two twin 40 mm guns between the 4-inch guns. Aft superstructure and deckedge screens were as Sheffield. All aviation equipment had by then been removed. Her colour scheme was again unusual: light grey, with a dark blue band running the full length of the hull up to quarterdeck level, and the after funnel, oddly, dark grey.

A second series of three ships completed about 1938 had a few modifications to the original pattern. The bridge front was rounded, like *Belfast*'s, and so less alteration of kit parts will be necessary; the for-

ward corners of the lower bridge sides and of the hangar sides were now rounded too. Further, the after 6-inch turrets were given their own director, whereas previously these had been controlled by the aft High-Angle director whose prime function was control of the 4-inch guns, for which it was retained. Of this group, Gloucester was bombed and sunk in the Mediterranean in May 1941; Manchester was scuttled after attack by E-boats during the 'Pedestal' convoy to Malta in August 1942; Liverpool was scrapped in 1958.

The aft superstructure of Manchester is shown on a separate drawing. Single 20 mm guns were sited on top of the lower bridge each side, further forward than the foremost 20 mm position in Sheffield, which in this group was occupied by Type 282 radar; four on the aft superstructure; one on 'X' turret offset as on Sheffield; and one on the quarterdeck. A single 40 mm Bofors gun appeared centrally on 'B' turret, with a rectangular screen. All radar was as Sheffield, except that the 285 aerial was absent from the after High-Angle director. The rafts carried were three on the side of each hangar, three on the rack behind the fore-funnel, three on top of 'Y' turret, and two on top of the port 4-inch guns' crew

shelter. At the time of her loss, Manchester was light grey.

Liverpool had single 20 mm guns on 'B' and 'X' turrets, and one on the quarterdeck. At the time of the photograph she had no radar; and her aft High-Angle director and pom-poms were lacking, though presumably only temporarily. Her pale and dark grey pattern was the same each side.

The last two ships of the 'City' Class were Edinburgh and Belfast herself. These were several feet longer than their predecessors (613 feet as against 591 feet) and had a different machinery layout; the extra length permitted another pair of 4-inch twins to be worked in, while their after 6-inch guns were sited one deck higher.

A photograph of Edinburgh is provided, from which it may be seen that, apart from the lack of bulges, the detail differences from Belfast were few: two single 20 mm guns were carried — unusually — on 'B' turret, without screens, and two more on the quarterdeck; note that of the latter pair, the starboard gun is further aft. The only radar carried is Type 279 at the mastheads. HMS Edinburgh was scuttled in 1942 after severe damage by torpedoes from U-456 on April 30 and from German destroyers on May 2, while escorting a Russian convoy.

Right HMS Birmingham in Nor-Navy Yard, Virginia, showing modifications up to November 1944. Below HMS Liverpool (IWM). Reference to these and the other photos and modelling notes will enable a whole fleet of 'City' Class cruisers to be assembled by the keen warship modeller.



