

Modernised Type 12M Class Frigate H.M.S. YARMOUTH 1968-1986 1/350 Scale

The Type 12 Frigates were introduced in to the Royal Navy during the 1950's and were the first ships designed specifically for the anti-submarine role. With the new "V" form hull design, they were intended to counter the new fast diesel electric submarines and be able to keep up high speeds even in rough weather.

Six ships were initially ordered for the Royal Navy, one of which, HMS Blackpool, was loaned to the Royal New Zealand Navy, and a further two built for the Indian Navy. INS Talwar and INS Trishul. Such was the success of these ships that a further nine vessels to an upgraded specification (Type 12M) were ordered for the Royal Navy. Two were also ordered for the Royal New Zealand Navy and three for the South African Navy as the President Class. The Australian Navy also built their versions of the Type 12 under a licence agreement.

During the 1960s, the introduction of the Leander class of Frigate or Type 12i, meant that ships were being provided with the additional capability of operating a Wasp Helicopter in the Match role. It was decided to refit the later Type 12M frigates and bring them up to this standard as well. Major reconstruction was carried out on the nine RN ships and the three President class of the South African Navy who had also purchase Wasp Helicopters. HMS Yarmouth was one of those nine ships.

Originally Laid Down on 29th November 1957 at John Browns Shipbuilding on the Clyde, she was commissioned on 26th March 1960. Her modernisation program took place between 1966 and 1968 which took her capacity close to that of a Leander class Frigate. She was heavily involved in the Cod Wars off Iceland during the 1970s where she sustained damage from collisions with Icelandic Gun Boats. Her involvement in the Falklands campaign really brought her name to the fore, where along with HMS Plymouth, she was in the thick of the action, both in San Carlos and on anti submarine patrols, where she gained the nickname 'Crazy Y', from her frantic chasing down of suspected and actual submerged targets.

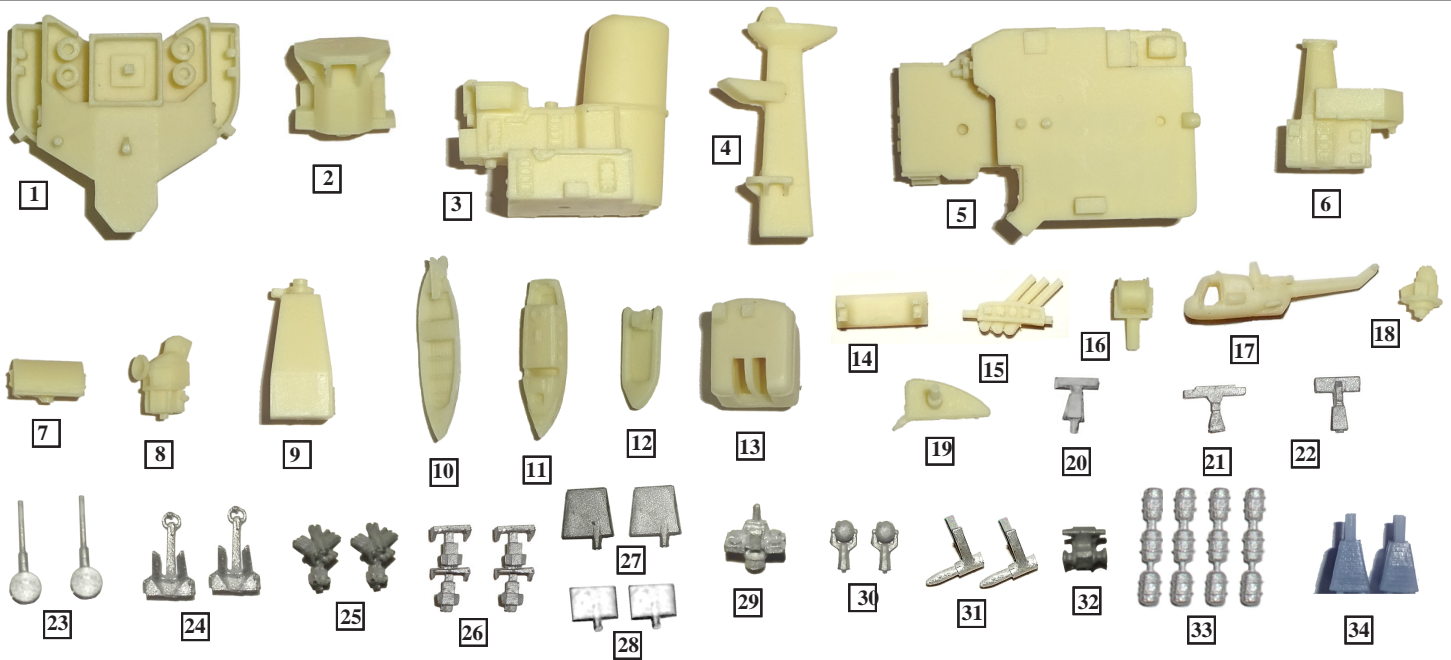
HMS Yarmouth continued to serve until 30th April 1986 when she was decommissioned. A year later she was towed out into the Atlantic and sunk as a target for HMS Manchester.

Specifications

Length: 370 ft oa. Beam: 41 ft Displacement: 2,150 tons standard 2,560 tons full load. Speed: 30 knots max
Armanent:

1 x Twin 4.5 inch Mk6 Gun Mounting. 1 x Limbo A/S Mortar Mk10 2 x 20mm Single OerlikonGuns
1 x Quadruple Sea Cat Missile Launcher 1 x Wasp Anti Submarine Helicopter

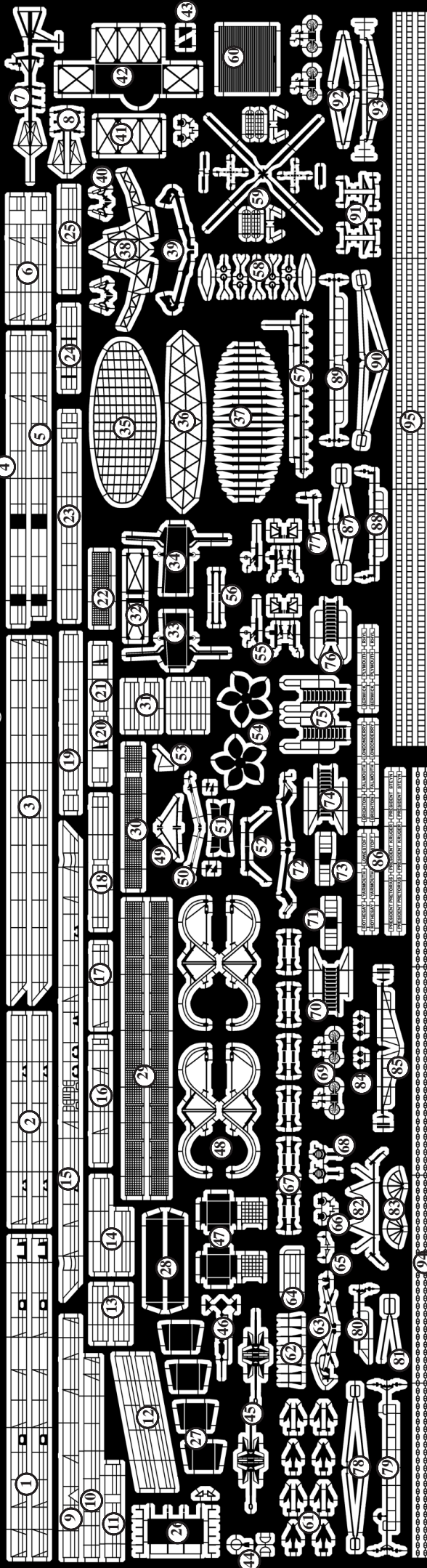
Resin and White Metal Parts



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|--------------------------------------|------------------------------|------------------------------------|
| 1. Bridge/ GDP Unit | 12. Gemini Inflatable Boat | 24. Anchors |
| 2. Main Director Platform | 13. Twin 4.5" Mk6 Gun Turret | 25. Corvus Chaff Launchers |
| 3. Funnel Unit | 14. Mortar Mk10 Base | 26. Fore Mast ECM Array (SAN Only) |
| 4. Fore Mast | 15. Mortar Mk10 Barrels | 27. Rudders |
| 5. Aft Superstructure & Hangar | 16. Large Hawser Reel | 28. Stabiliser Fins |
| 6. Main Mast & Director Deck House | 17. Wasp Helicopter Fuselage | 29. Sea Cat Missile Launcher |
| 7. Engine Room Vent Box | 18. Sea Cat Director | 30. Large Signal Lamps |
| 8. Main MRS 3 Director | 19. 993 Radar Antenna | 31. Propeller A Frames |
| 9. Main Mast (SAN Modification only) | 20. 978 Nav Radar Antenna | 32. Quarterdeck Windlass |
| 10. 27' Motor Whaler | 21. IFF Antenna | 33. Life Raft Canisters |
| 11. 25' Admiralty Motor Cutter | 22. Early IFF Antenna | 34. HF Whip Aerial Bases |
| | 23. 4.5" Gun Barrels | |



These 40mm Bofors have been included as extras for the SAN ships if fitted later.



