

WAR EMERGENCY DESTROYERS

The 'O' to 'Z' classes described and modelled

By PETER HODGES

LAST month, I dealt in some depth with the background to the development of the Emergency Classes of destroyers. This month, the conversion of the Airfix *Cossack* kit will be discussed, and various tables and drawings will enable the modeller to produce a variety of vessels.

MODELLING THE VARIANTS

As I mentioned in the first part of this article, because their equipment was rather makeshift, and also because their hull lengths were slightly less than the later ships, neither the 'O' nor the 'P' classes are detailed here. Similarly, the large 'C' group underwent considerable change within itself, and will form the subject of a separate article.

This leaves the ships tabulated, the details of the vessels chosen being shown in the Equipment Table. Inspection of this will reveal all the differences in armament layout, themselves covered both by full size drawings for 1:600 scale, and by free-hand sketches.

For completeness refer to last month's Class List. The vessels met a variety of fates, as can be seen from the 'Disposals' column. It is interesting to note that the 'lead ship' of the 'S' and 'T' classes perpetuated the name of a famous Naval Personage, and that this was continued in the following classes, giving them each one 'odd man out' which was usually fitted as the Leader. Unhappily, *Hardy*, like her earlier namesake, was a War Loss.

In an attempt to leave the drawing as basic as possible, those items of equipment which were standard throughout the classes (eg, torpedo tubes and fo'c'sle arrangements) are omitted, as are details of boats and Carley Floats.

BUILDING SEQUENCE

Modifications to the *Cossack* hull are straightforward. The length of the fo'c'sle deck needs to be reduced to 68 mm and the break of the fo'c'sle shortened to suit. Next, the rounded stern must be cut off and a new 'transom' fitted. Cut this well over size and then file it to suit when the cement has set, making the quarters slightly rounded. At the same time, flatten off the upward curve of the keel as much as possible.

Cutting back the fo'c'sle deck makes the main deck (Part 3) too short, so an extension is needed at main deck level to pass under the fo'c'sle deck. Make this plenty long enough to give an authentic 'entry' effect beneath.



Above: A close view of HMS Rotherham in 1945 as she transfers oil fuel from the carrier Illustrious in the Far East Fleet. Useful details to note are the single Oerlikon mounts in the wings abreast the after radar mast, bridge wings with twin Oerlikons, and the early type of shield on the 4.7 inch guns (Imperial War Museum).

When these decks have been fitted and cemented in place, extend the fo'c'sle towards the funnel, to conform to the drawing and remove the base of the superstructure from the main and fo'c'sle decks. All holes need to be plugged, either with plastic sprue or with modelling putty. Anchors in each hawse-hole can be cemented into position at this stage.

The hull is now ready for fitting-out. Starting right forward, make up the jackstaff tripod from plastic sprue, and then cement the (wooden) jackstaff on to it. In due course, the steel tripod will be painted grey, while the jackstaff itself will be pale brown.

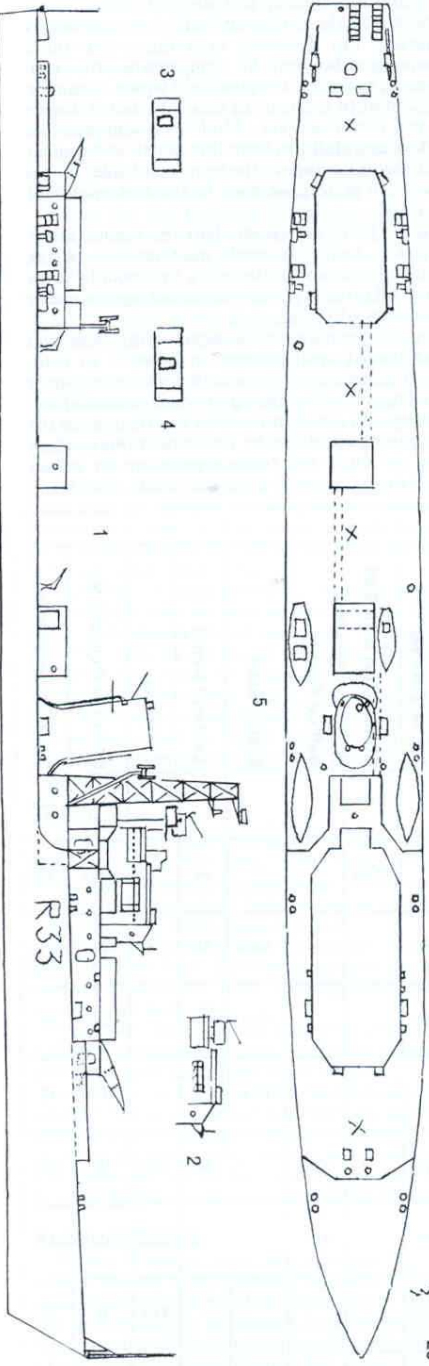
The detail of the superstructure is largely a matter of choice. I made it all from scrap and plastic sheet, drilling the portholes before assembly. Screen doors can also be cut at this time if they are to be depicted in the open position, but don't do this if your model, like mine, is 'coming up harbour', because then all doors are closed. If they are to be open, cement a tiny piece of plastic in the fully open position and paint the inside of the door white. This gives a good contrast effect.

