Peter Hall's ATLANTIC MODELS

Type 12 Frigate
H.M.S. TORQUAY
1956-1985
1/350 Scale

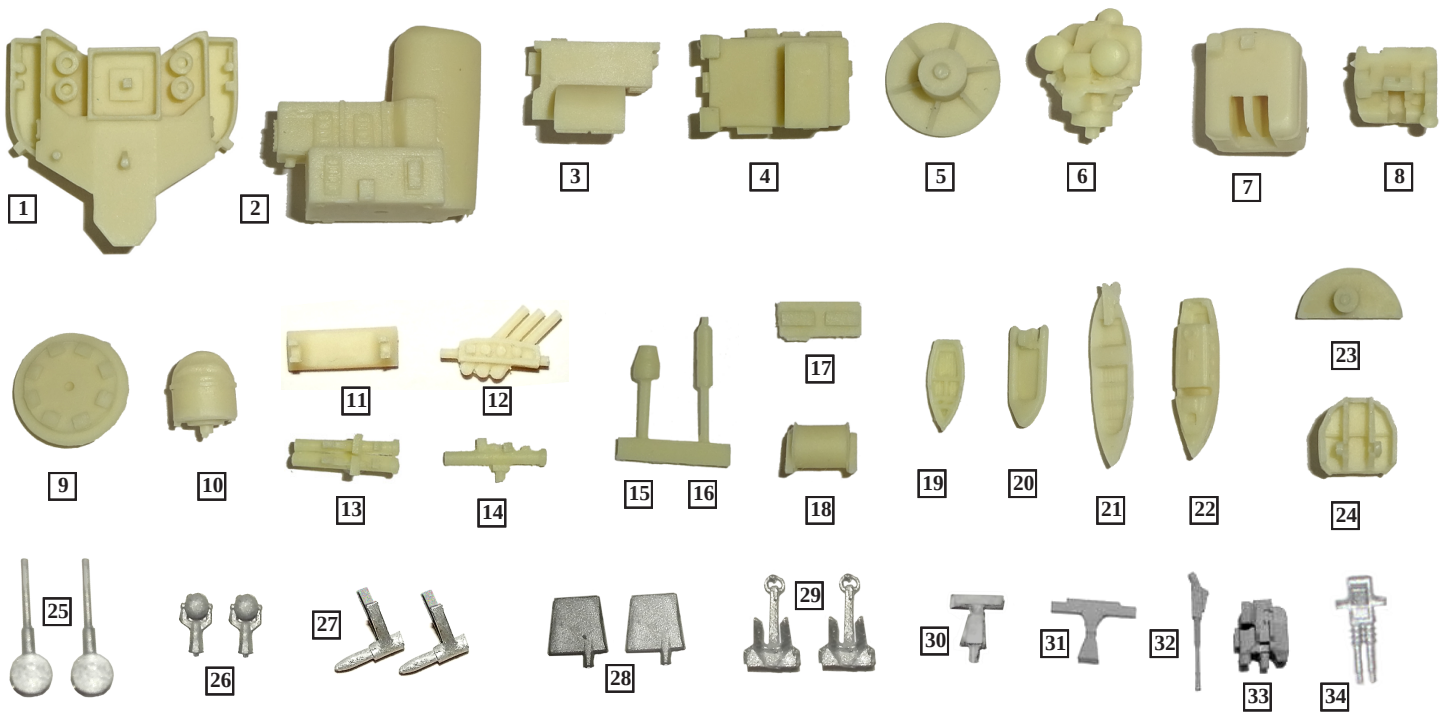
The Type 12 Frigates were introduced in to the Royal Navy during the 1950's and were the first ships designed specifically for the anti-submarine role. With the new "V" form hull design, they were intended to counter the new fast diesel electric submarines and be able to keep up high speeds even in rough 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. The first ship to be completed was HMS Torquay. HMS Torquay was laid down at Harland and Wolf's Shipyard in Belfast on 11th March 1953, launched 1st July 1954 and completed 10th May 1956.
On commissioning she became the leader of the 5th Frigate Squadron based at Portsmouth, soon becoming active as in October of that year, Torquay found herself deployed to the Mediterranean and took part in the Suez operation in November 1956. From then she found herself patrolling around Cyprus and remained in the Mediterranean until the middle of 1957, returning to Portsmouth in May.
In July 1958 HMS Torquay was part of the task group formed around HMS Eagle, for Operation Fortitude, when King Hussein of Jordan requested an airlift of British troops following unrest after the formation of the United Arab Republic by Egypt and Syria. From 1963 Torquay was allocated to the Dartmouth Training Squadron and served in various training roles until 1971 when Torquay was brought in for a major refit and upgrade of systems.
She received a plated in fore mast of the Type fitted to the Modernised Type 12Ms and a larger aft superstructure and training spaces built over the where the forward set of Mortars had been. Torquay rejoined the Training Squadron in 1972 again as a Navigation Training Ship. She joined the 2nd Frigate Squadron based in Portsmouth and in 1977 attended the Queens Silver Jubilee Fleet Review at Spithead. She continued to serve as a Training ship until 1985 when she was replaced by HMS Juno. She paid off on 28th March 1985 and sold for scrap in 1987.

