

Leander Class Frigate
H.M.S. CLEOPATRA
1966-1992
1/350 Scale

The Type 12 (Improved) or Leander Class Frigates that were introduced into Royal Navy service from the early 1960's, were the most numerous of any of the classes of ships of the modern era.

The design of the Leander class was based on the earlier Whitby and Rothesay class Type 12 hull, which had already proved it's excellent sea keeping qualities, but had a simplified superstructure layout which included a built in helicopter hangar. The hull was built up flush with the main deck at the stern, which gave a better protected area for the variable depth sonar installation as well as improved deck space around the mortar well . The Leander class Frigates were split into three batches and were built between 1959 and 1973. The first batch of 10 was fitted with Y100 machinery the second batch of 6 having the upgraded Y136 machinery fitted. The third batch of 10 ships were known as the Broad Beam Leanders and had a hull that was wider by 2 feet to accommodate the Y160 machinery fit.

HMS Cleopatra, was the last ship of the first batch of the Leander class and was laid down at HM Dockyard, Devonport on 19th June 1963. She was launched on 25th March 1964 and commissioned into service on 4th January 1966.

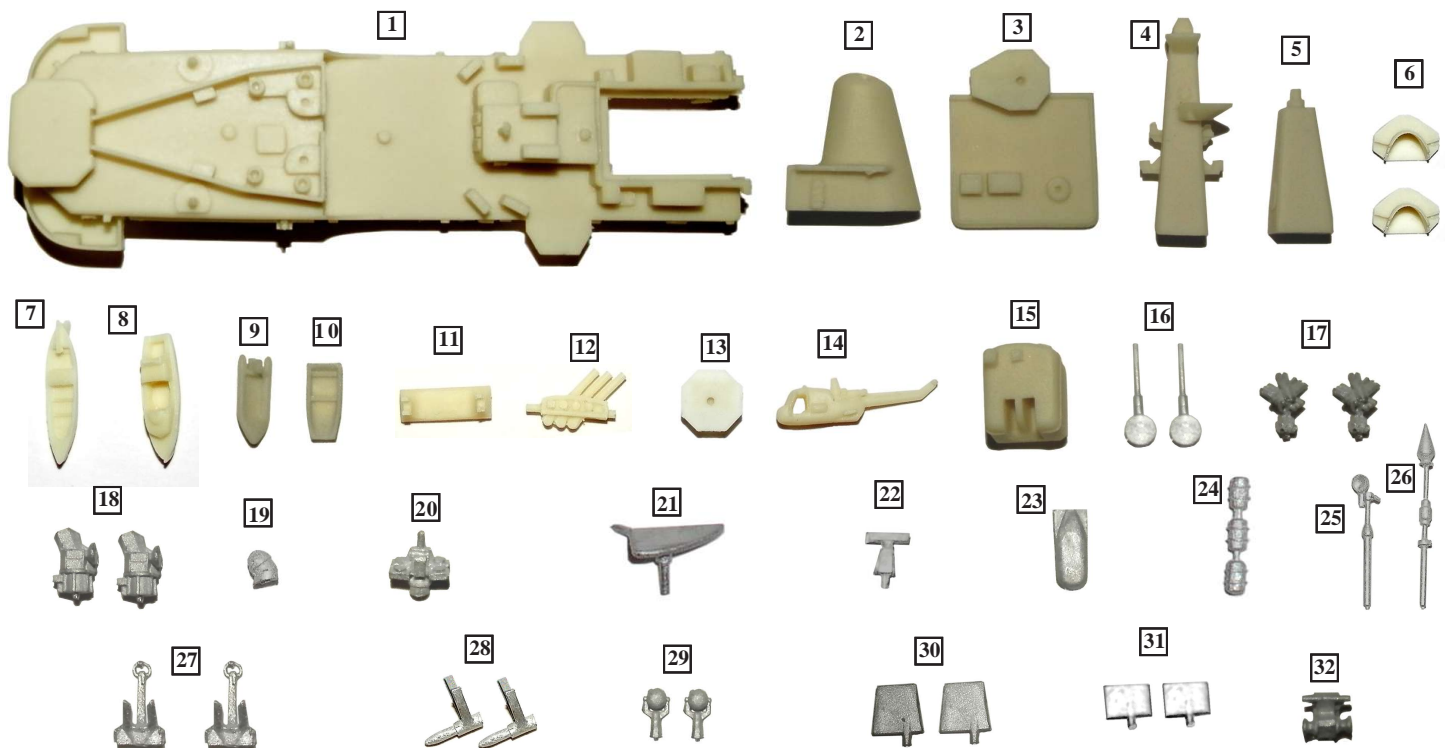
'Cleopatra' as she became known joined the 2nd Destroyer Squadron of the Far East Fleet to where she was deployed for the first part of her career. This also involved taking station off the coast of Mozambique on the famous Beira patrol, which was designed to prevent oil from reaching the landlocked Rhodesia, who had unilaterally declared independence.

During 1969, HMS Cleopatra was one of the 5 ships escorting HMAS Melbourne when the Melbourne was involved in the catastrophic collision with the destroyer USS Frank E. Evans and became involved in the subsequent rescue operation.

Early 1972 saw 'Cleopatra' on escort duties for Her Majesty the Queen and Prince Philip's tour of South East Asia, then in 1973 she was assigned to the North Atlantic area to protect British trawlers from the Icelandic gun boats during the second 'Cod War'.

HMS Cleopatra then began her mid life refit, during which she had her twin 4.5" Mk6 Turret removed and replaced with a bank of four Exocet missile box launchers. She and HMS Penelope were the only Batch 1 Leanders to have this modification, as the other eight were converted for Ikara. 1982 saw 'Cleopatra' in refit again having the large Towed Array Sensor equipment fitted to the stern and the superstructure modified with the larger hangar to accommodate the Lynx helicopter that was replacing the Wasp on all small ships. The mortar well was plated over to make a larger flight deck for Lynx operations. She continued to carry out her duties through the 1980's though she was starting to show her age by the early 90's. On January 31st 1992 HMS Cleopatra was decommissioned and sold for scrap the following year.

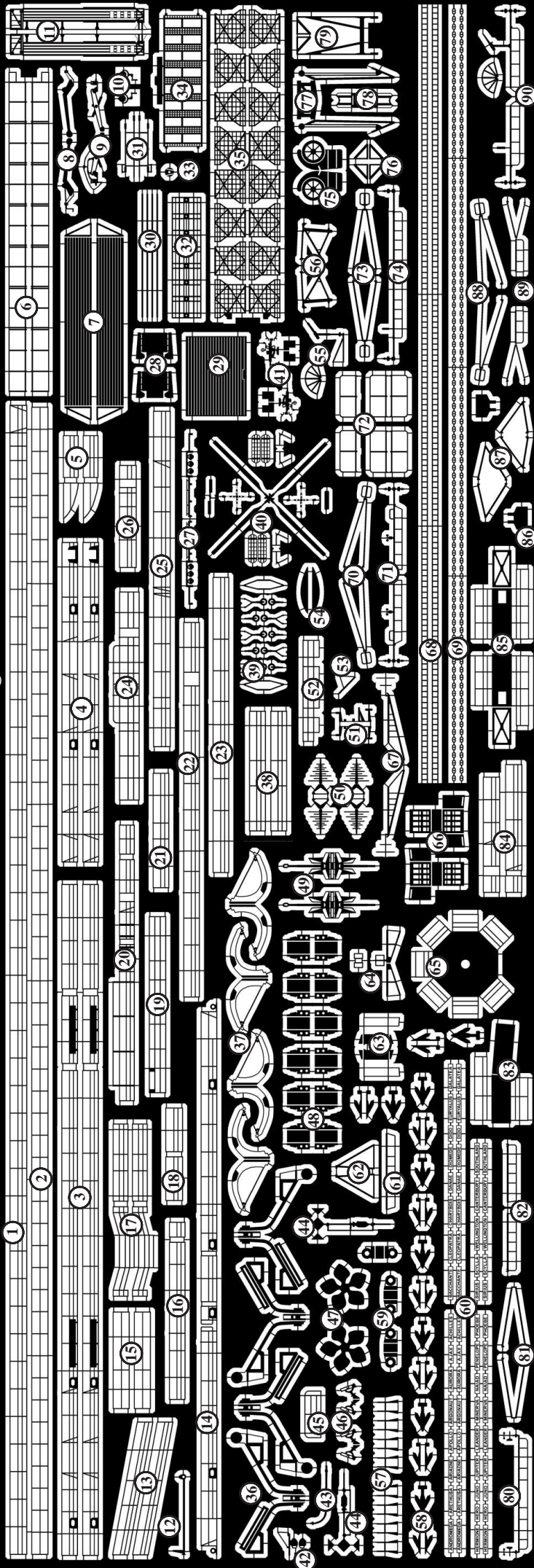
RESIN & WHITE METAL PARTS



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|--------------------------------------|-------------------------------|-----------------------------|---------------------------------|
| 1. Main Superstructure Unit | 9. Gemini Inflatable Boat | 17. Corvus Chaff Launchers | 25. Fore Mast Top Array (Early) |
| 2. Funnel | 10. Punt | 18. GWS22 Directors | 26. Fore Mast Top Array (Late) |
| 3. Hangar Roof and Director Platform | 11. Mortar Mounting Base | 19. Aft Director Tub | 27. Anchors |
| 4. Fore Mast | 12. Limbo AS Mortar Mk10 | 20. Seacat Missile Launcher | 28. Propeller Bearings |
| 5. Main Mast | 13. Forward Director Platform | 21. 993 Radar Antenna | 29. Searchlights |
| 6. Chaff Launcher Enclosures | 14. Wasp Helicopter | 22. 978 Radar Antenna | 30. Rudders |
| 7. 27' Whaler | 15. 4.5" Mk6 Twin Gun Turret | 23. VDS Sonar Body | 31. Stabiliser Fins |
| 8. 25' Cheverton Motor Boat | 16. 4.5" Gun Barrels | 24. Life Raft Cannisters | 32. Aft Deck Windlass |