The blast-shields above 'A' and 'Y' guns were divided into compartments by shallow webbing in which various items of deck equipment were stowed. I managed this webbing with tiny sections of paper, which is fiddly work but greatly enhances the final appearance. Alternatively, 'B' and 'Y' gun decks can be scratch-built and the bridge structure from the *Cossack* kit utilised. Those who elect

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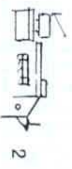
(1) Basic profile, with short lattice foremast, gaff on funnel, 'double director' arrangement and later type Radar aerial. (2) Bridge for 'W' class. Similar for 'Z' class, but with Power Director. (3) After bulkhead of after superstructure. (4) Forward bulkhead of after superstructure. (5) Basic deck plan showing centres of rotation, tripod mast position and outline of cat-walks (Note catwalk to port of funnel). (6) 'B' gun deck. (6a) Associated Carley float arrangement for 'Q', 'S', 'T' and 'W' classes. (6b) Associated Carley float arrangement for 'R' class. (6c) Associated Carley float arrangement for 'V' and 'Z' classes. (7) Bridge. Signal searchlights on wings; compass and Captain's sight on centre line. (8) Twin Oerlikon gun deck with searchlight platform. (8a) Associated arrangement of Carley floats. (9) Quad pom-pom gun deck. (10) Midship gun deck for 4x single Oerlikon, searchlight platform, Warning Radar structure, and short mainmast. (10a) Midship gun deck Carley floats, 'R' class. (10b) Midship gun deck Carley floats, 'Q' class. (11) Midship gun deck for twin Bofors. (11a) Associated Carley float arrangement. (12) Midship gun deck for 2x twin Oerlikon, with stump mast and W/T aerial yard. (Ensign staff shown dotted). (13) 'X' gun deck with lattice structure for D/F aerial. (14) Radar mast, 'Q', 'W' and 'Z' classes. (15) Tall lattice foremast with D/F aerial and later type Radar aerial. (16) Arrangement of early type warning Radar 'lantern' on foremast; yardarm detail for all ships with lattice foremast. (17) Detail of bridge Oerlikon sponson; note reduced splinter shield height outboard. (18) Arrangement of D/C thrower and 'Ready-use' depth charge. (19) Early 4.7 inch with breech-worker's platform. (20) Power operated director for 'Z' class. (21) Quad pom-pom with angled splinter shield on forward corners and curved shield in rear. (22) Simplified HA Rangefinder Director. (23) Single 40 mm Bofors mounting. (23a) Platform for super-firing single Bofors in lieu of searchlight (Tumult only). (23b) Arrangement of single Bofors gun deck (Tumult only). (24) Single Oerlikon. (25) Twin Oerlikon. (26) Twin Bofors (Hazemayer). (27) Later 4.7 inch (and 4.5 inch for 'Z' class). (28) Arrangement of gripes. (29) Motor boat on Radial davits. (30) Detail of tripod foremast.