Modernised Type 12M Frigates 1/350 Scale

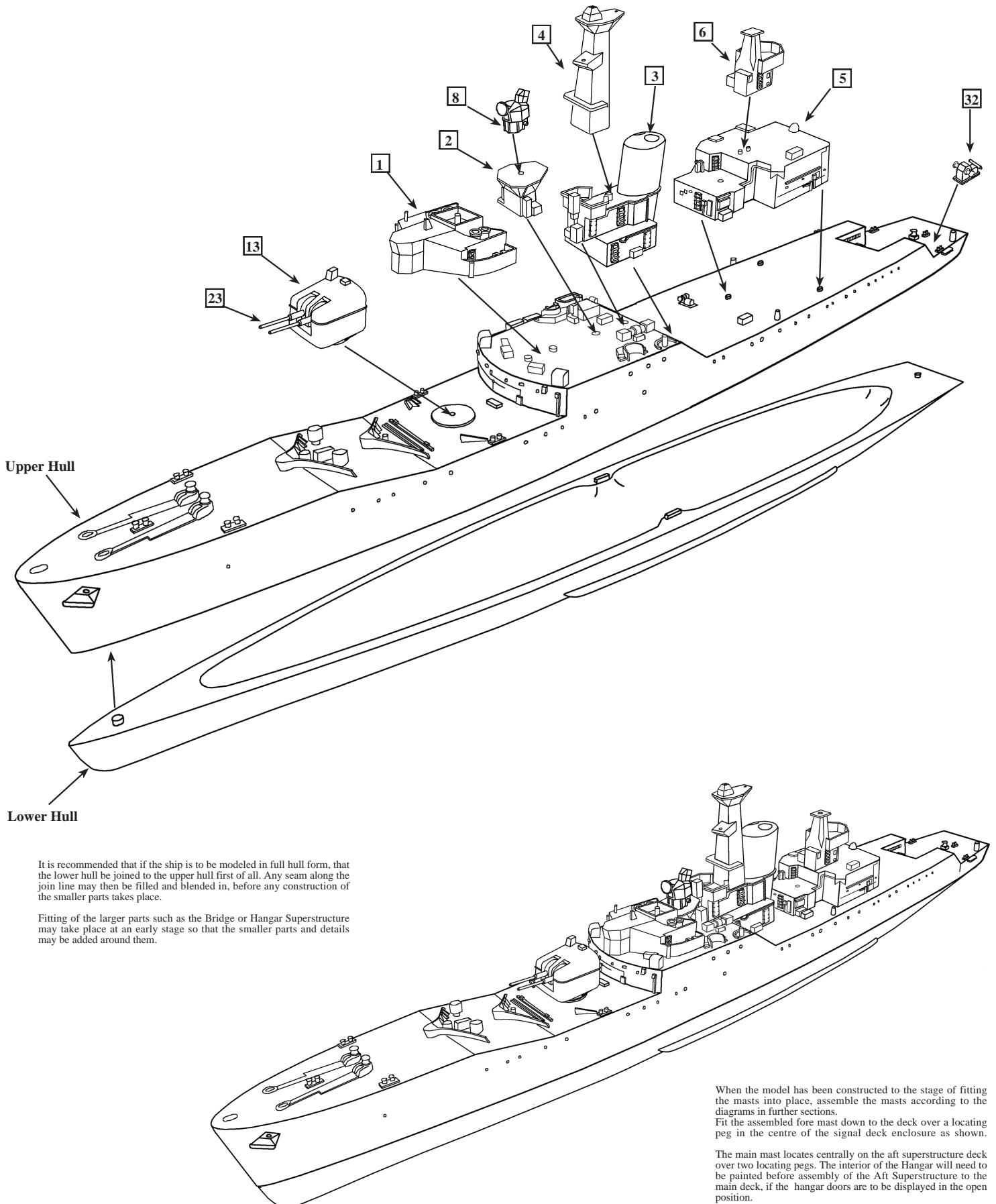
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|---|---|--|
| 1. Railings (Fo'c'sle) | 49. Fwd RAS Gear Attachment Frame | 73. Aft Hull Step Ladder Landing (Sbtd) |
| 2. Railings (Fore Deck) | 50. Fwd RAS Gear Post | 74. Inclined Ladder (Aft Hull Step Sbtd) |
| 3. Railings (Main Deck) | 51. Fwd RAS Gear Access Platform | 75. Inclined Ladders (Forward Hull Step) |
| 4. Railings (Superstructure Port) | 52. Small Boat Crane | 76. Inclined Ladder (Funnel Port) |
| 5. Railings (Superstructure Port) | 53. Main Mast Gaff | 77. Sensor (Main Mast Top) |
| 6. Railings (Mortar Well) | 54. Propellers | 78. Yardarm Stays (Fore Mast Sides) |
| 7. Fore Mast Top Array (Centre) | 55. 20mm Orlikon Mountings | 79. Yardarms (Fore Mast Sides) |
| 8. Fore Mast Top Array (Sides) | 56. 168 Decoy Rack | 80. Yardarm (Fore Mast Front) |
| 9. Railings (Hangar Roof) | 57. Flight Deck Approach Light Bar | 81. Yardarm Stays (Fore Mast Front) |
| 10. Railings (Hangar Roof) | 58. Wasp Helicopter Undercarriage Parts | 82. Sword and Shield Antenna Mountings |
| 11. Railings (Hangar Roof) | 59. Wasp Helicopter Parts | 83. Shield Antennas |
| 12. Railings (Fo'c'sle Ramp) | 60. Hangar Door | 84. Flight Deck Floodlight Clusters |
| 13. Railings (Chaff Launcher Enclosure) | 61. Sea Cat Missiles | 85. Yardarms (Fore Mast Aft Quarters) |
| 14. Railings (Funnel Base) | 62. Sae Cat Loading Rails | 86. Ships Name Boards |
| 15. Railings (Quarterdeck) | 63. Hyab Hydraulic Crane (Alt) | 87. Yardarm Stays (Main Mast) |
| 16. Railings (Aux Conn Position Aft) | 64. Mortar Well Platform Railing | 88. Yardarms (Main Mast) |
| 17. Railings (Aux Conn Position Fwd) | 65. Fore Mast Top Sensors | 89. Yardarms (Main Mast Sides SAN) |
| 18. Railings (Fore Mast Lower Platform) | 66. Signal Lamps (Small) | 90. Yardarm Stays (Main Mast Sides SAN) |
| 19. Railings (Fore Mast Top Platform) | 67. Life Raft Racks (Singles) | 91. Fore Mast Top Pole Array (Early) |
| 20. Railings (Forward Hull Step Sbtd) | 68. Signal Lamps (Large) | 92. Yardarm Stays (Main Mast Aft Quarters SAN) |
| 21. Railings (Forward Hull Step Port) | 69. Cordage Reels | 93. Yardarms (Main Mast Aft Quarters SAN) |
| 22. Mortar Well Safety Net | 70. Inclined Ladder(Aft Hull Step Port) | 94. Anchor Chain |
| 23. Railings (Main Director Platform) | 71. Aft Hull Step Ladder Landing (Port) | 95. Vertical Ladder Stock |
| 24. Railings (Main Mast Top Platform) | 72. Decoy Crane | |
| 25. Railings (Nav Radar Platform) | | |
| 26. Canoe Rack | | |
| 27. Life Raft Shelves (Small) | | |
| 28. Life Raft Shelves (Large) | | |
| 29. Flight Deck Safety Nets | | |
| 30. Hangar Side-Safety Nets | | |
| 31. Railings (Whip Aerial Platforms) | | |
| 32. Aerial Platform Supports | | |
| 33. Aerial Platform (Starboard) | | |
| 34. Aerial Platform (Port) | | |
| 35. Jupiter Radar Antenna Mesh | | |
| 36. Jupiter Radar Rear Frame | | |
| 37. Jupiter Radar Vertical Spacers | | |
| 38. Jupiter Radar Mounting Frame | | |
| 39. Jupiter Radar Transducer Horn | | |
| 40. Chaff Launcher Flare Tubes | | |
| 41. Aux Conn Platform Aft Frame | | |
| 42. Aux Conn Platform | | |
| 43. Aux Conn Platform Ext Supports | | |
| 44. Bridge Roof DF Antenna | | |
| 45. Alternative Anchors | | |
| 46. Dan B buoy Marker | | |
| 47. Signal Flag Stowage | | |
| 48. Boat Davits | | |

General Precautions

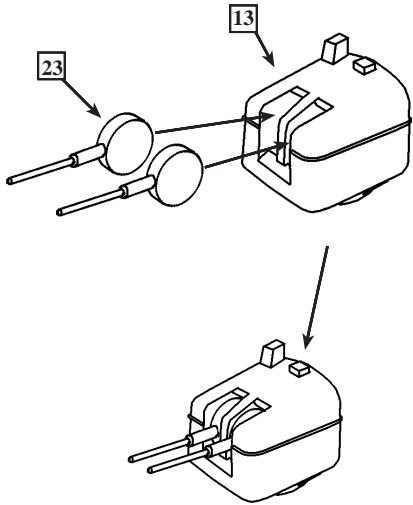
When assembling a Resin / Photoetched metal kit, certain precautions must first be taken.

1. Resin dust can be harmful if inhaled. It is recommended that you wear a suitable dust mask when drilling or sanding resin parts.
2. Cyano adhesives (super glues) are generally used to assemble this type of kit. Care must be taken when using this type of adhesive as it will bond in seconds. Follow the advice on the container.
3. Wash resin parts in a solution of warm soapy water before assembly. This will remove any residual mold release agents and ensure a good key for painting.
4. Soak photoetch parts in a suitable solvent, such as white spirit, to degrease the surfaces prior to painting.