PHOTO ETCHED METAL PARTS

ATLANTIC MODELS © 2014



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|-----------------------------------|---|---------------------------------------|--|
| 1. Railings 3 Bar Stock | 37. Boat Davit Upper Section | 65. Sword and Shield Antenna | 73. Yardarm Supports (Main Mast) |
| 2. Railings 2 Bar Stock | 38. Railings (SATCOM Platform) | 56. RAS Gantries | 74. Yardarms (Main Mast) |
| 3. Railings (Main Deck) | 39. Wasp Helicopter Undercarriage Parts | 57. Seacat Launcher Rails | 75. VDS Gantry Pit Head Wheel |
| 4. Railings (Focсле) | 40. Wasp Helicopter General Parts | 58. Seacat Missiles | 76. VDS Gantry Pit Head Stays |
| 5. Railings (Superstructure Step) | 41. Single 20mm Oerlikon Mountings | 59. VDS Deck Winches | 77. VDS Gantry Side Arms |
| 6. Flight Deck Safety Nets | 42. Glidepath Indicator Light | 60. Ships Name Plates | 78. VDS Sonar Body Cradle |
| 7. Life Raft Cannister Shelves | 43. Bridge Roof Davit | 61. Fore Mast Rear Yard | 79. VDS Gantry Centre Bracing |
| 8. Paravane Crane (Manual) | 44. Dan Buoy | 62. Fore Mast Rear Yard Supports | 80. Fore Mast Aft Yardarm (Ikara) |
| 9. Paravane Crane (Hydraulic) | 45. Railing (Mortar Platform) | 63. Main Mast Lower Platforms | 81. Main Mast Yardarm Stays (Ikara) |
| 10. Signal Lamps | 46. Chaff Launcher Flare Gun | 64. Fore Mast Front DF Antenna | 82. Main Mast Yardarms (Ikara) |
| 11. Accommodation Ladders | 47. Propeller Blades | 65. Aft Director Platform (Ikara) | 83. Ikara House Walkway |
| 12. Seacat Telemetry Antenna | 48. Life Raft Cannister Racks | 66. Fuel Can Stowage Racks | 84. Railings (Ikara House Roof) |
| 13. Railings (Focсле Ramp) | 49. Anchors | 67. Yardarms (Fore Mast Forward) | 85. Aft Whip Antenna Platforms (Ikara) |
| 14. Railings (Stern) | 50. Mast Top Antenna Array (Late) | 68. Vertical Ladder Stock | 86. VDS Sonar Body Fins |
| 15. Railings (Oerlikon Enclosure) | 51. Mast Top Antenna Array (Early) | 69. Anchor Chain Stock | 87. Fore Mast Top Pole Braces |
| 16. Railings (Fore Mast Top) | 52. Railings (Main Mast Top Ikara) | 70. Yardarm Supports (Fore Mast Side) | 88. Fore Mast Side Yardarm Stays |
| 17. Railings (Chaff Launchers) | 53. Main Mast Gaff | 71. Yardarms (Fore Mast Side) | 89. Funnel Yardarms |
| 18. Railings (Funnel Platform) | 54. Prop Guard Buffers | 72. Safety Nets (Hangar Roof) | 90. Fore Mast Side Yardarms |

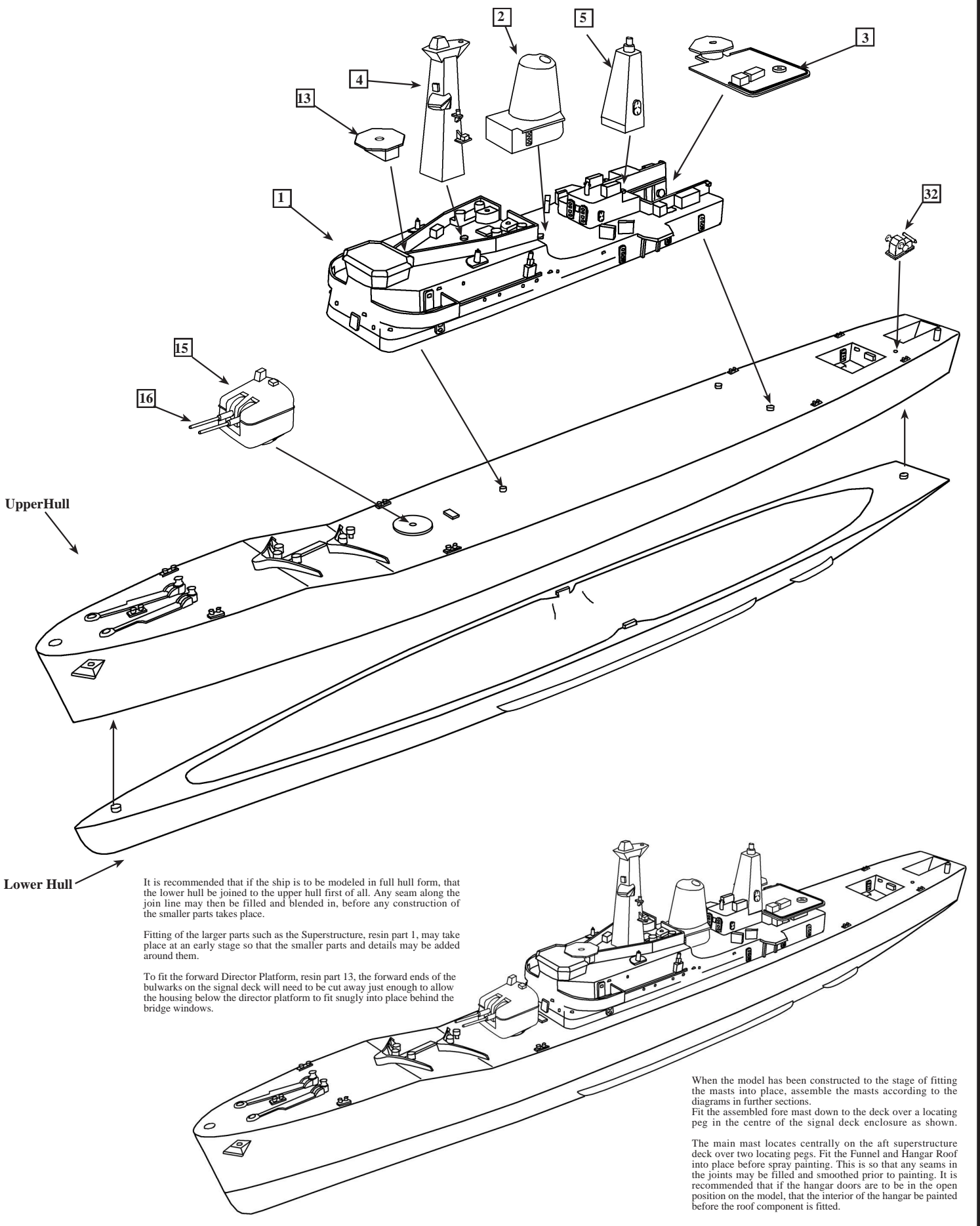
Note: Additional Photo-Etched parts are included in this set that are not required by the basic kit, but are for the Ikara Leander version. Instructions for the conversion and the use of the alternative etched parts are included in the Ikara Leander conversion set, available from Atlantic Models.

General Precautions

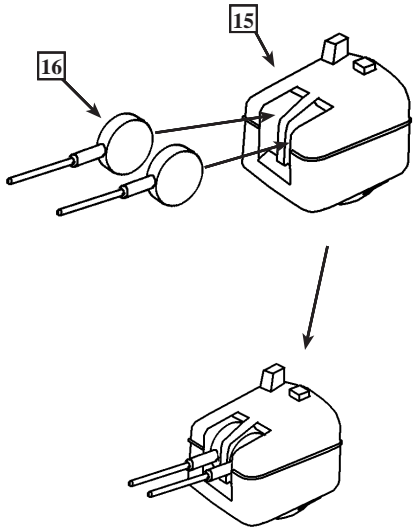
When assembling a Resin / Photoetched metal kit, certain precautions must first be taken.