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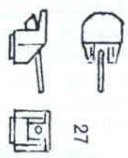


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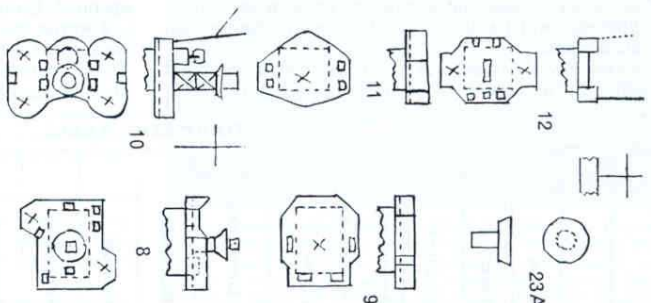
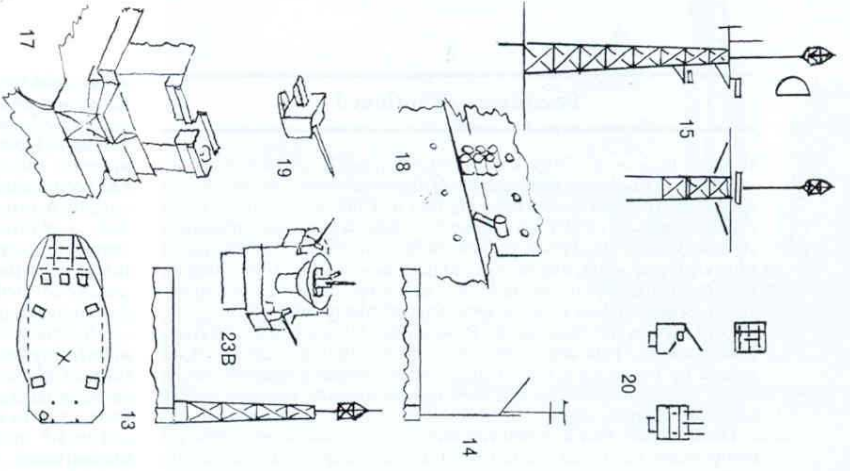


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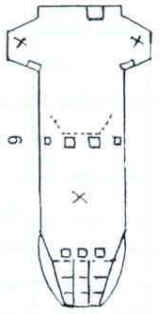


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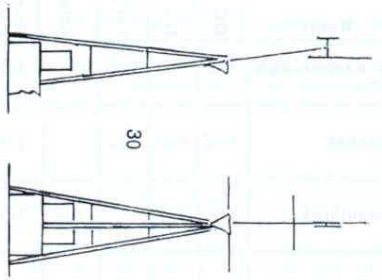


All full-size for 1:600 scale except scrap views



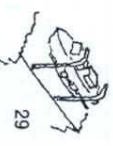
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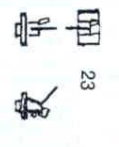


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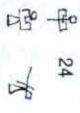
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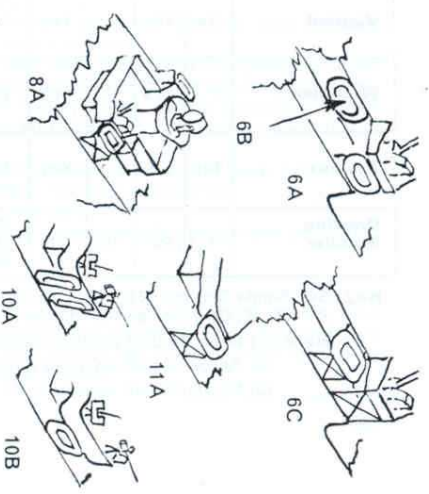
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6B

6A

6C

8A

10A

10B

11A

Destroyers—continued

to build their own bridge will produce a much nearer approach to scale, particularly in the thickness of the windshields of the various sponsons. It is worth remembering that in 1:600 scale, 1 mm almost exactly represents 2 ft (there being 25.4 mm to the inch, and 1 inch representing 50 ft). This is a most useful yardstick in making paper bulwarks, and so on, and also in judging the size of lockers, winches, etc. The bridge sponsons had wind deflectors fitted to their upper edges, best modelled by a narrow strip of thin plastic.