Main Structural Parts

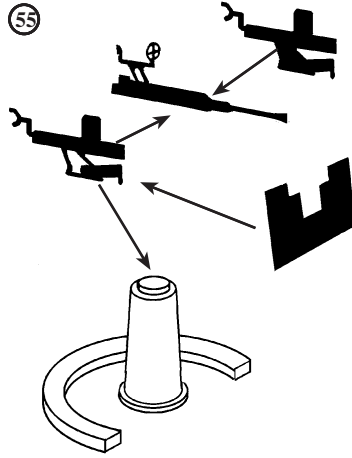


Twin 4.5" Mk6 Gun Turret Assembly



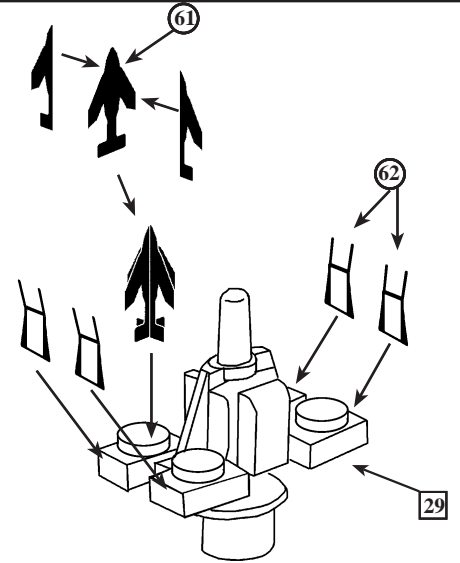
Clean off any excess material from the gun barrels, parts 23, so that the barrels and the elevation discs are clean and smooth. Fit the elevation discs on both barrels into the recesses in the front of gun turret, resin part 13. Elevate the barrels to the desired position and secure into place.

20mm Oerlikon Mounting



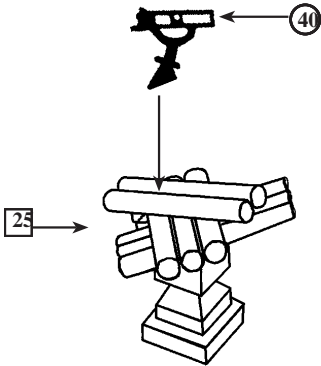
Fit the two side sections of the gun body to each side of barrel section. Bend the shoulder rests outwards slightly then twist the gun sight to 90°. Fit the 20mm gun mounting to the tops of the pintles that are situated on each side of the forward superstructure top deck aft of the bridge. Fit the gun shield centrally to the locating lug just below the mid point on the gun.

Sea Cat Missile Launcher



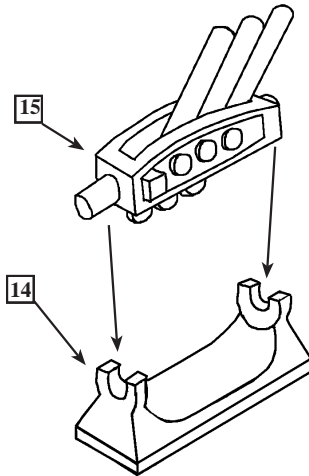
Assemble the Sea Cat missiles using etched parts 61 as shown above. These can be fitted to the launcher as desired. Fit the loading rails, etched parts 62, to the short sides of the launcher.

Corvus Chaff Launcher Assembly



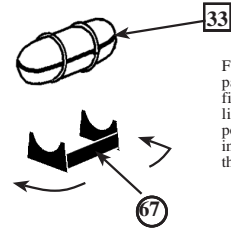
Fold the flare tubes, etched parts 40, in half to make them double thickness with the relief etched detail outer most. Fit to the top of the chaff launchers, metal parts 25 so that the foot locates between the top two tubes. Make two of these.

Mortar Mk10 Assembly



Fit the Mortar Mk 10 Barrel unit, resin part 15, so that the hinge lugs locate in the recessed ends of the Mounting base, resin part 14. The mortar barrels can be angled sideways as desired.

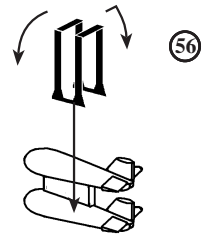
Life Raft Stowage Assembly



Fold the lift raft canister rack, etched part 33, to the shape shown above, then fit a single canister in to each rack. The life raft canisters are fitted to various points on the edges of the decks as shown in later diagrams or on to shelves fitted to the sides of the hangar.

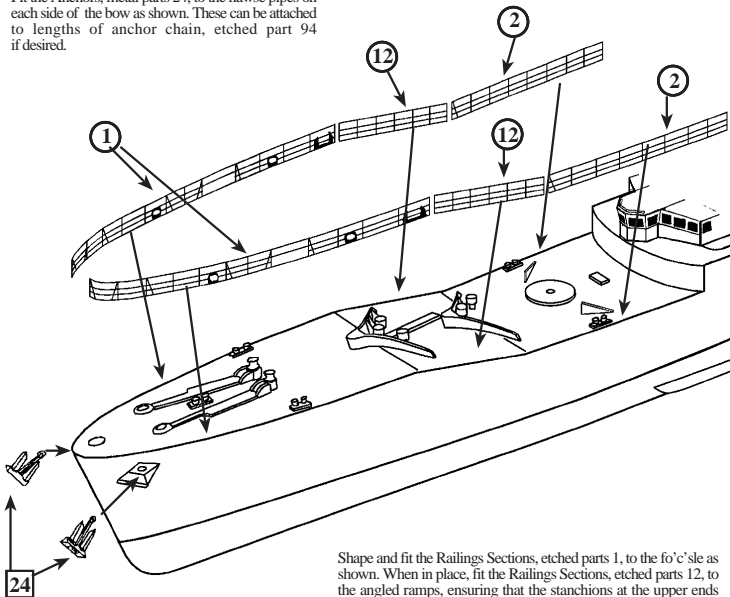
182 Torpedo Decoy Rack

Fold the legs on etched parts 56 over in 90° steps so that they are parallel, then fit them over the acoustic decoys as a stowage frame. Fit to the quarterdeck off centre to port.



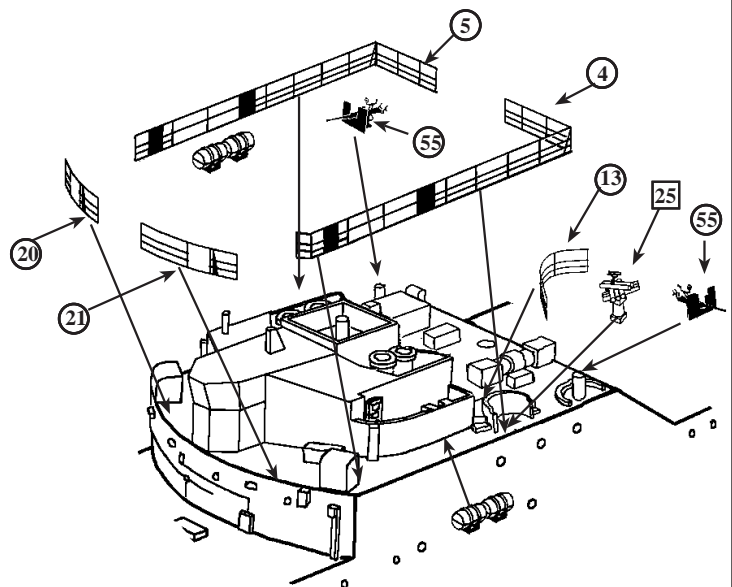
Fo'c'sle Railings Location

Fit the Anchors, metal parts 24, to the hawse pipes on each side of the bow as shown. These can be attached to lengths of anchor chain, etched part 94 if desired.



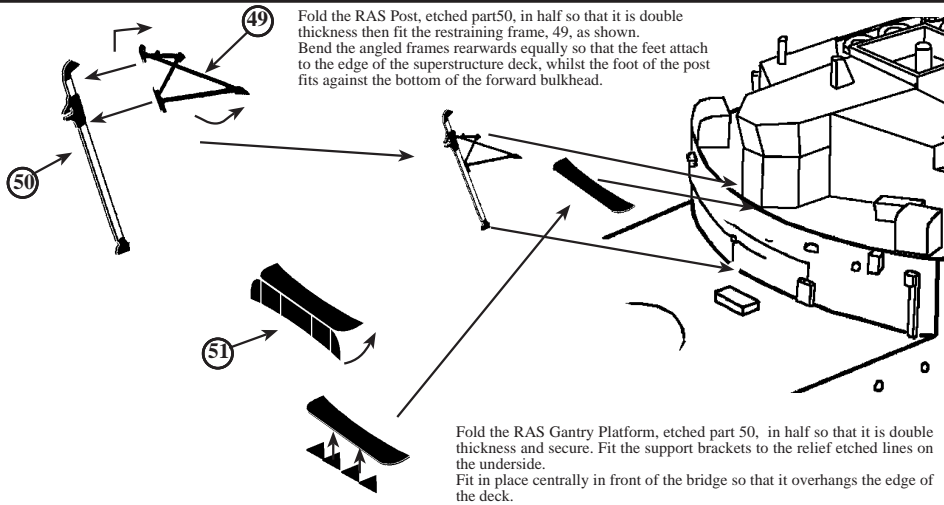
Shape and fit the Railings Sections, etched parts 1, to the fo'c'sle as shown. When in place, fit the Railings Sections, etched parts 12, to the angled ramps, ensuring that the stanchions at the upper ends fit against the rear stanchions on the fo'c'sle railings. Fit Railings Sections, etched parts 2, between the lower stanchions on the ramp railings and the forward superstructure front bulkhead.

Forward Superstructure Railings and Fittings Location



Gently curve the Railing Sections, etched parts 20 and 21 to fit the forward edges of the deck step. Fit Railings Sections, etched parts 4 and 5 to the Port and Starboard sides of the Superstructure deck respectively. Etched part 4 is slightly longer to take up the extra length needed on the Port side. Shape and fit the railings sections 13 to the rear edges of the Chaff Launcher enclosures on both sides of the Superstructure Deck. Fit the Chaff Launchers and 20mm Oerlikons in to place as shown above. Fit a pair of Life Raft Canisters to the outsides of the Bridge Wings as shown

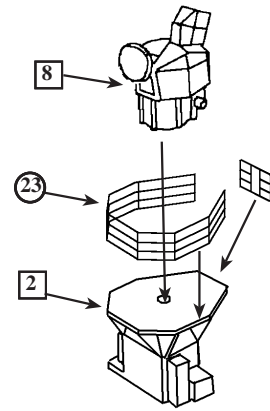
Forward RAS Equipment Assembly



Fold the RAS Post, etched part 50, in half so that it is double thickness then fit the restraining frame, 49, as shown. Bend the angled frames rearwards equally so that the feet attach to the edge of the superstructure deck, whilst the foot of the post fits against the bottom of the forward bulkhead.