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

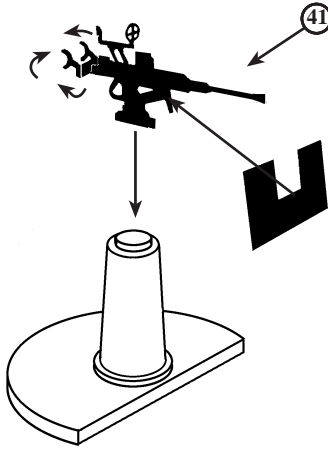


Twin 4.5" Mk6 Gun Turret Assembly



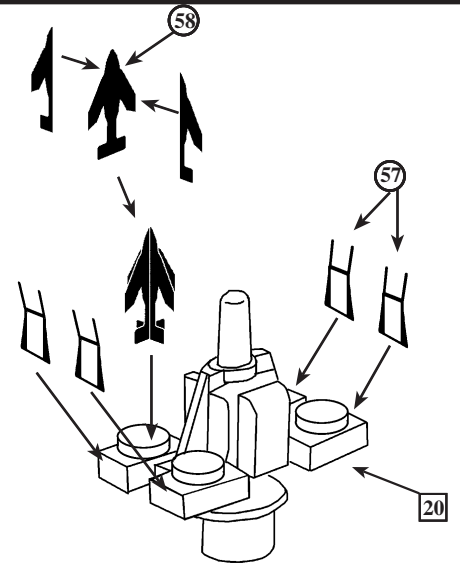
Clean off any excess material from the gun barrels, parts 16, so that the barrels and the elevation discs are clean and smooth. Fit the elevation discs on both barrels into the recesses in the front of gun turret, resin part 15. Elevate the barrels to the desired position and secure into place.

20mm Oerlikon Mounting



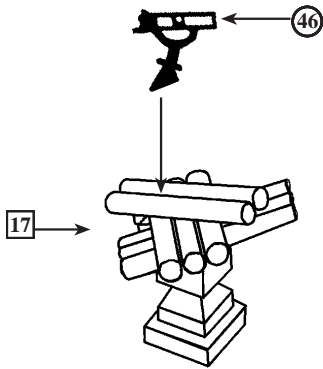
Fold the shoulder rests on the rear of the gun around to 90° so that they are parallel, then fold them up to 90° to fit against the back of the gun. Twist the gun sight to 90°. Fit the 20mm gun mounting to the tops of the pintles that are situated on each side of the forward superstructure top deck abreast of the fore mast. Fit the gun shield centrally to the locating lug just below the mid point on the gun.

Sea Cat Missile Launcher



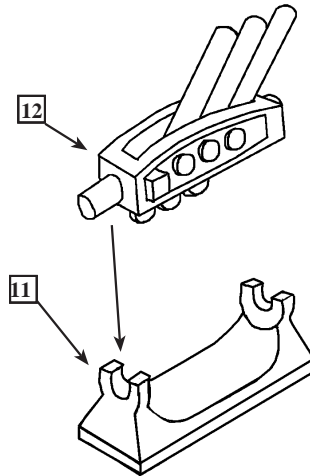
Assemble the Sea Cat missiles using etched parts 58 as shown above. These can be fitted to the launcher as desired. Fit the side rails, etched parts 57, to the short sides of the launcher.

Corvus Chaff Launcher Assembly



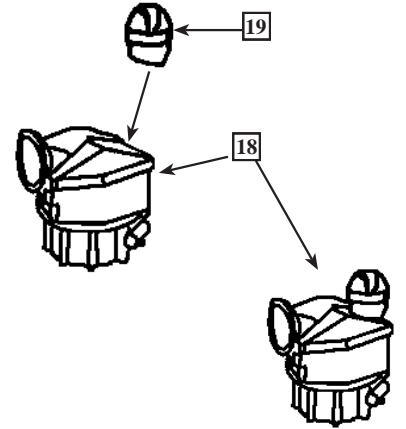
Fold the flare tubes, etched parts 46, in half to make them double thickness with the relief etched detail outer most. Fit to the top of the chaff launchers, metal parts 17 so that the foot locates between the top two tubes. Make two of these.

Mortar Mk10 Assembly



Fit the Mortar Mk 10 Barrel unit, resin part 12, so that the hinge lugs locate in the recessed ends of the Mounting base, resin part 11. The mortar barrels can be angled sideways as desired.

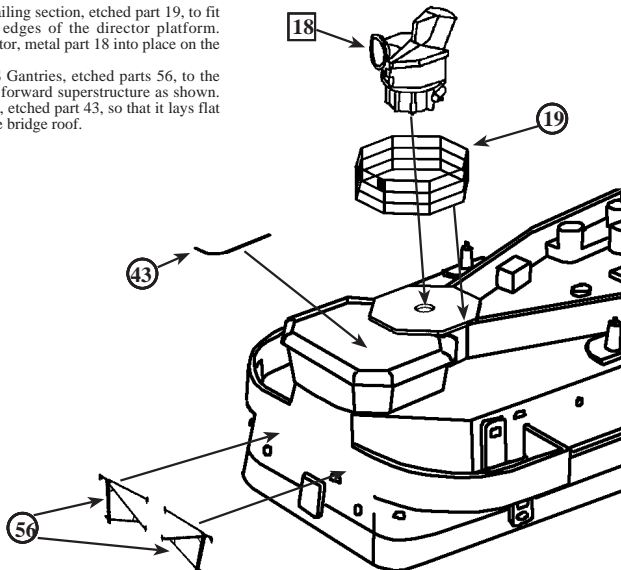
Sea Cat Director (MRS3) Assembly



To convert the MRS3 Gun Director to the GWS 22 Sea Cat version, remove the aimer's cabin window unit from the top of the director and smooth the surface. Fit the small, aimer's tub, metal part 19, to the same location making sure the angled base fits to the corresponding angle on the director. This is for the aft director only.

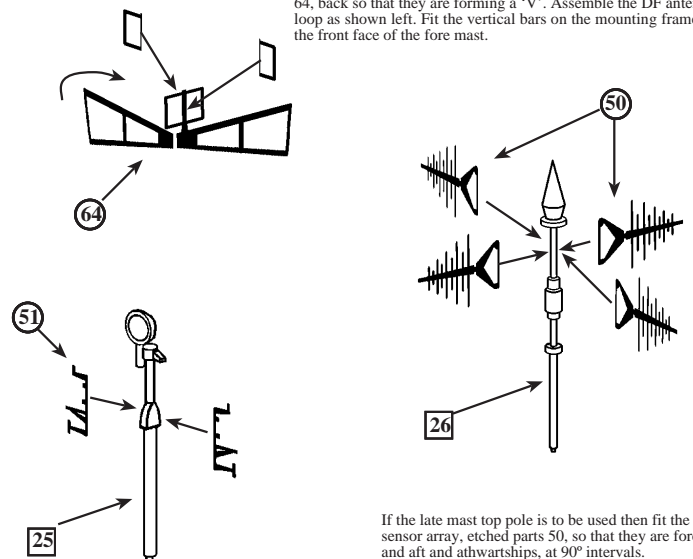
Bridge Fittings Location

Shape the railing section, etched part 19, to fit around the edges of the director platform. Fit the director, metal part 18 into place on the platform. Fit the RAS Gantries, etched parts 56, to the front of the forward superstructure as shown. Fit the davit, etched part 43, so that it lays flat on top of the bridge roof.



Fore Mast Antenna Assembly

Fold the mounting bracket frame of the DF antenna, etched part 64, back so that they are forming a 'V'. Assemble the DF antenna loop as shown left. Fit the vertical bars on the mounting frame to the front face of the fore mast.

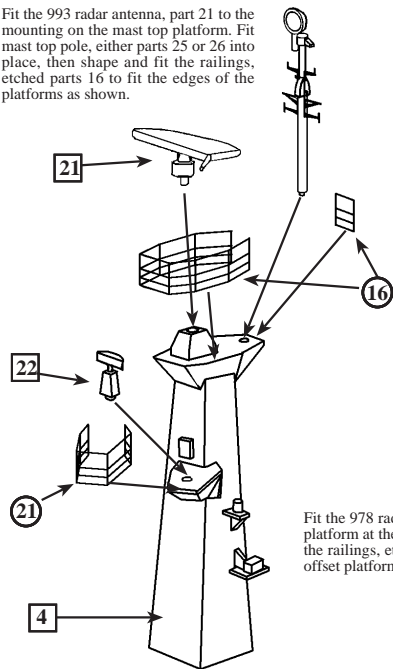


If the early mast top pole, metal part 25, is to be fitted to the fore mast, use etched parts 51, fitted to the sides of the mast pole as shown above.

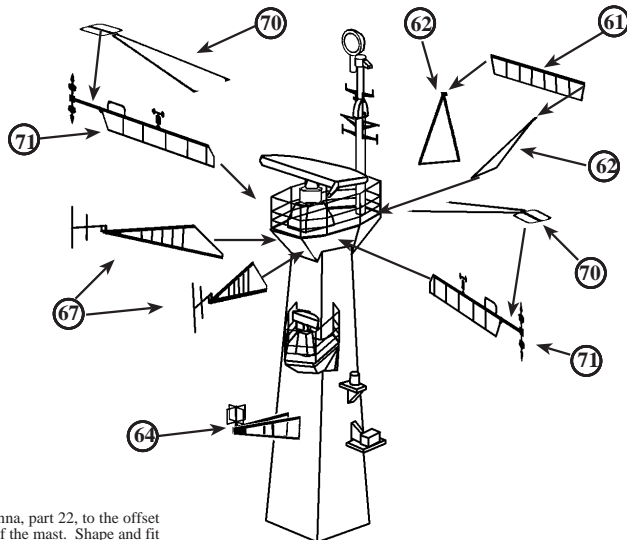
If the late mast top pole is to be used then fit the sensor array, etched parts 50, so that they are fore and aft and athwartships, at 90° intervals.