Notice from the drawing the Rangefinder Director with its rangefinder 'arms', 'fishbone'-style radar aerials, and the hollow effect, gained by wrapping a thin strip of paper around a disc of plastic. There is also a servicing platform on the director pedestal with a windshield around it.

HMS *Rocket* had a tripod foremast, easily made from Airfix kit components but better made from thin plastic sprue. Lattice masts present a nice challenge, but are much more easily made than may be imagined. If necessary, reduce the number of units in the lattice, because the difference will hardly notice; but do use the thinnest sprue that is manageable.

The *Cossack* fore funnel can be used for all the models, but build out the base with putty and smooth it down to give a slightly 'belled'

effect. Add the waste steam pipes, the siren pipes, and the siren platform, and also a stub exhaust projecting just above the rim.

The 'Qs' and 'Rs' both had the early mark of 4.7 inch which is available from the *Hotspur* kit. However even this is not quite accurate and needs some modification. An unnecessary projection has been included on the right rear of the gunshield which should be cut off. A projection *did* exist in the rear on that side, but it was in fact, a platform for the breech-worker. Modellers who wish to correct this, should make a new platform from thin plastic and cement it level with the *base* of the mounting on the right hand side. It was usually covered by a wooden grating, so must be finished matt light brown at the painting stage.

All sixteen ships had a 'Quad' pom-pom abaft the funnel, available from the *Cossack* kit. Again, it needs modification, in the form of a splinter shield in rear and in front. A thumbnail sketch shows what is necessary. All other types of gun mountings are made from scrap to the dimensions of the drawing.

The 4.7 inch gun in 'X' position was comparatively high and unobstructed, and had special arrangements to allow it to train through very nearly two complete revolutions before its stop-gear operated. Quite often it was stowed pointing forward instead of aft.

Torpedo tube mountings can come from either the *Hotspur* or the *Daring* kits. The latter can be cut down by one tube to make them 'Quad' mounts, but on the whole the *Hotspur* units are far better. They do, however, need the addition of a cupola, made from scrap

EQUIPMENT TABLE

Name	DC	HA Director	Early 4.7 inch	Later 4.7/4.5 inch	Bridge Armament Each Side	Abaft Funnel	Midship Gundeck	Lattice Mainmast	Pole Mainmast	Tripod Foremast	Lattice Foremast	Stump Mast For W/T Aerial	Stump Mast with Gaff	Gaff on Funnel	Ensign Staff	'Lantern' Aerial	Cat-walks	Colour of Pendant No	Camouflage Scheme
Queenborough	Yes	Yes	Yes		SO	QP	SL 4×SO		Yes	Yes			Yes					W	AS
Rocket	Yes	Yes	Yes		TO	QP	SL 4×SO			Yes			Yes			A		B/W	43
Saumarez	Yes	Yes		Yes	TO	SL, 2×TO	TB	Yes			SH	Yes			Yes	M		W	WA
Terpsichore	Yes	Yes		Yes	TO	SL, 2×TO	2×TO				SH	Yes			Yes			W	G
Tumult	Yes	Yes		Yes	SB	3× SB	TB				SH	Yes			Yes			B	G
Vigilant	Yes	Yes		Yes	TO	SL, 2×TO	TB	Yes			T	Yes		Yes		M	Yes	W	AS
Wrangler		Yes		Yes	TO	2×TO	TB		Yes		T	Yes		Yes			Yes	W	AS
Zealous	Yes			Yes	TO	SL 2×TO	TB		Yes		T	Yes					Yes	B	43
Drawing Number	1, 7, 22		19	27	23, 24, 25	23B, 8, 9, 23A	10, 11, 12	13	14	30	1, 15	12	10	1	12	0.1 16	5	—	—

Key: SO: Single Oerlikon; TO: Twin Oerlikon; SB: Single Bofors; QP: Quad Pom-Pom; SL: Searchlight; TB: Twin Bofors; SH: Short; T: Tall; A: Aft; M: On Foremast; B: Black; W: White; AS: Admiralty Standard; 43: Post-1943; WA: Western Approaches; G: Plain Light Grey.