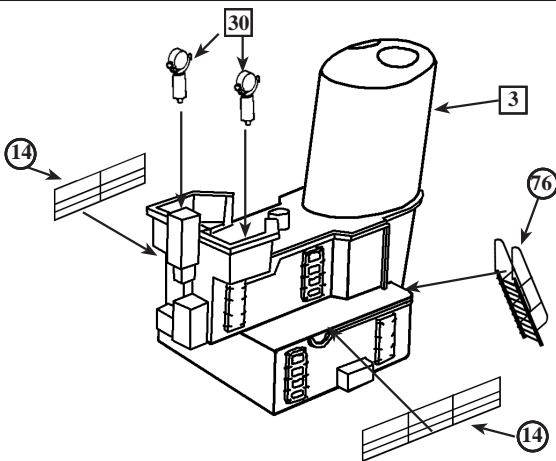
Fold the RAS Gantry Platform, etched part 50, in half so that it is double thickness and secure. Fit the support brackets to the relief etched lines on the underside. Fit in place centrally in front of the bridge so that it overhangs the edge of the deck.

Main MRS 3 Director and Platform



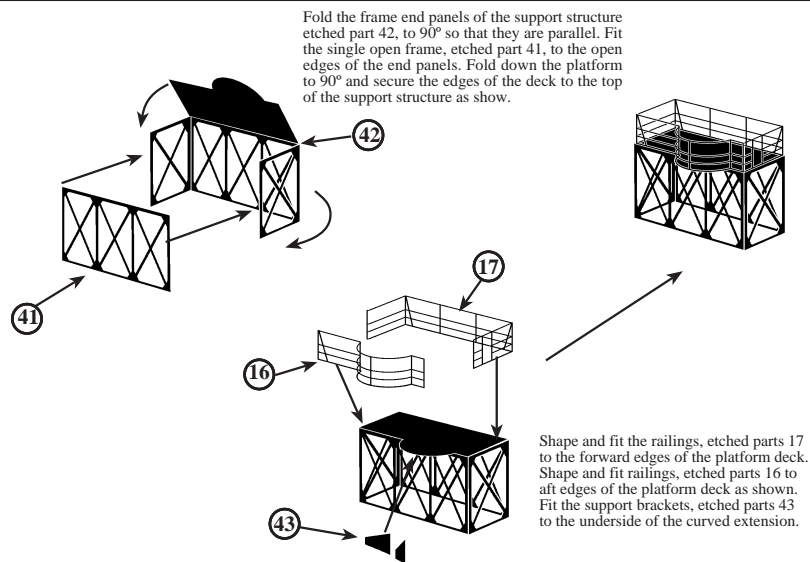
Shape the Railings, etched parts 23, to fit around the edges of the main MRS 3 Director platform as shown above. The rear small section of railing has an access opening for a vertical ladder section. This may be obtained by cutting a length of ladder form the stock etched part 95. Fit the completed assembly into place behind the bridge and GDP unit, resin part 1.

Funnel Platform Fittings



Fit the Funnel Unit, resin part 3, into place over the hull step at the rear of the superstructure as shown in the main location diagram. Fit the railings sections, etched parts 14, to the edges of the deck as shown above, with the longer section to the port side. Shape and fit the inclined ladder, etched part 76 to the rear of the side platform. Fit the two large Signal Lamps, metal parts 30, into place in the platform extensions, forward of the funnel as shown above.

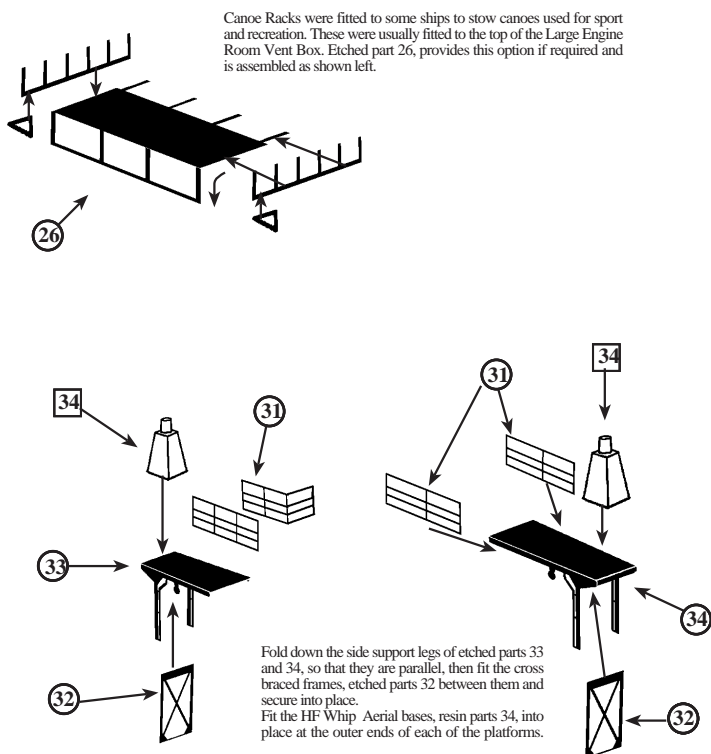
Auxiliary Conning Position Assembly



Fold the frame end panels of the support structure etched part 42, to 90° so that they are parallel. Fit the single open frame, etched part 41, to the open edges of the end panels. Fold down the platform to 90° and secure the edges of the deck to the top of the support structure as shown.

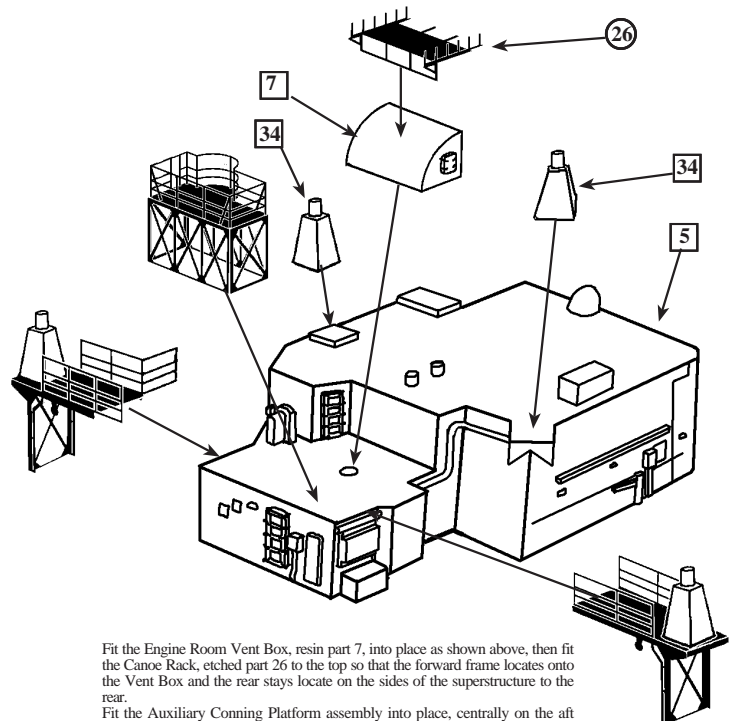
Shape and fit the railings, etched parts 17 to the forward edges of the platform deck. Shape and fit railings, etched parts 16 to aft edges of the platform deck as shown. Fit the support brackets, etched parts 43 to the underside of the curved extension.

Aft Superstructure Fittings and HF Antenna Assembly



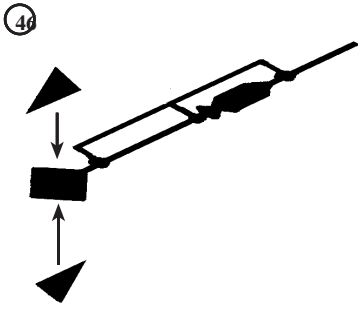
Canoe Racks were fitted to some ships to stow canoes used for sport and recreation. These were usually fitted to the top of the Large Engine Room Vent Box. Etched part 26, provides this option if required and is assembled as shown left.

Fold down the side support legs of etched parts 33 and 34, so that they are parallel, then fit the cross braced frames, etched parts 32 between them and secure into place. Fit the HF Whip Aerial bases, resin parts 34, into place at the outer ends of each of the platforms.



Fit the Engine Room Vent Box, resin part 7, into place as shown above, then fit the Canoe Rack, etched part 26 to the top so that the forward frame locates onto the Vent Box and the rear stays locate on the sides of the superstructure to the rear. Fit the Auxiliary Conning Platform assembly into place, centrally on the aft superstructure deck as shown above. Fit the HF Whip Aerial platforms into place as shown, with the shorter platform on the starboard side of the aft superstructure. The railings sections 31 may be fitted at this stage, with the two sections containing two inner stanchions fitting to starboard. The rear one of these is shaped around the edge of the deck onto the aft superstructure.

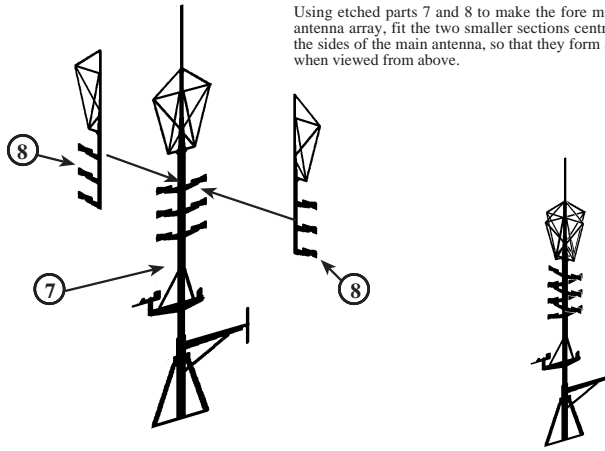
Dan Buoy Assembly



Assemble the radar reflectors on the Dan Buoys, etched parts 46, as shown above.
Fit the rectangular bracket arrangement onto the side railings on each stem quarter.