Fore Mast Assembly

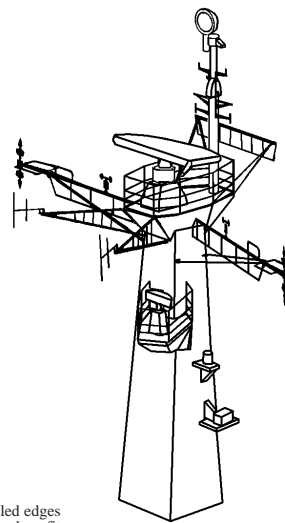
Fit the 993 radar antenna, part 21 to the mounting on the mast top platform. Fit mast top pole, either parts 25 or 26 into place, then shape and fit the railings, etched parts 16 to fit the edges of the platforms as shown.



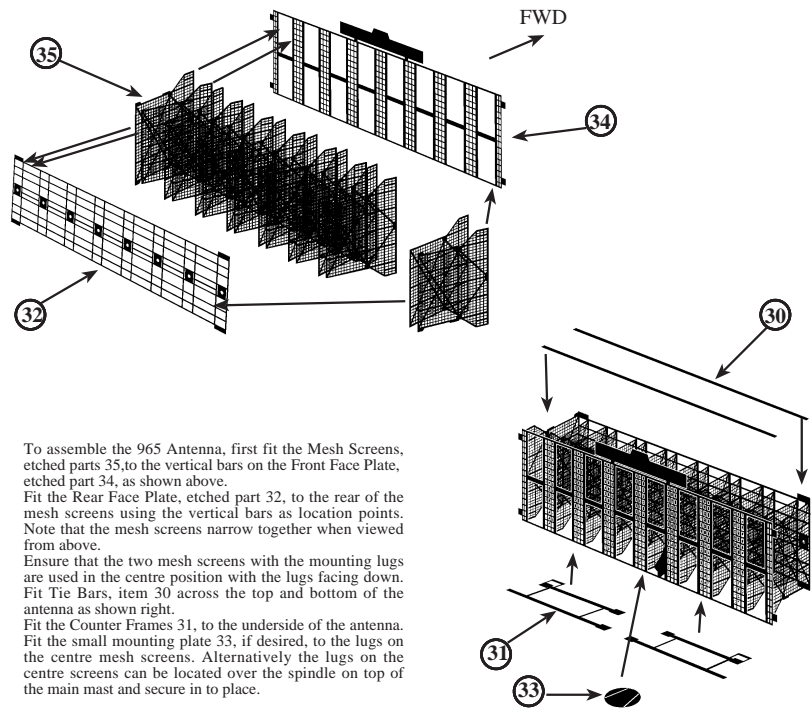
Fit the 978 radar antenna, part 22, to the offset platform at the front of the mast. Shape and fit the railings, etched part 21, to the edges of the offset platforms as shown.



Fit the rear yardarm support brackets, etched parts 62, to the rear angled edges of the mast top platform. Angle them up equally so that the top locating lugs fit onto the ends of the yardarm, etched part 61. Fit the inner ends of the side yardarms, etched parts 71, so that they locate into the angle formed by the mast top platform where it meets the mast side. Fit the supports stays, etched parts 70, so that the loop antennas fit on top of the outer ends of the yardarms. Angle the stays downward until they touch against the mast then fix into place. Fit the forward yardarms, etched parts 67, under the mast top platform overhang.



965 Radar Antenna Assembly



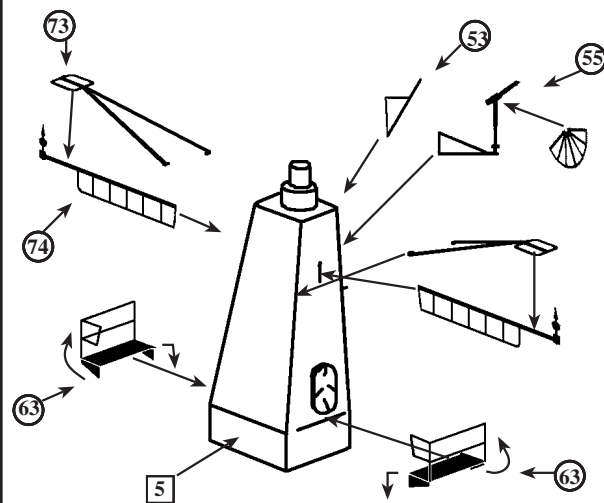
To assemble the 965 Antenna, first fit the Mesh Screens, etched parts 35, to the vertical bars on the Front Face Plate, etched part 34, as shown above.

Fit the Rear Face Plate, etched part 32, to the rear of the mesh screens using the vertical bars as location points. Note that the mesh screens narrow together when viewed from above.

Ensure that the two mesh screens with the mounting lugs are used in the centre position with the lugs facing down. Fit Tie Bars, item 30 across the top and bottom of the antenna as shown right.

Fit the Counter Frames 31, to the underside of the antenna. Fit the small mounting plate 33, if desired, to the lugs on the centre mesh screens. Alternatively the lugs on the centre screens can be located over the spindle on top of the main mast and secure in to place.

Main Mast Assembly

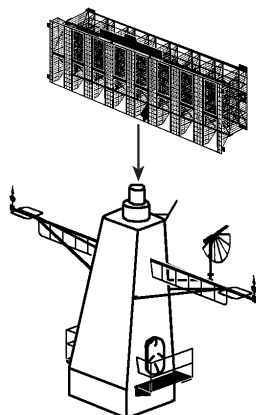


Fit the inner ends of the main mast yardarms, etched parts 74, to the sides of the mast as shown. The top rail of the yardarm should be positioned 5mm below the top edge of the mast. Fit the yardarm stays, etched parts 73, in the same way as that described for the foremost yardarms.

Fit the Sword and Shield Antenna, etched part 55, to the port aft corner of the main mast. The horizontal beam fits on the same level as the top rail of the yardarms. Fit the Ensign Gaff, etched part 53, to the rear face of the main mast as shown.

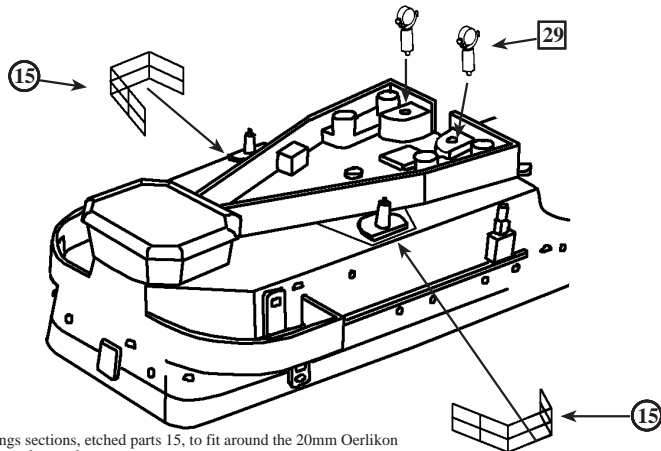
Fold down the support brackets on the access platforms, etched parts 63, to 90° then fold the railings up to 90° and shape the forward section to fit against the mast when the platform is in place. Fit the platforms on each side of the mast below the side access hatches.

965 Radar Antenna Location



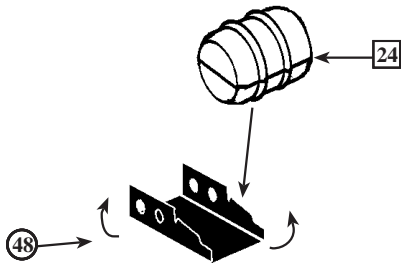
Fit the completed 965 radar antenna, so that the narrow lug on the top of the main mast fits into the locating 'V' formed by the centre mesh screens. Alternatively, if the circular mounting plate has been fitted to the base of the antenna, cut off the narrow lug and fit the antenna directly onto the larger circle.

20mm Oerlikon Location



Shape the railings sections, etched parts 15, to fit around the 20mm Oerlikon gun mountings as shown above. Fit the searchlights, parts 29, to the locating holes on the raised platforms on the signal deck.

Life Raft Stowage Assembly

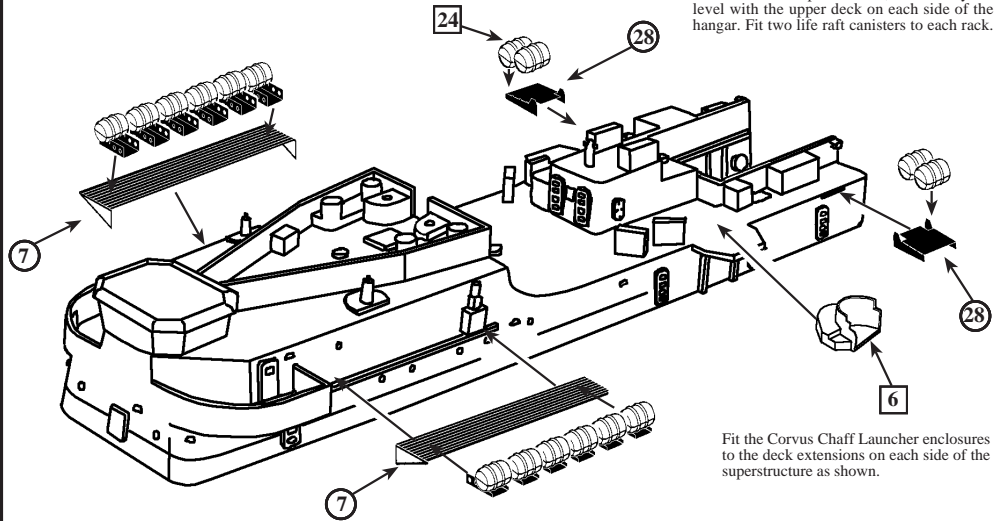


Fold up the sides of the life raft canister racks, etched parts 48, so that they are parallel. Remove the life raft canisters, parts 24, from the molding strips so that each canister is separate, then fit to the angled part of the rack as shown above.