Note: (1) *Wrangler* dual purpose director shown on drawing 2.

(2) *Zealous* power-operated director shown on drawing 20; located as in *Wrangler*.

(3) No significant variants in 'U' Class.

and cemented between the moulded straps abaft the centre of rotation. As an additional refinement, cement a small strip of plastic across the tubes near the cupola to represent the servicing platform.

All the close-range gundecks are protected by slinter shields (made from thin paper in the model) and similar shields are fitted alongside the 4.7 inch guns. Notice that the splinter shields for twin Oerlikons are of reduced height outboard, to allow the guns to be fully depressed.

Torpedo davits and Carley Floats come from the spare part box, and a good deal of plastic sprue needs to be chopped up to make bollards, searchlights and so on.

Make the DC throwers from sprue too, slicing it diagonally so that the thrower leans outwards. By each thrower are six ready-use depth charges, arranged three high and two deep, as shown in the drawing. On the quarter-deck there are double rows of six depth charges and two dan buoys. The short ensign staff is offset to starboard clear of the depth charge rails.

Boats and davits again come from the spare part box. New holes need to be made in the deck to receive them, of course, and as already described, I set my 25 ft motor boat in the outboard position.

Make up the two 'Charlie Noble' galley funnels, cranking the forward one to lead it towards the mast structure. A number of lockers and fan trunks are positioned generally around the upper decks, all made from scrap.

HMS *Rocket* had a short lattice structure amidships, carrying the early type of Surface Warning Radar, with a searchlight platform immediately abaft it. The lattice is made from sprue, and is topped by a small platform for the aerial, while the searchlight and its platform are made from scrap.

From the 'V' class onwards, catwalks were provided linking the fo'c'sle deck with the after superstructure. These were narrow gangways with guardrails on each side, and are shown dotted in the drawing. They gave a means of getting aft along the main deck when the latter was awash in rough weather.

Mount the propeller shafts, screws and rudder conventionally. The small recesses applicable to the *Cossack* hull will be in the wrong place, once its length has been altered so new ones need to be cut to accept the shafts, and the originals filled with modelling putty, sanded smooth.

CAMOUFLAGE

All the ships dealt with saw War Service, first in the Home Fleet and later in the Far East, where they went more or less en bloc. There were three main camouflage schemes:

Western Approaches: Long stripes of white, green, and light blue, with objects in shade painted white.

Admiralty Standard: This was similar, but the colours were brown, grey, and dark blue. Both schemes were in use on Home and foreign stations at the same time, although some ships in the Home Fleet were overall dark grey.

Post-1943: All ships were light grey with a dark blue band from the waterline to maindeck level, extending roughly between 'A' and 'Y' guns, but sometimes from stem to stern.

HMS *Rocket* had the post-1943 scheme, and I achieved a dead straight line at the colour boundary by first painting the entire hull above the waterline grey. Then, a thin strip of Sellotape was stuck on the ship's side leading forward at maindeck level as far as the bow. The lower part of the hull was then painted blue, and when all was dry, the Sellotape was carefully peeled off, leaving a sharp edge.

FUNNEL MARKINGS

Flotilla Leaders were distinguished by having a black band around the top of the funnel, 2 mm deep in 1:600 scale. They did not show their pendant number on the side or stern. The flotilla marking was also carried on the funnel, in the form of bands of red, white, or black, or a combination of these. The allocations were complex and varied from theatre to theatre, but in any case they were abandoned to a large extent towards the end of the war, so the modeller of the ships listed need not be bothered by them.

After the war, the complicated scheme of flotilla funnel bands was changed in favour of the simple expedient of a number painted on the funnel—a method which still survives. In addition, nowadays, warships often have a symbolic device on the funnel, too. HMS *Glamorgan*, for example, wears the Red Dragon of Wales, while HMS *Kent* displays the White Horse of her County.

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Top: A superb detail view of HMS *Wager*, 27th Destroyer Flotilla, British Pacific Fleet, in 1945. Note the red/yellow Carley float, the single small director with superimposed radar aerial, twin Oerlikon mount in bridge wing, and later type of shield to 4.7 inch gun (E. W. Elwick). Above: HMS *Rocket* modelled by Peter Hodges as described in the text.