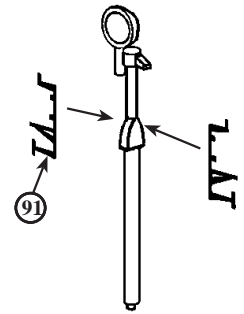
The colour of the reflector and body of the Dan Buoys varied from Dayglo Orange which was the most common, to Red and White 90° alternate sections

Fore Mast Top Pole Assembly



Using etched parts 7 and 8 to make the fore mast top antenna array, fit the two smaller sections centrally to the sides of the main antenna, so that they form a cross when viewed from above.

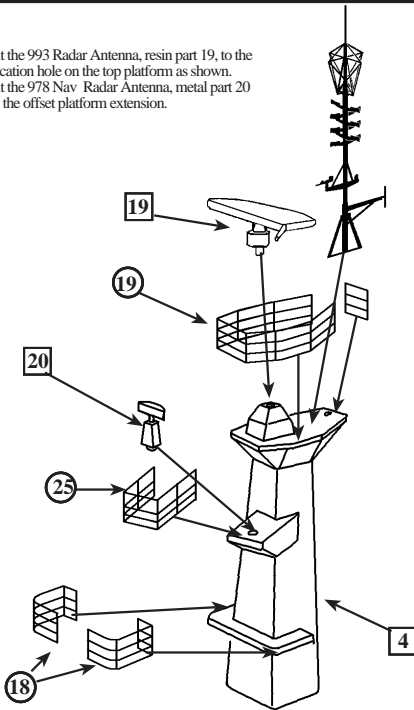
SAN Alternative Top Pole



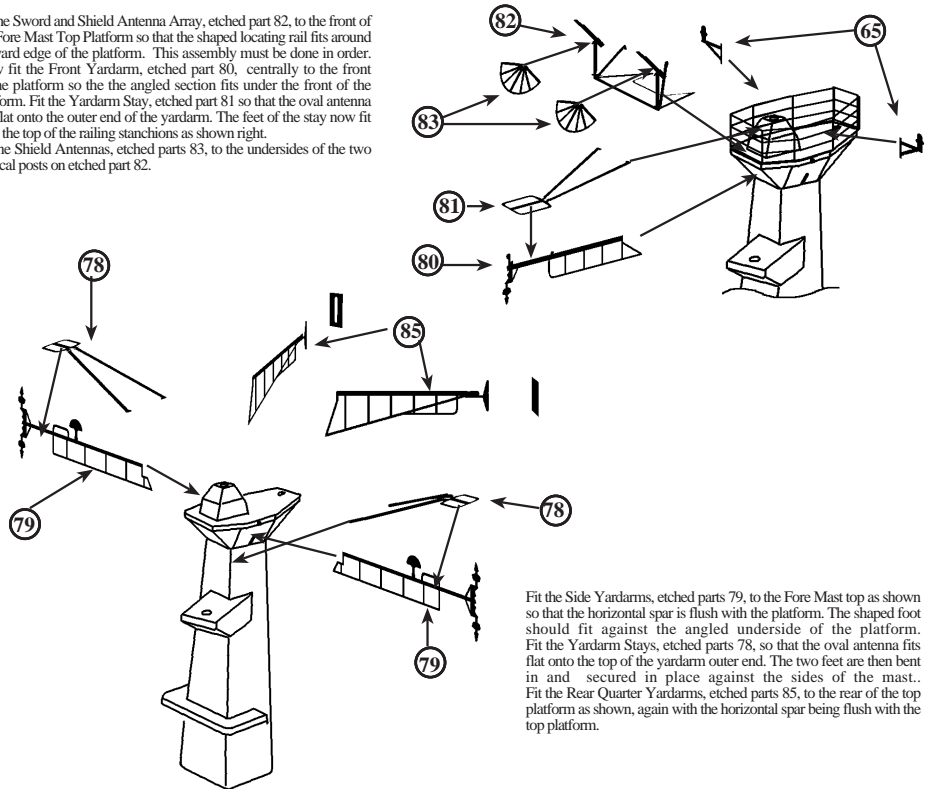
This diagram has been provided for information only to show the location of etched parts 91 on the mast pole should it be fitted to the South African Navy version of the ship. The mast top pole has not been supplied in this kit, but may be obtained from Atlantic Models on request.

Fore Mast Fittings Assembly

Fit the 993 Radar Antenna, resin part 19, to the location hole on the top platform as shown.
Fit the 978 Nav Radar Antenna, metal part 20 to the offset platform extension.



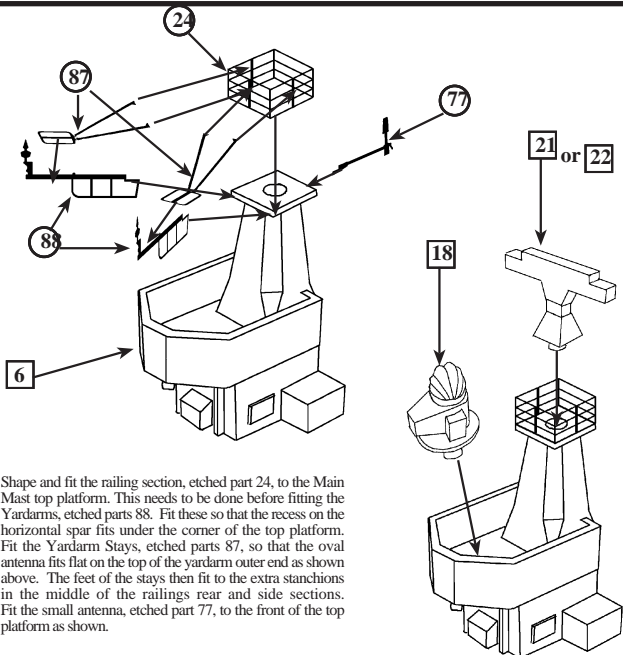
Fit the Sword and Shield Antenna Array, etched part 82, to the front of the Fore Mast Top Platform so that the shaped locating rail fits around forward edge of the platform. This assembly must be done in order. Now fit the Front Yardarm, etched part 80, centrally to the front of the platform so the angled section fits under the front of the platform. Fit the Yardarm Stay, etched part 81 so that the oval antenna fits flat onto the outer end of the yardarm. The feet of the stay now fit onto the top of the railing stanchions as shown right.
Fit the Shield Antennas, etched parts 83, to the undersides of the two vertical posts on etched part 82.



Shape and fit the Railing Sections, etched parts 18, 19 and 25, to the edges of their respective platforms as shown above. Note that there is a gap centrally on the lower platform to allow a section of vertical ladder access.

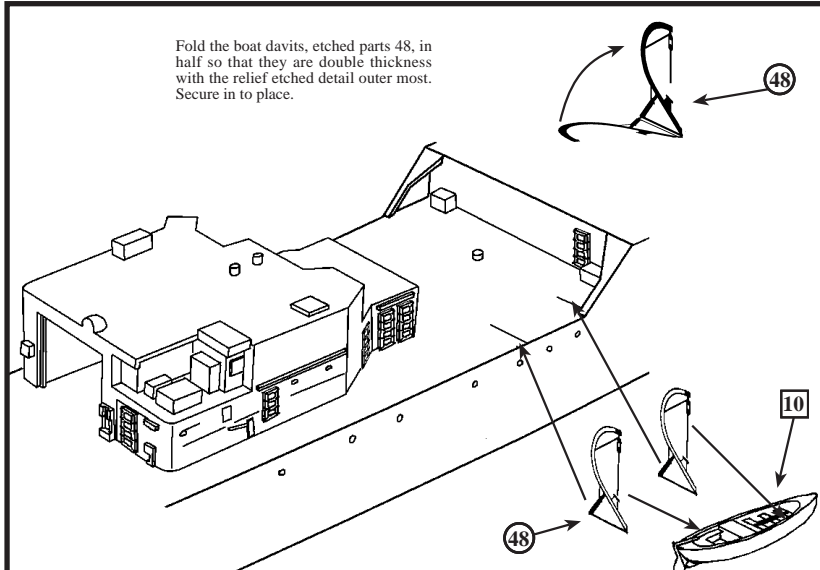
Fit the Side Yardarms, etched parts 79, to the Fore Mast top as shown so that the horizontal spar is flush with the platform. The shaped foot should fit against the angled underside of the platform. Fit the Yardarm Stays, etched parts 78, so that the oval antenna fits flat onto the top of the yardarm outer end. The two feet are then bent in and secured in place against the sides of the mast. Fit the Rear Quarter Yardarms, etched parts 85, to the rear of the top platform as shown, again with the horizontal spar being flush with the top platform.

Main Mast Fittings Assembly



Shape and fit the railing section, etched part 24, to the Main Mast top platform. This needs to be done before fitting the Yardarms, etched parts 88. Fit these so that the recess on the horizontal spar fits under the corner of the top platform. Fit the Yardarm Stays, etched parts 87, so that the oval antenna fits flat on the top of the yardarm outer end as shown above. The feet of the stays then fit to the extra stanchions in the middle of the railings rear and side sections. Fit the small antenna, etched part 77, to the front of the top platform as shown.