For the aft pair of life raft racks, fold down the sides of etched parts 28, so that they are parallel, then fit directly to the edge of the deck on the aft superstructure.



Life Raft Shelf and Canister Stowage Locations

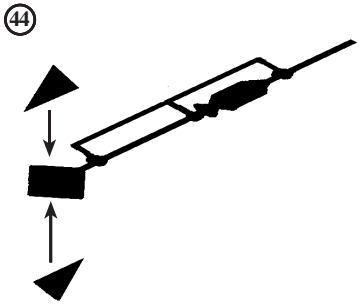


Fit the aft life raft racks, etched parts 28, to the sides of the aft superstructure, so that they are level with the upper deck on each side of the hangar. Fit two life raft canisters to each rack.

Fit the Corvus Chaff Launcher enclosures to the deck extensions on each side of the superstructure as shown.

Fold down the end angled brackets on etched parts 7 to 90°. Fit these shelves into place on the sides of the superstructure, on top of the locating strip provided. Fit six life raft canisters on their ejector racks to each side shelf as shown above.

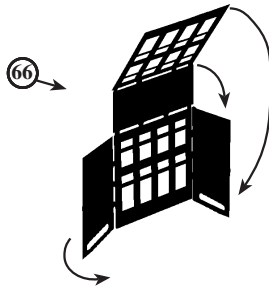
Dan Buoy Assembly



Assemble the radar reflectors on the Dan Buoys, etched parts 44, as shown above. Fit the rectangular bracket arrangement onto the side railings on each stern quarter.

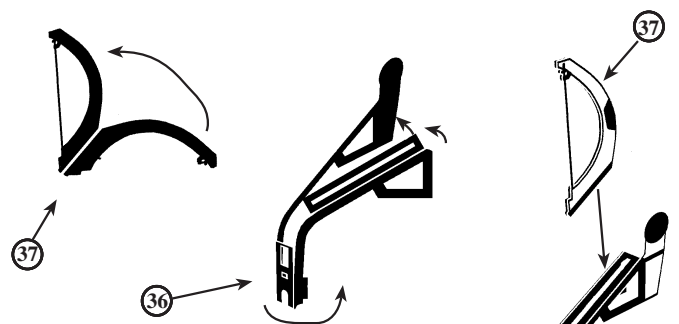
The colour of the reflector and body of the Dan Buoys varied from Dayglo Orange which was the most common, to Red and White 90° alternate sections

Fuel Can Rack Assembly



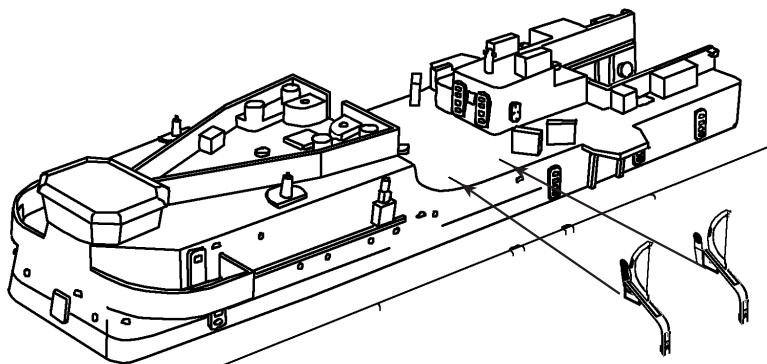
Fold the sides of the fuel can rack round to 90° so that they are parallel, then fold the top and front panels down in stages of 90° so that they form a box construction rack. These racks are meant to contain the Jerry cans of fuel required by the ships boats. They are usually positioned on the edges of the deck between the mortar well and the VDS well. They have a quick overboard release capability due to the flammable contents and are painted red.

Boat Davit Assembly

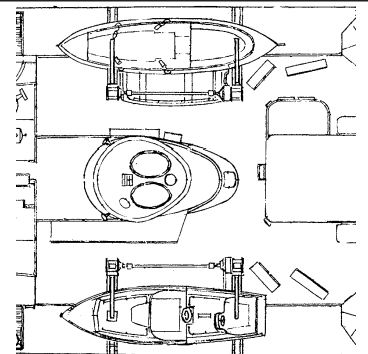


Fold the davit top sections, etched parts 37, in half so that the relief etched detail is outermost, then secure into place so that they are double thickness. Fold the sides of the lower sections of the davits, etched parts 36, to 90° around the base plate, so that the yare parallel. Fold the top strip over to 90° and fix the edge to the opposite side. Make these davits in pairs that are mirror images to each other. Fit the top section into place on the relief etched line on the top plate of the lower section.

Boat Davit Locations

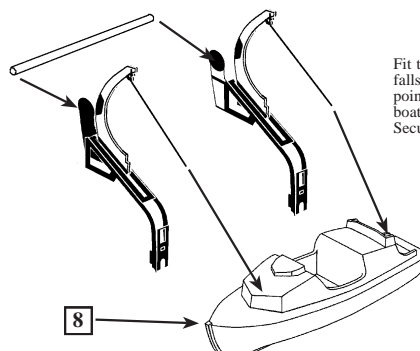
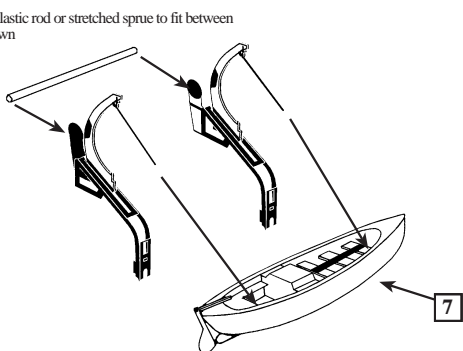


Fit the davits into place so that the feet are positioned on the edges of the main deck. The bottom of the horizontal bracket should fit onto the superstructure deck at the location shown above. This is the same on both sides.



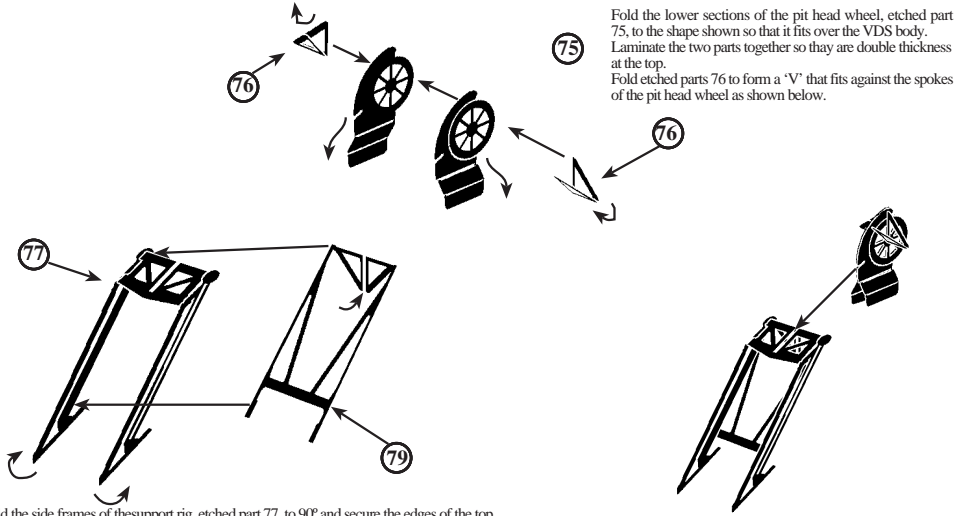
Boat Davit Location

Cut a length of plastic rod or stretched sprue to fit between the davits as shown



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 in to place

Variable Depth Sonar (VDS) Pit Head Gear Assembly

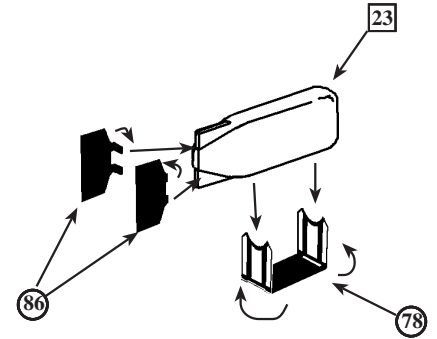


Fold the lower sections of the pit head wheel, etched part 75, to the shape shown so that it fits over the VDS body. Laminate the two parts together so they are double thickness at the top. Fold etched parts 76 to form a 'V' that fits against the spokes of the pit head wheel as shown below.

Fold the side frames of the support rig, etched part 77, to 90° and secure the edges of the top plate into place as shown above so that the feet of the frame are parallel. Fit the bracing frame etched part 79 so that the long edges locate along the inside of the thicker side bars on etched part 77.