PENDANT NUMBERS

The complete list of wartime pendant numbers appears in the Class List, and I have also indicated the appropriate colour in the Equipment Table. As will be seen from the model of HMS *Rocket*, her number changed colour so that it contrasted against the camouflage band. I used transfers, later painting over the black letters with white paint.

PAINTING SCHEME

Contrast is the thing to aim for to give the best effect. The table gives the correct camouflage for the main hull and superstructure and the following is an average scheme for decks and fittings:

Black: Boot-topping (1.5 mm strip of Sellotape, painted, cut and stuck on the hull when painting is complete); pom-pom gun body and barrels; Oerlikon guns and magazines; lattice masts below yardarm level; rangefinder 'arms'; searchlights; galley funnels; inside main funnel.

Light Grey: Deck fittings and boats; 4.7 inch gunshields and barrels; Oerlikon shields; hull and superstructure in conjunction with camouflage scheme; main deck from break of fo'c'sle to after superstructure; fo'c'sle gear.

Dull red: Fo'c'sle to breakwater; hull beneath boot-topping; quarter-deck abaft after superstructure.

Dark Green: Fo'c'sle deck abaft breakwater; all gundecks; main deck abreast after superstructure; torpedo tube servicing platforms.

Light Brown: Decks of boats; breech worker's platform on 4.7 inch guns; bridge deck; Warning Radar 'lantern'; jackstaff and ensign staff.

White: Upper masts; motor boat canopies; all boats below their waterline; later style Surface Warning radar aerial.

Silver: Muzzles of 4.7 inch guns.

Bronze: Propellers. (On no account should anchors ever be painted bronze!)

FINAL DETAILS

Using gloss paints, put a touch of red and green on the wind deflectors of the bridge signal-search sponsons to port and starboard to depict the navigation lamp shields, and similarly paint the tops of the port and starboard cable holders.

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With a sprig of thin sprue make a series of tiny white dots vertically upwards from the intersection of the bow and the keel on each side to represent the draught marks. Terminate the marks halfway up the ship's side and similarly mark the stern.

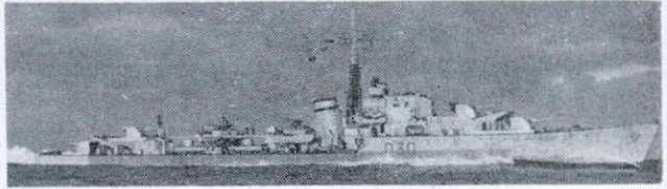
Paint the dan buoys white, and then add tiny dots of red or green as appropriate to their side, again using a sprig of sprue. At the same time, put a few red dots on the superstructure bulkheads to represent the flooding valves and fire-hose racks.

As an alternative deck colour scheme, both fo'c'sle and quarter-deck can be grey, with the raised plating forward of the cable-holders picked out in matt black.

All ships should at least wear a White Ensign, if nothing else, and the different positions from which it was flown at sea are detailed in the Equipment Table. It will be seen from this that some ships had an ensign gaff on a stump, some a gaff on the funnel, while others had no gaff at all, and flew their ensign from a very small staff on the midship gundeck. All three locations were the sea positions, of course; in harbour, the ensign was flown from its staff on the quarter deck.

Reader E. W. Elwick points out that HMS *Valentine* included in the class list last month never commissioned under that name but was transferred to Canada as *Algoquin* before completion. In the case of the 27th Destroyer Flotilla, at least, the flag superior changed to 'D' in 1945 as shown in Mr Elwick's pictures of *Wager* which illustrate this article.

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Above: HMS *Wager* in the Pacific in 1945 with a single Bofors mount and twin Oerlikon mounts abaft the funnel. The Hazemeyer Bofors mount is further aft with its radar aerial just visible above it.

Left: Another view of *Wager* this time showing the port side twin Oerlikon complete with its gyro gunsight, the Hazemeyer Bofors, and the 10 ft dinghy lashed under the Carley float stowage (E. W. Elwick).