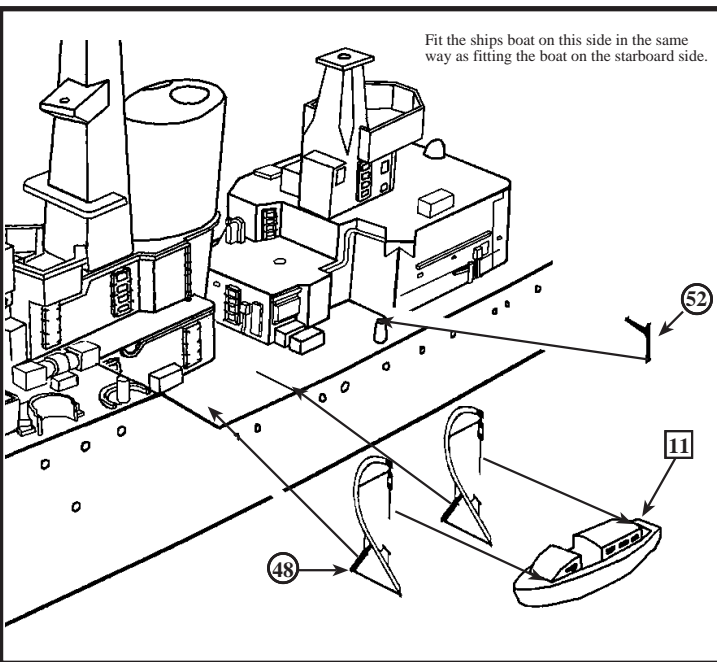
27' Motor Whaler Location and Davit Assembly



Fold the boat davits, etched parts 48, in half so that they are double thickness with the relief etched detail outer most. Secure in to place.

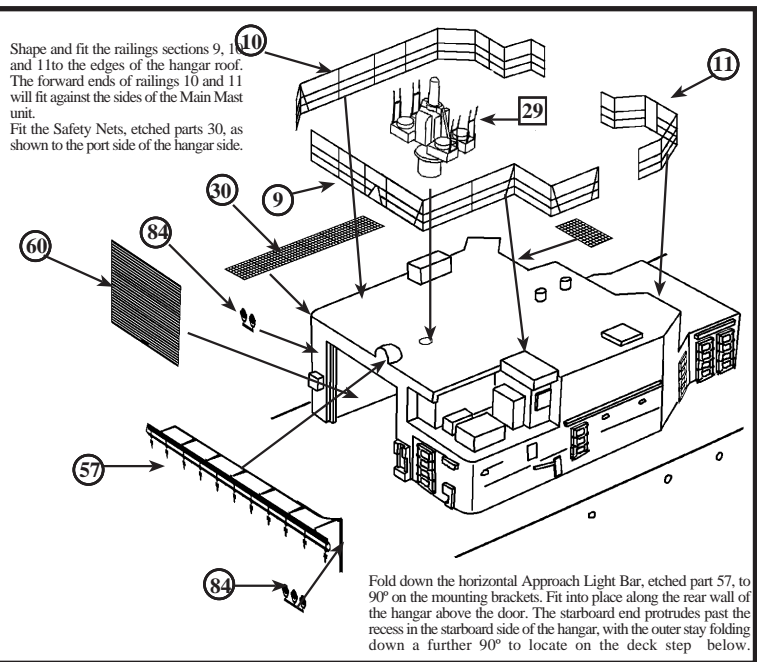
Fit the boats in to place by measuring the distance of the falls from the davits, then drilling through the boat at those points forward and aft. Feed the falls down through the boat, until the boat is in the correct position on the davits. Secure into place.

25° Admiralty Motor Cutter Location



Fit the ships boat on this side in the same way as fitting the boat on the starboard side.

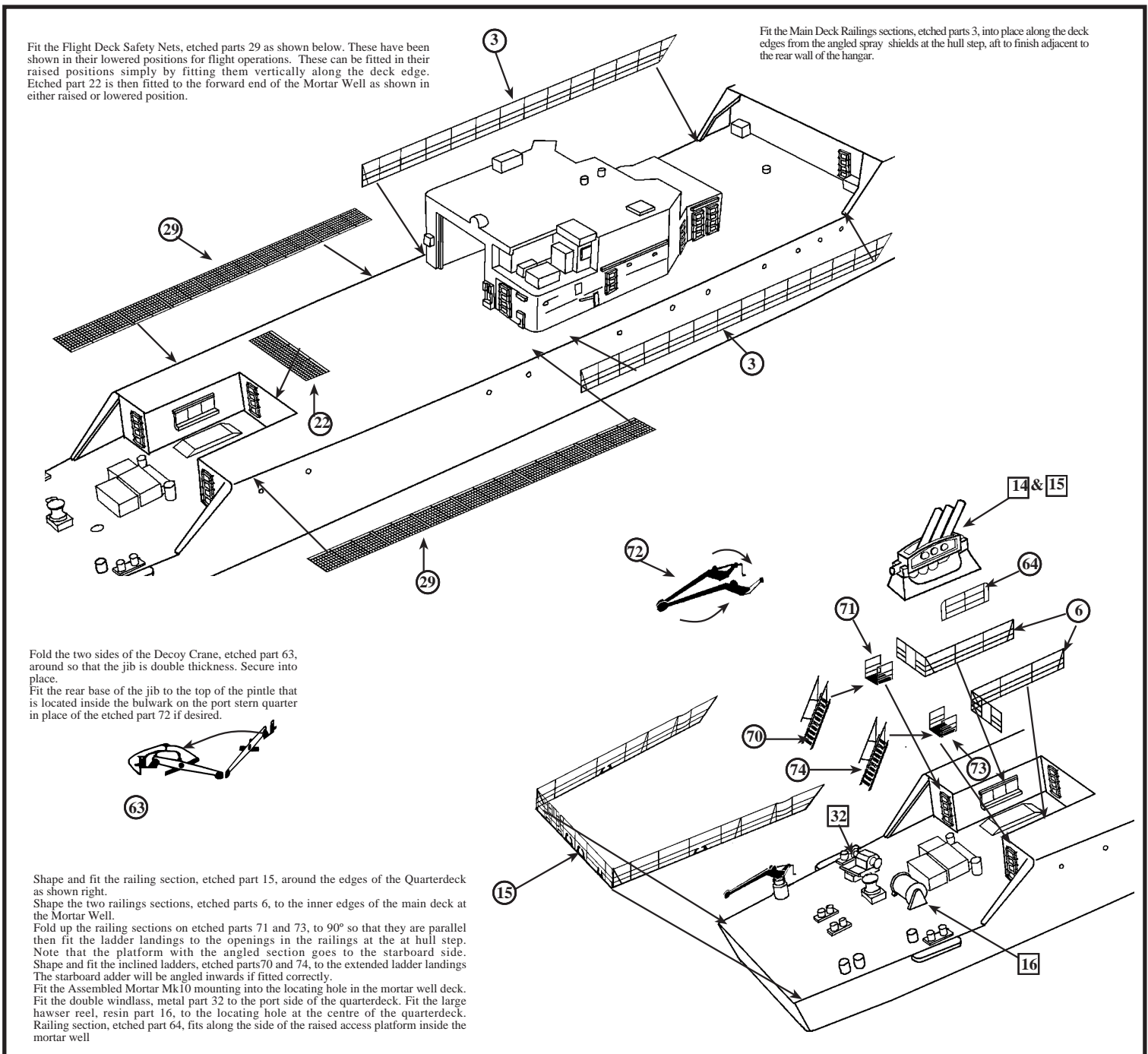
Helicopter Hangar Fittings



Shape and fit the railings sections 9, 10 and 11 to the edges of the hangar roof. The forward ends of railings 10 and 11 will fit against the sides of the Main Mast unit.
Fit the Safety Nets, etched parts 30, as shown to the port side of the hangar side.

Fold down the horizontal Approach Light Bar, etched part 57, to 90° on the mounting brackets. Fit into place along the rear wall of the hangar above the door. The starboard end protrudes past the recess in the starboard side of the hangar, with the outer stay folding down a further 90° to locate on the deck step below.

Flight Deck and Quarterdeck Fittings Location



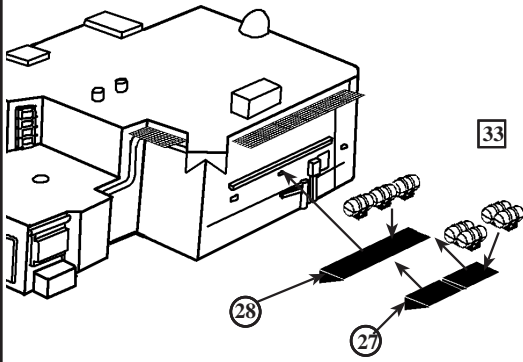
Fit the Flight Deck Safety Nets, etched parts 29 as shown below. These have been shown in their lowered positions for flight operations. These can be fitted in their raised positions simply by fitting them vertically along the deck edge. Etched part 22 is then fitted to the forward end of the Mortar Well as shown in either raised or lowered position.

Fit the Main Deck Railings sections, etched parts 3, into place along the deck edges from the angled spray shields at the hull step, aft to finish adjacent to the rear wall of the hangar.

Fold the two sides of the Decoy Crane, etched part 63, around so that the jib is double thickness. Secure into place.
Fit the rear base of the jib to the top of the pintle that is located inside the bulwark on the port stern quarter in place of the etched part 72 if desired.