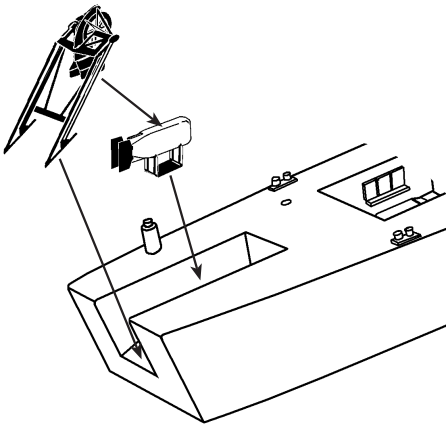
Fit the pit head wheel assembly so that slot in the rear fits over the corresponding slot in the support frame top plate.

VDS Body and Cradle Assembly



Fold up the ends of the VDS cradle, etched part 78 to 90° so that they are parallel. Turn the attachment lugs on the stabiliser fins inwards and fit the fins to the rear of the VDS body. Fit the VDS body into the cradle as shown.

VDS Location

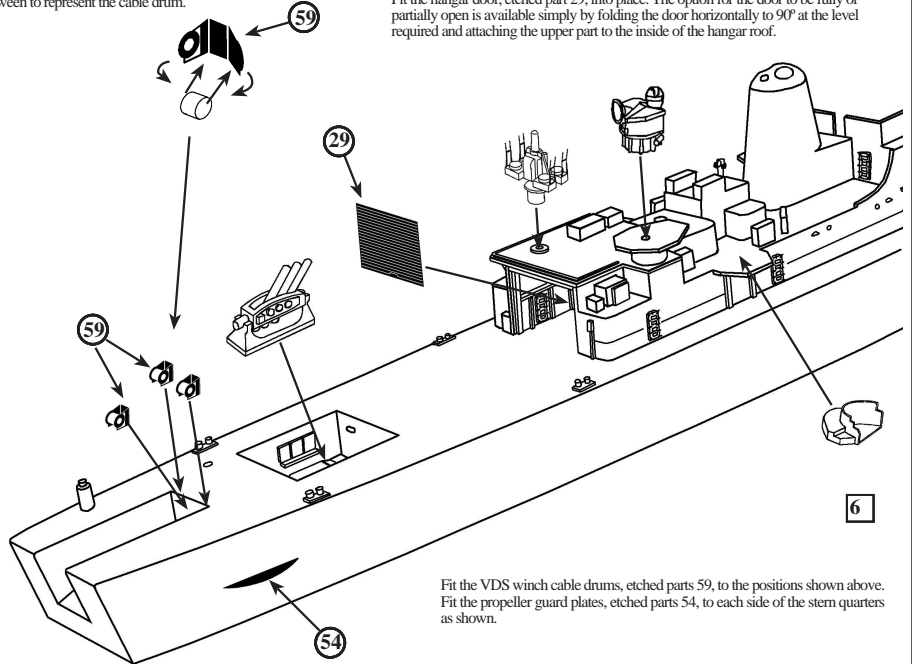


Fit the VDS body and cradle assembly into the stern well so that the bottom of the cradle locates centrally onto the horizontal deck. Fit the support frame and pit head gear assembly so that the shaped guide channel below the pit head wheel fits over the top of the VDS body. The feet of the support frame fit to the rear of the downward angled deck on each side of the opening in the stern.

The kit has been supplied with the transom plate in place across the stern, if the ship is to be modelled as a later version with the VDS well plated in. All that will need to be done, in this case is for a rectangle of plastic card or brass sheet, to be fitted over the top of the VDS well. This was then used as a boat stowage area for inflatable's and punts.

Aft Fittings Locations

Fold the sides of the cable reels, etched parts 59 to 90° so that they are parallel, then fit a length of rod or sprue in between to represent the cable drum.

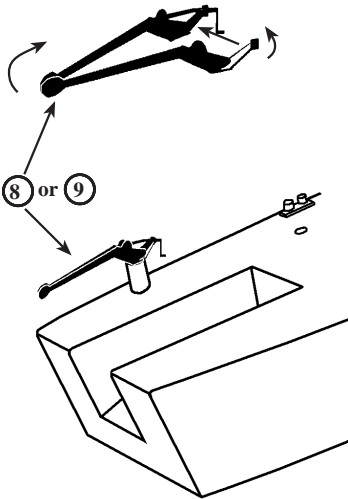


Fit the Sea Cat Missile Launcher and Director into place at the locations shown on the hangar roof.

Fit the hangar door, etched part 29, into place. The option for the door to be fully or partially open is available simply by folding the door horizontally to 90° at the level required and attaching the upper part to the inside of the hangar roof.

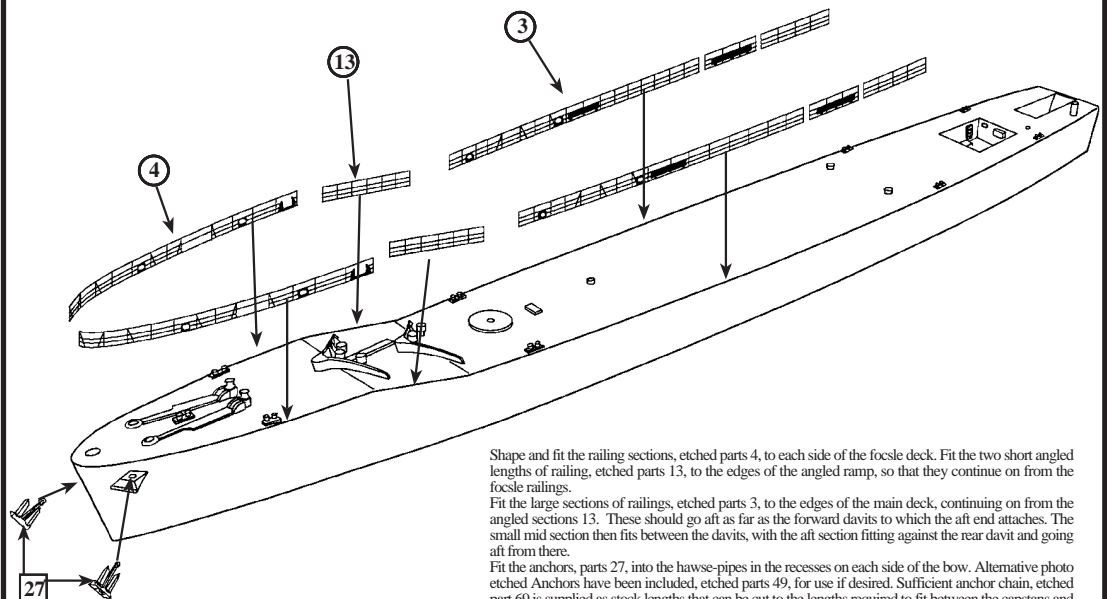
Fit the VDS winch cable drums, etched parts 59, to the positions shown above. Fit the propeller guard plates, etched parts 54, to each side of the stern quarters as shown.

Paravane Crane Assembly



Shape the paravane crane, etched part 8, as shown above and fit to the top of the mounting pillar on the stern deck. The alternative crane, etched part 9, is a late model fitted during the refits on some ships of the class. Further research to establish which ones would have to be done.

Main Deck Railings Location

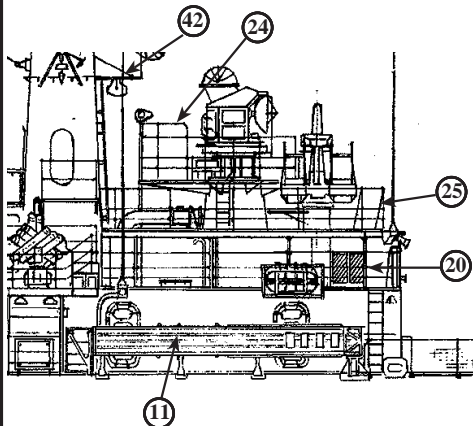


Shape and fit the railing sections, etched parts 4, to each side of the focsle deck. Fit the two short angled lengths of railing, etched parts 13, to the edges of the angled ramp, so that they continue on from the focsle railings.

Fit the large sections of railings, etched parts 3, to the edges of the main deck, continuing on from the angled sections 13. These should go aft as far as the forward davits to which the aft end attaches. The small mid section then fits between the davits, with the aft section fitting against the rear davit and going aft from there.

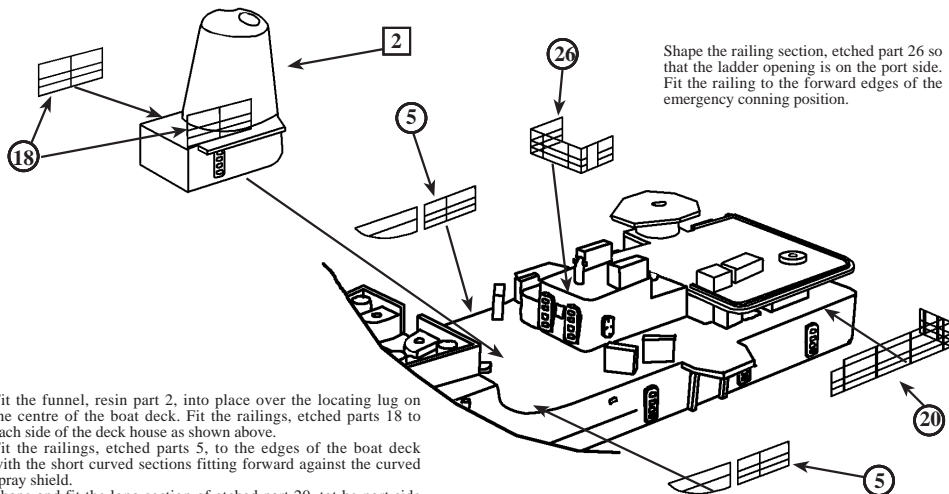
Fit the anchors, parts 27, into the hawse-pipes in the recesses on each side of the bow. Alternative photo etched Anchors have been included, etched parts 49, for use if desired. Sufficient anchor chain, etched part 69 is supplied as stock lengths that can be cut to the lengths required to fit between the capstans and the hawse pipe openings on the focsle deck.

Hangar Fittings Side View



Fit the accommodation ladders, etched parts 11, to each side of the hangar on the main deck edges. Fit these so that the landing platform is forward as shown above.
Fit the small yardarm, etched part 42, centrally to the rear face of the main mast. Fold the aircraft approach light fitting in half to make it double thickness. This can be further thickened by putting a drop of white PVA glue on each side of the lamp unit and then painting over when dry.

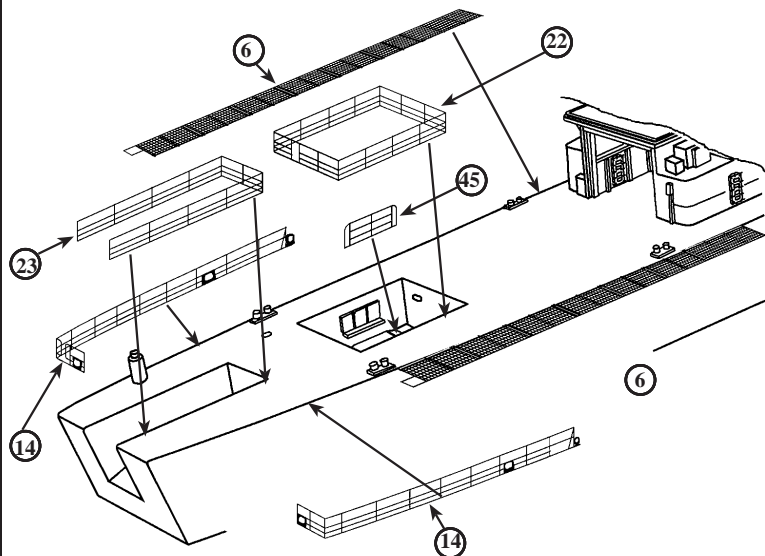
Superstructure Railings Location



Fit the funnel, resin part 2, into place over the locating lug on the centre of the boat deck. Fit the railings, etched parts 18 to each side of the deck house as shown above.
Fit the railings, etched parts 5, to the edges of the boat deck with the short curved sections fitting forward against the curved spray shield.
Shape and fit the long section of etched part 20, to the port side of the hangar, with the raised part forming the hangar roof support.

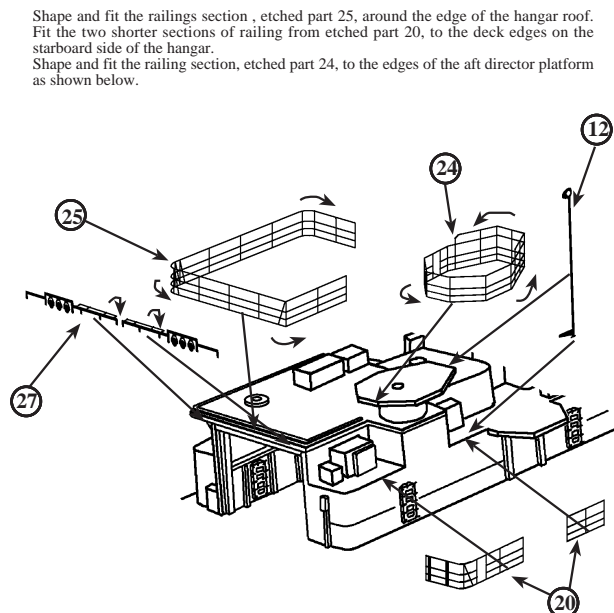
Shape the railing section, etched part 26 so that the ladder opening is on the port side. Fit the railing to the forward edges of the emergency conning position.

Flight Deck Railings and Safety Net Location



Fit the small section of railing, etched part 45 to the inner edge of the raised platform on the starboard side of the mortar well. Shape and fit the railings section, etched part 22, around the edge of the mortar well. Note: When the helicopter was on deck or flying, these railings would be collapsed or removed.
Shape and fit the railings around the VDS well, etched parts 23. Shape and fit the two long sections of railing, etched parts 14 and fit to each side of the stern as shown above.
Fit the Flight Deck Safety Nets, etched parts 6, to the edges of the flight deck in either the raised or lowered positions as the model requires.

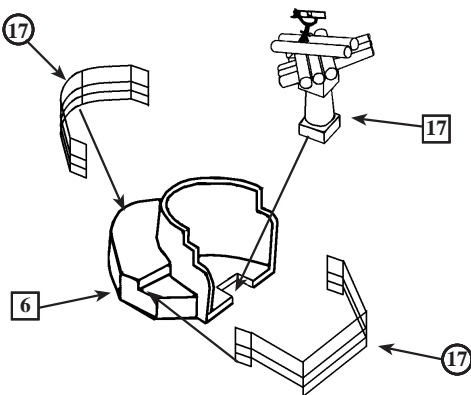
Helicopter Hangar Fittings Location



Shape and fit the railings section, etched part 25, around the edge of the hangar roof. Fit the two shorter sections of railing from etched part 20, to the deck edges on the starboard side of the hangar.
Shape and fit the railing section, etched part 24, to the edges of the aft director platform as shown below.

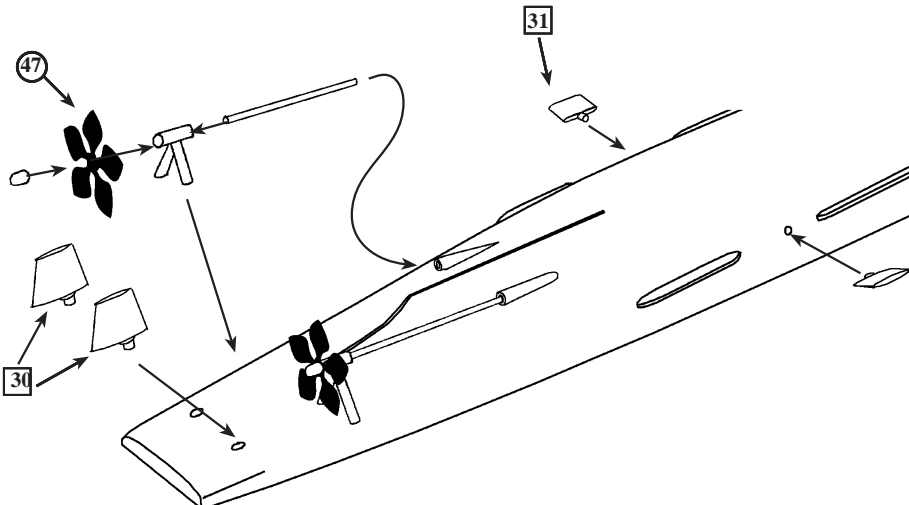
Fit the flight deck lighting bar, etched part 27, to the rear edge of the hangar roof. The inner attachment frame will need to be folded to 90° to give the lighting bar clearance from the rear of the hangar.
Fit the Sea Cat telemetry antenna, etched part 12, so that it rests centrally against the forward edge of the director platform with the foot of the antenna on the deck below.

Chaff Launcher Assembly



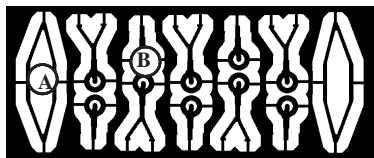
It is recommended that the Corvus Chaff Launcher enclosures be fitted to the deck extensions on the rear of the superstructure before fitting the parts. Cut out a rectangular notch in the bottom of the enclosure to receive the base of the launcher.
Fit the launcher into place, then shape and fit the straight railing section of etched part 17, to the rear platform on the chaff launcher enclosure. Shape and fit the angled forward section of railing 17, to the stepped area of the enclosure as shown above.

Propeller and Rudder Assembly



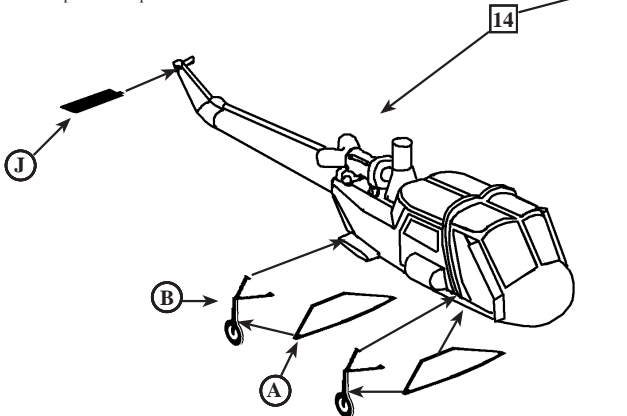
If the kit is being built as a full hull model, prepare the lower hull and fit to the upper hull as described at the beginning of these instructions. Fit the Stabiliser fins, parts 31 to the locating holes on the lower hull between the bilge keels.
Cut two 30mm lengths of the 1mm diameter brass rod stock provided, to make the propeller shafts. Cut the front of the hub boss from the bearing and retain. Fit the propeller, etched part 47, 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 30, in to place in the locating holes on the stern.