Shape and fit the railing section, etched part 15, around the edges of the Quarterdeck as shown right.
Shape the two railings sections, etched parts 6, to the inner edges of the main deck at the Mortar Well.
Fold up the railing sections on etched parts 71 and 73, to 90° so that they are parallel then fit the ladder landings to the openings in the railings at the at the hull step. Note that the platform with the angled section goes to the starboard side.
Shape and fit the inclined ladders, etched parts 70 and 74, to the extended ladder landings. The starboard ladder will be angled inwards if fitted correctly.
Fit the Assembled Mortar Mk10 mounting into the locating hole in the mortar well deck. Fit the double windlass, metal part 32 to the port side of the quarterdeck. Fit the large hawser reel, resin part 16, to the locating hole at the centre of the quarterdeck. Railing section, etched part 64, fits along the side of the raised access platform inside the mortar well

Hangar Life Raft Rack Assembly

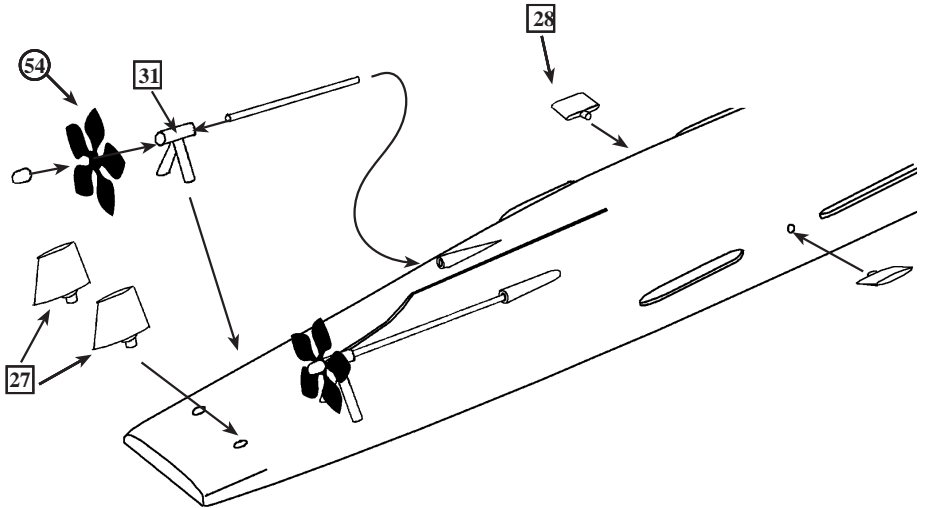


The Life Raft Canisters that were fitted to each side of the Hangar were of two different layouts. The first option is to have a three canister shelf, etched part 28, fitted to each side of the hangar, locating on to the raised strips provided. Fit a row of three Life Raft Canisters to each of these shelves as shown above.

The second option is a bit more unusual in that there were two double canister shelves, etched parts 27, fitted to each side of the hangar. These usually had a gap between them and had two Life Raft Canisters fitted in tandem on each one.

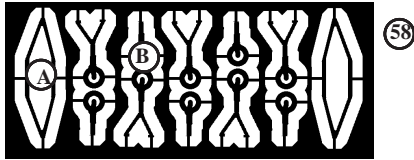
Sometimes a single small shelf was fitted centrally to the hangar side. This depends on which ship of the class is being modelled and further research will be required to establish which format is required for your model.

Propeller and Rudder Assembly

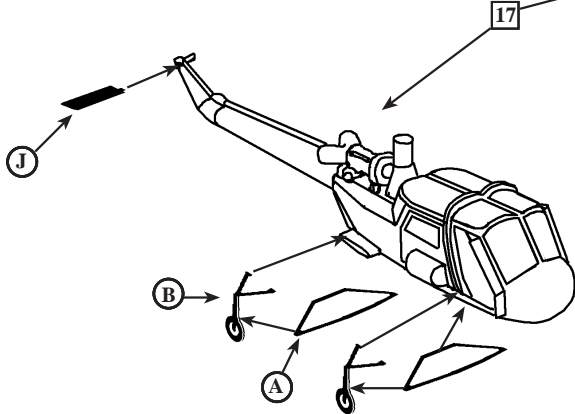


If the kit is being built as a full hull model, prepare the lower hull and fit to the upper hull as described at the beginning of these instructions. Fit the Stabiliser fins, parts 28 to the locating holes on the lower hull between the bilge keels. Cut two 30mm lengths of the 1mm diameter brass rod stock provided, to make the propeller shafts. Cut the front of the hub boss from the bearing and retain. Fit the propeller, etched part 54, centrally to the flat face on the front of the A frame bearing. Re-fit the hub boss to the front of the propeller as shown above. Fit the propeller shaft assemblies to the lower hull so that the open end of the shaft fits in to the hull sleeve. The legs of the A-frame may need to be trimmed in length to get the A-frame to sit correctly on the hull, but there is sufficient length on both legs to do this. Fit the rudders, metal parts 27, in to place in the locating holes on the stern.

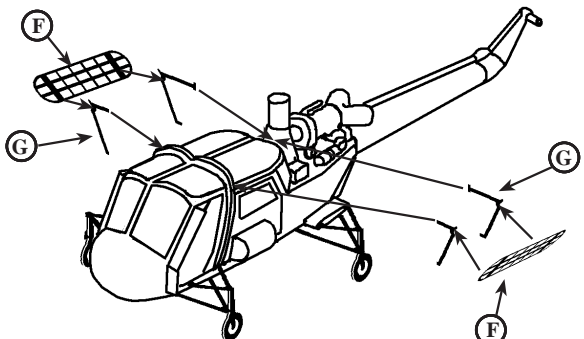
Wasp HAS1 Helicopter Assembly



Cut a groove in the top of the tail opposite to the tail rotor attachment, and fit the stabiliser wing etched part 40J in to place.



Fold the flotation bag shells, etched parts 59F, in half so that the relief etched detail is outermost. Fit the flotation gear attachment frames, etched parts 59G, so that the forward frames fit onto the outside of the yolk frame between the front and rear doors. The rear frame fits with the top foot on the front of the main rotor gearbox and the lower foot on the engine deck. The flotation bag shells then fit with the lower edges slotting into the point of the attachment frames at the thick relief etched lines.



Fit the doublers, etched parts 59D and 59H, to the upper and lower surfaces of the main rotor head, to give the extra thickness needed for that part. Fit the main rotor centrally to the top of the rotor shaft as shown.

If the modeller requires the main rotor blades to be folded as for storage, simply bend the blades rearwards at the point where the doubler parts are fitted on the upper and lower surfaces. The two front blades would be angled downwards slightly.

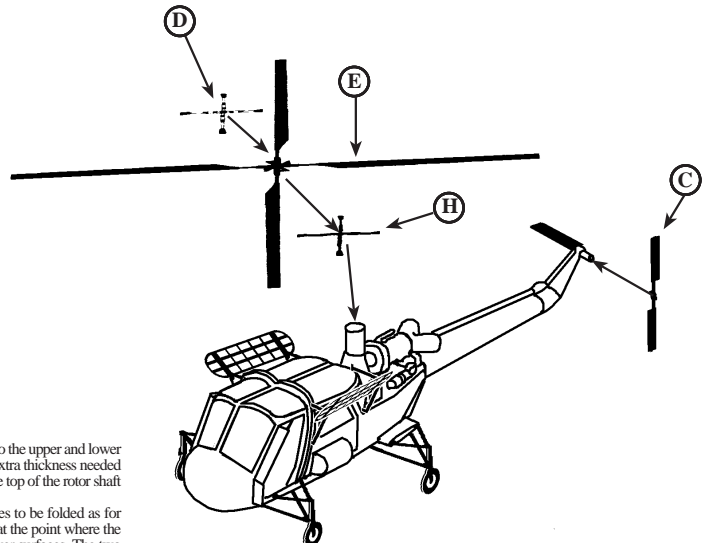
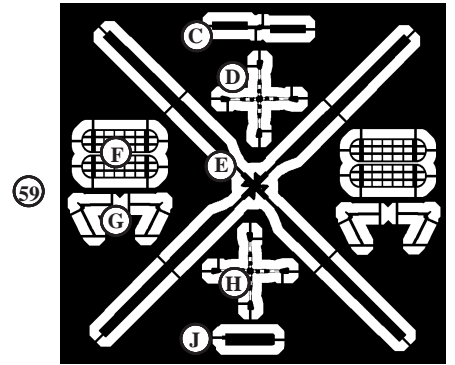
Assemble the starboard side undercarriage legs in the same way as described for the port side.

Fold the undercarriage legs 58B in half so that they are double thickness with the relief etched detail outermost. Secure into place. Fold the 'V' frame on top of the undercarriage legs to 90°. Make 4 of these.

Fit the lower undercarriage attachment frames to the underside of the fuselage, so that the rear of the front frame is in line with the main door pillar, and the rear frame is in alignment with the small stub wings. The two parallel sections of each frame fit onto the underside of the fuselage centrally.

Fit the front undercarriage to the fuselage so that the ends of the top 'V' frame fit on to the fuselage forward with the rear foot in line with the door pillar. The point of the lower frame should attach to the inside of the leg just above the wheel. The rear leg top 'V' frame feet fit onto the outside edge of the stub wing, and again the point of the lower frame should attach to the inside of the leg just above the wheel.

Assemble the starboard side undercarriage legs in the same way as described for the port side.