Wasp HAS1 Helicopter Assembly

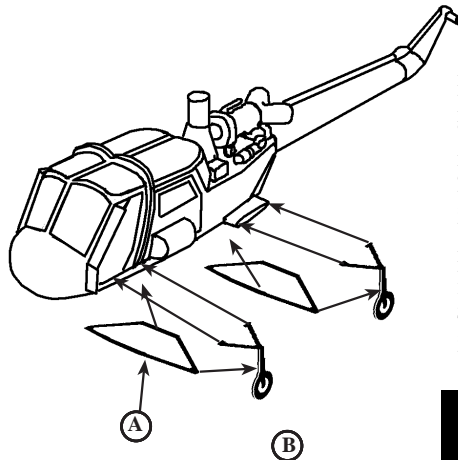


39

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.



14

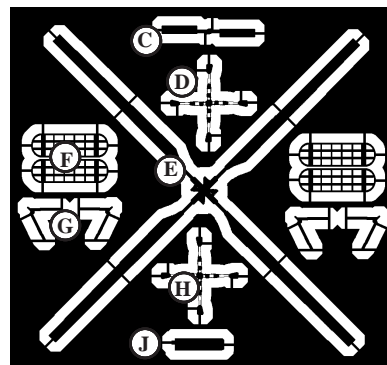


Fold the undercarriage legs 39B in half so that they are double thickness with the relief etched detail outer most. Secure into place. Fold the 'V' frame on top of the undercarriage legs to 90°. Make 4 of these.

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.

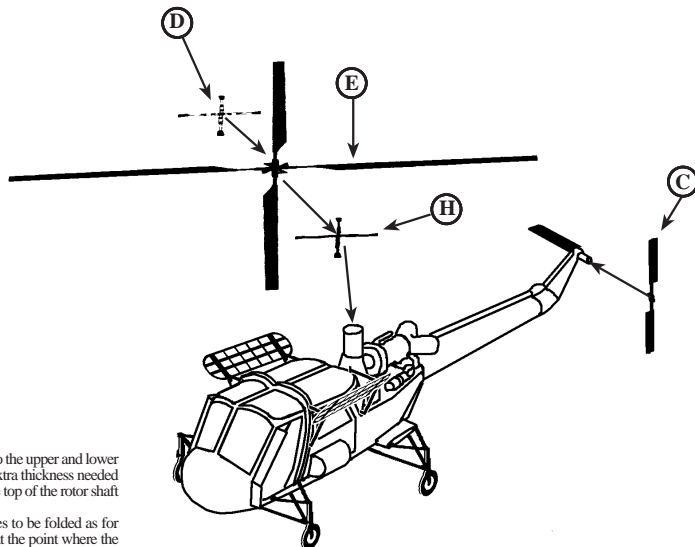
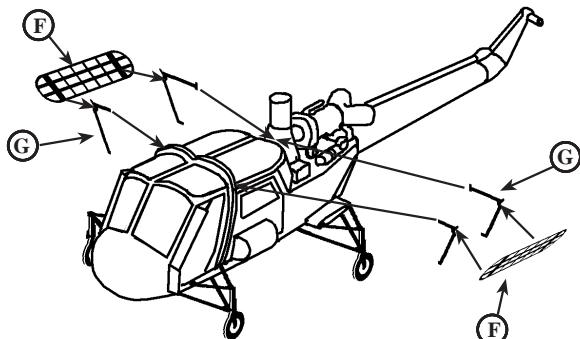
Fit the front undercarriage to the fuselage so that the ends of the top 'V' frame fit on to the fuselage forward with the rear foot in line with the door pillar. The point of the lower frame should attach to the inside of the leg just above the wheel. The rear leg top 'V' frame feet fit onto the outside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



40

Fold the flotation bag shells, etched parts 40F, in half so that the relief etched detail is outermost. Fit the flotation gear attachment frames, etched parts 40G, 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 40D and 40H, 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 stowage, 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.

Wasp Helicopter Colour Guide



Ships Flights Codex Numbers

- 422/HMS Aurora. 423/HMS Diomede. 424/HMS Minerva 425/HMS Bacchante
- 426/HMS Arethusa 430/HMS Achilles 431/HMS Charybdis 432/HMS Scylla
- 433/HMS Euryalus 443/HMS Jupiter 450/HMS Sirius 452/HMS Galatea
- 454/HMS Penelope 455/HMS Ariadne 460/HMS Ajax 463/HMS Cleopatra
- 464/HMS Danae 465/HMS Juno 466/HMS Argonaut 470/HMS Apollo
- 471/HMS Phoebe 472/HMS Andromeda 473/HMS Dido 475/HMS Hermione
- 476/HMS Leander 324/HMS Naiad



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

Main Colour Chart and Painting Guide



R.N. Light
Weatherwork
Grey
Humbrol 127



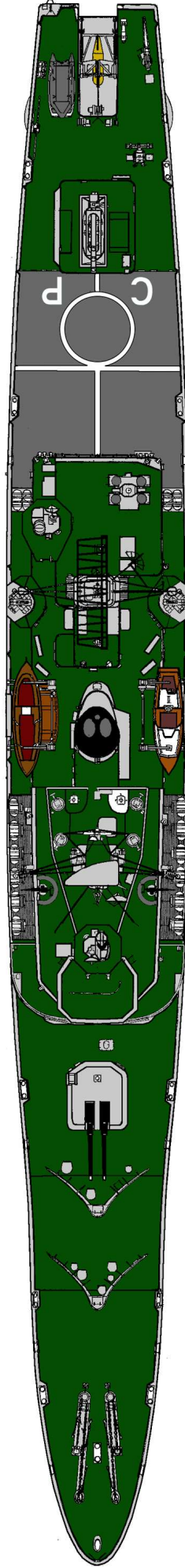
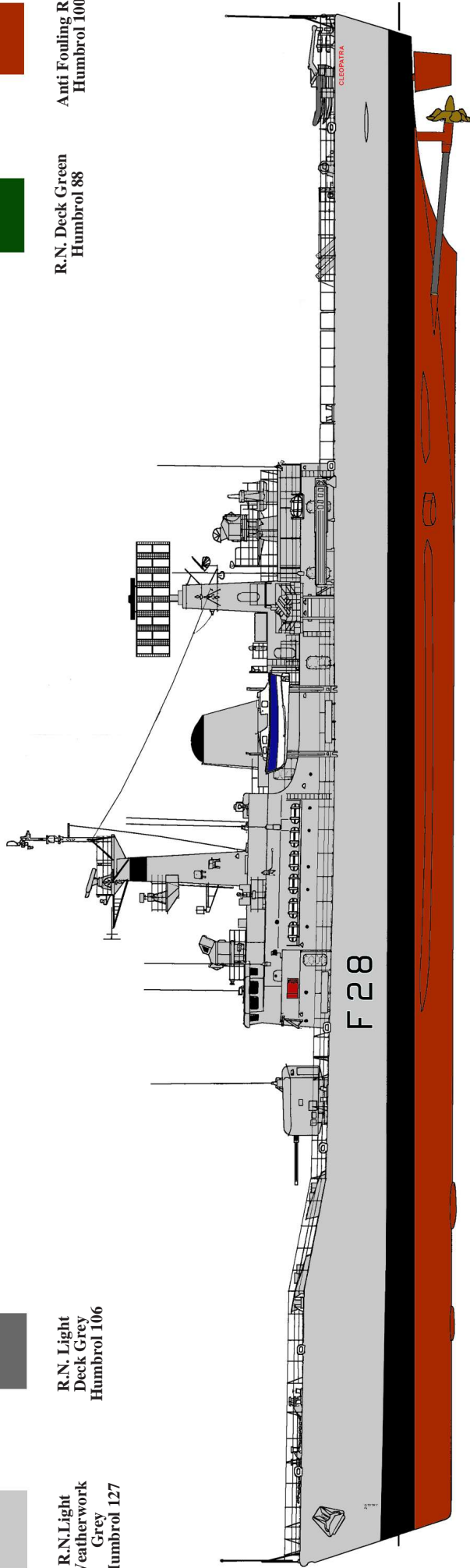
R.N. Light
Deck Grey
Humbrol 106



R.N. Deck Green
Humbrol 88



Anti Fouling Red
Humbrol 100



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

F12 HMS Achilles / AC F114 HMS Ajax / AJ F57 HMS Andromeda / AM F70 HMS Apollo / AP
 F38 HMS Arethusa / AR F56 HMS Argonaut / AT F72 HMS Ariadne / AE F10 HMS Aurora / AU
 F69 HMS Bacchante / BC F28 HMS Cleopatra / CP F75 HMS Charybdis / CS F47 HMS Danae / DN
 F104 HMS Dido / DO F16 HMS Diomede / DM F15 HMS Euryalus / EU F18 HMS Galatea / GA
 F58 HMS Hermione / HM F52 HMS Juno / JO F60 HMS Jupiter / JP F109 HMS Leander / LE
 F45 HMS Minerva / MV HMS F39 Naiad / NA F127 HMS Penelope / PN F42 HMS Phoebe / PB

F71 HMS Scylla / SC F40 HMS Sirius / SS

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

Matt Black.

Upper parts of Masts and Exhaust Stacks. Gun Barrels. Waterline Boot Topping.

Matt White

Fore Mast Top Array. Life Raft Canisters. Bollards and Fairleads. Cochrane on Motor Boat

Bronze

Propellers. Elevation Discs on 4.5" Guns.

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