Wasp Helicopter Colour Guide



Ships Flights Codex Numbers

456/ HMS Yarmouth. 462/ HMS Rothesay. 451/ HMS Lowestoft 461/ HMS Brighton
 440/ HMS Berwick 447/ HMS Londonderry 441/ HMS Falmouth 446/ HMS Rhyl
 445/ HMS Plymouth



Humbrol 96
RAF Blue Grey

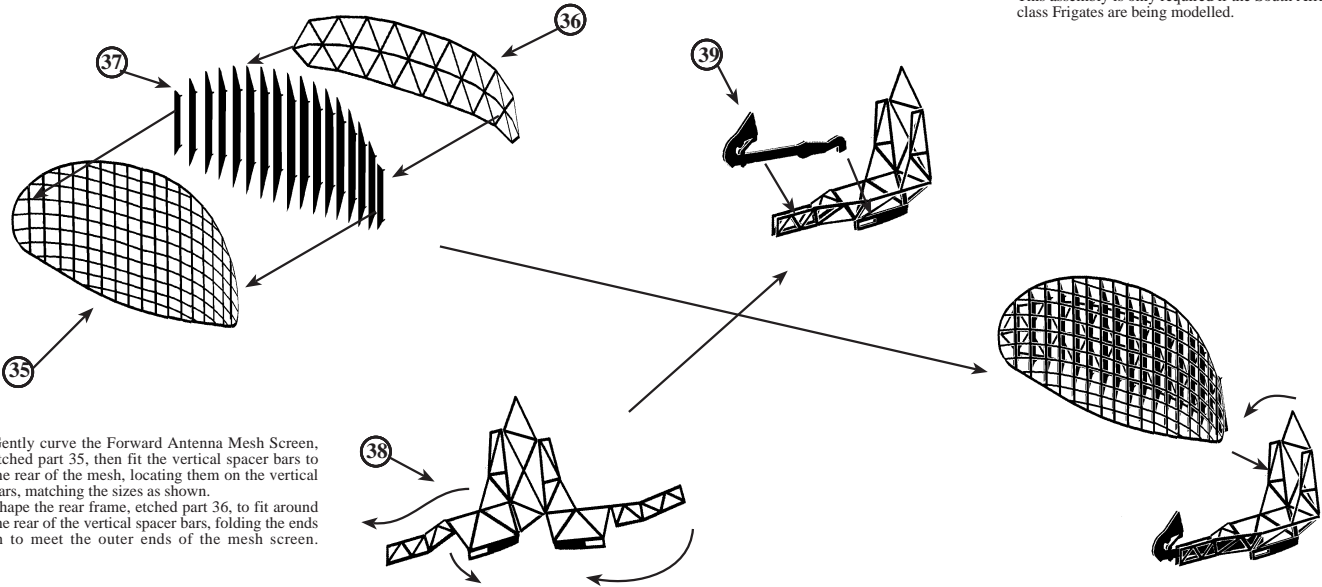


Other Colours Used

Matt Black..... Wheel Tyres, Undersides of Rotor Blades.
 Light Grey... Top Surfaces of Rotor Blades, Cockpit Interior
 Red and White Tail Rotor Blade Tips
 Gloss Black.... Tail Rotor Blades

South African Navy Jupiter Radar Assembly

This assembly is only required if the South African Navy President class Frigates are being modelled.

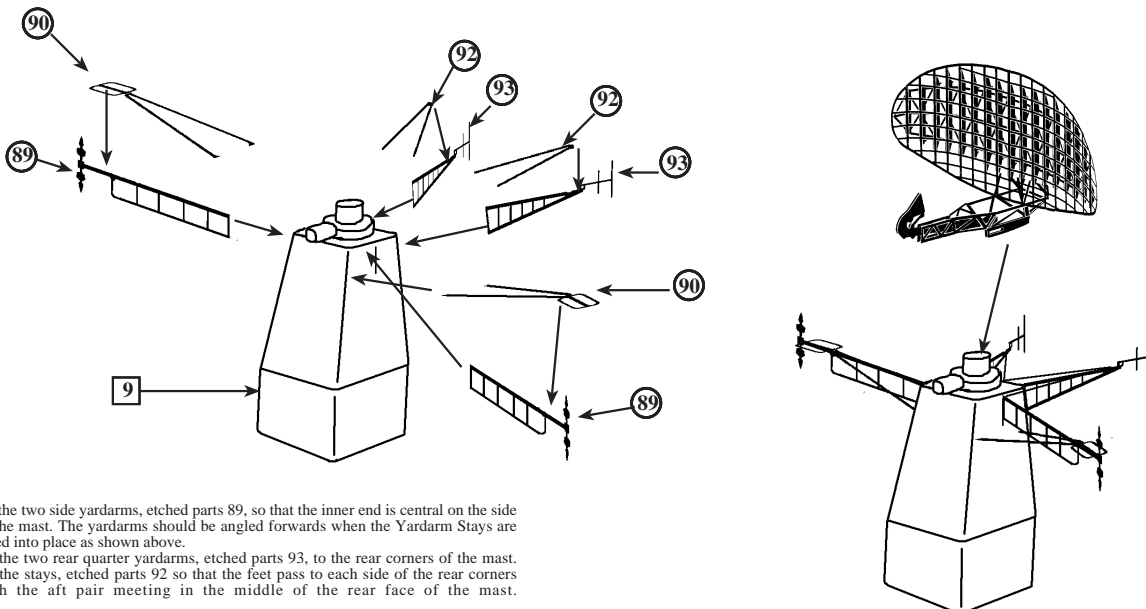


Gently curve the Forward Antenna Mesh Screen, etched part 35, then fit the vertical spacer bars to the rear of the mesh, locating them on the vertical bars, matching the sizes as shown.
 Shape the rear frame, etched part 36, to fit around the rear of the vertical spacer bars, folding the ends in to meet the outer ends of the mesh screen.

Fold the side frames of the Antenna mounting, etched part 38, around to 90° so that they are parallel. Fold the pointed lower section of the centre frame inwards and at the same time fold in the lower sections of the side frames until the rear bars meet the centre frame. Bring the very front sections of the side frame together, at the same time trapping the Transducer Horn between them as shown above.

Fit the assembled antenna, onto the mounting frame so that the centre of etched part 36 fit to the two upper vertical bars on the side frames of the mounting. Fold the top pointed frame inwards to come against the top of etched part 36.

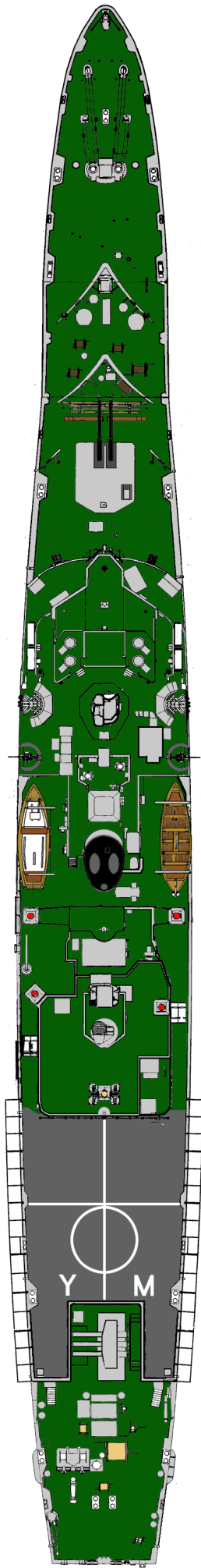
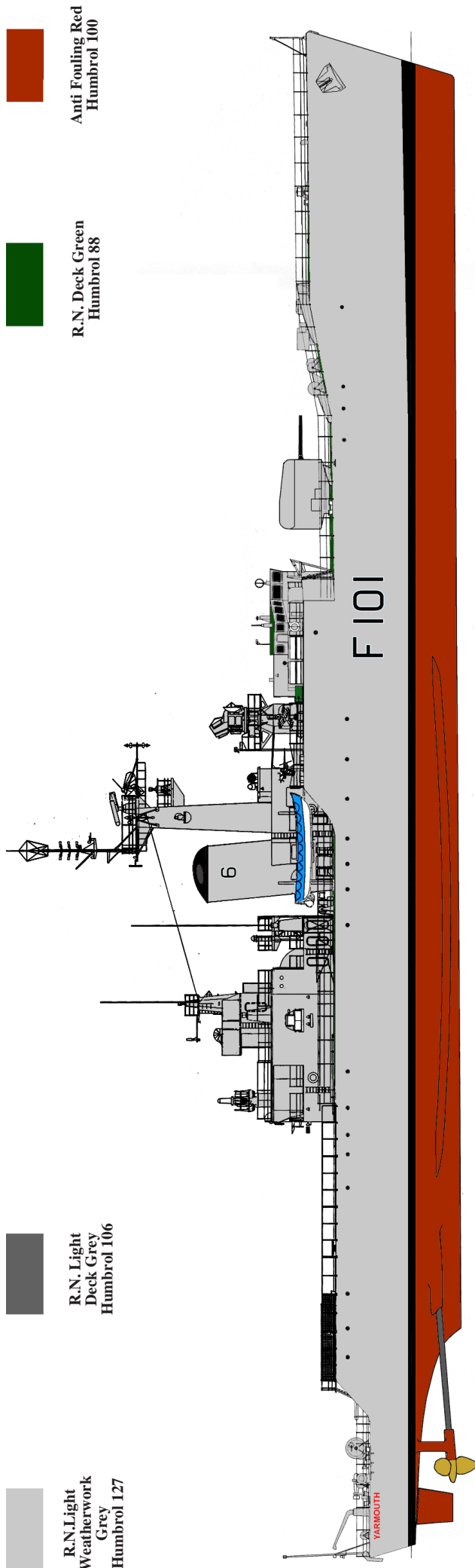
South African Navy Type 12 Frigate Main Mast Assembly



Fit the two side yardarms, etched parts 89, so that the inner end is central on the side of the mast. The yardarms should be angled forwards when the Yardarm Stays are fitted into place as shown above.
 Fit the two rear quarter yardarms, etched parts 93, to the rear corners of the mast.
 Fit the stays, etched parts 92 so that the feet pass to each side of the rear corners with the aft pair meeting in the middle of the rear face of the mast.

Fit the Jupiter Radar Antenna so that the lower plate on the mounting base fits to the top of the locating peg on the mast.

Main Colour Chart and Painting Guide



Pennant Numbers Flight Deck Code Letters for all Ships of the Class

HMS Yarmouth F101 / YM HMS Lowestoft F103 / LT HMS Brighton F106 / BR
 HMS Rothesay F107 / RO HMS Londonderry F108 / LD HMS Falmouth F113 / FM
 HMS Berwick F115 / BK HMS Plymouth F126 / PL HMS Rhye F129 / RL

The colour guide above shows the main scheme and the areas covered. There are smaller less obvious areas that are listed below.

Matt Black
 Matt White
 Bronze

Upper parts of Masts and Exhaust Stacks. Gun Barrels. Watertime Boot Topping.
 Fore Mast Top Array. Life Raft Canisters. Bollards and Fairleads. Coachwork on Motor Boat
 Propellers. Elevation Discs on 4.5" Guns.

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