Specifications

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

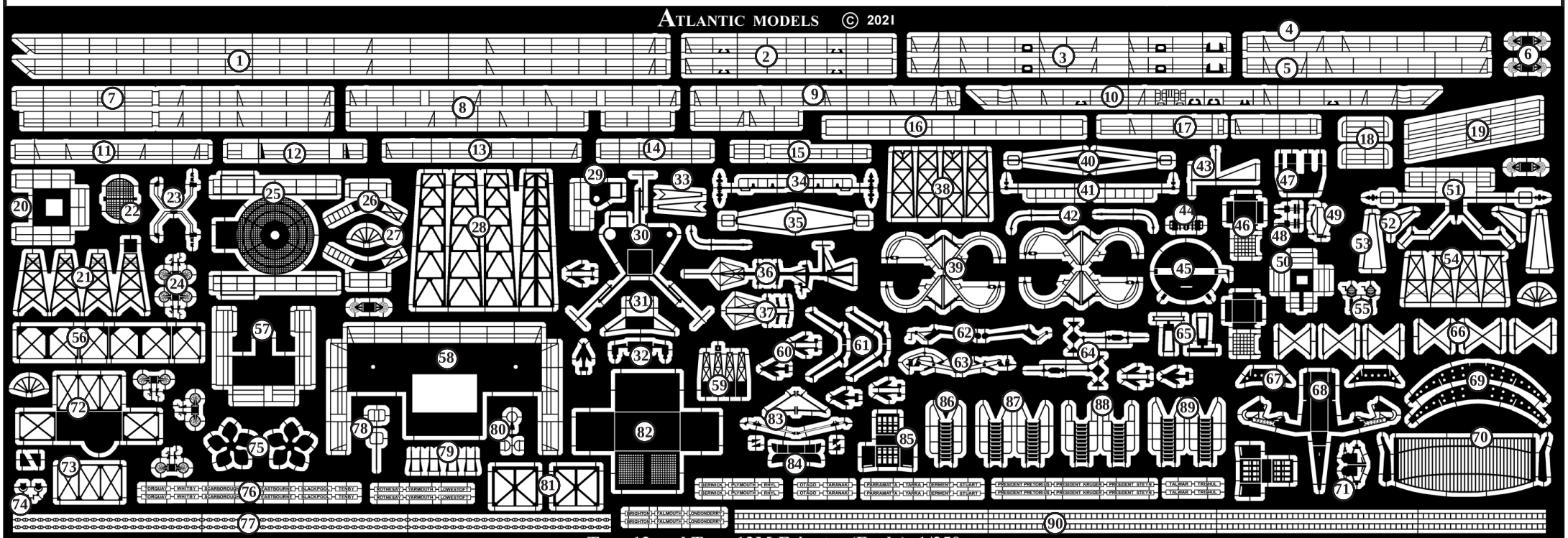
Armanent: 1 x Twin 4.5 inch Mk6 mounting. 1 x Twin Bofors STAAG Mk2 (Later 1x Single Bofors Mk7)
2 x Limbo A/S Mortar Mk10 12 x 18" A/S Torpedo Tubes (8 x Single 2 x Twin Mountings) Later Removed

RESIN & WHITE METAL PARTS



1. Bridge/ GDP Unit
2. Funnel Unit
3. Mid Deckhouse/ Vent Intake
4. Aft Deckhouse (Early)
5. Main Director Platform
6. Mk6 FC Director (Late)
7. Twin 4.5" Mk6 Gun Turret
8. 40mm Bofors STAAG Mounting
9. STAAG Base Platform
10. Aft AA Director Tub
11. Mortar Mk10 Base x 2
12. Mortar Mk10 Barrels x 2
13. Twin Torpedo Tube Mounting x 2
14. Single Torpedo Tube Mounting x 8
15. 277 Radar Antenna Base
16. Large Whip Aerial Base
17. Inflatable Life Raft Packs x 4
18. Large Hawser Reel
19. 14' Bosun Dinghy
20. Gemini Inflatable Boat
21. 27' Motor Whaler
22. 25' Adm Motor Cutter
23. 293 Radar Antenna
24. Twin 40mm Bofors Mk5
25. 4.5" Mk6 Gun Barrels
26. Singnal Lamps
27. Propeller A Frame Bearings
28. Rudders
29. Anchors
30. 978 Nav Radar Antenna
31. IFF 1010 Cossor Antenna
32. 40mm Bofors Barrels x 2
33. 40mm Bofors Mk7 Base x 2
34. Twin 40mm Bofors x 2

Photo Etched Metal Parts List



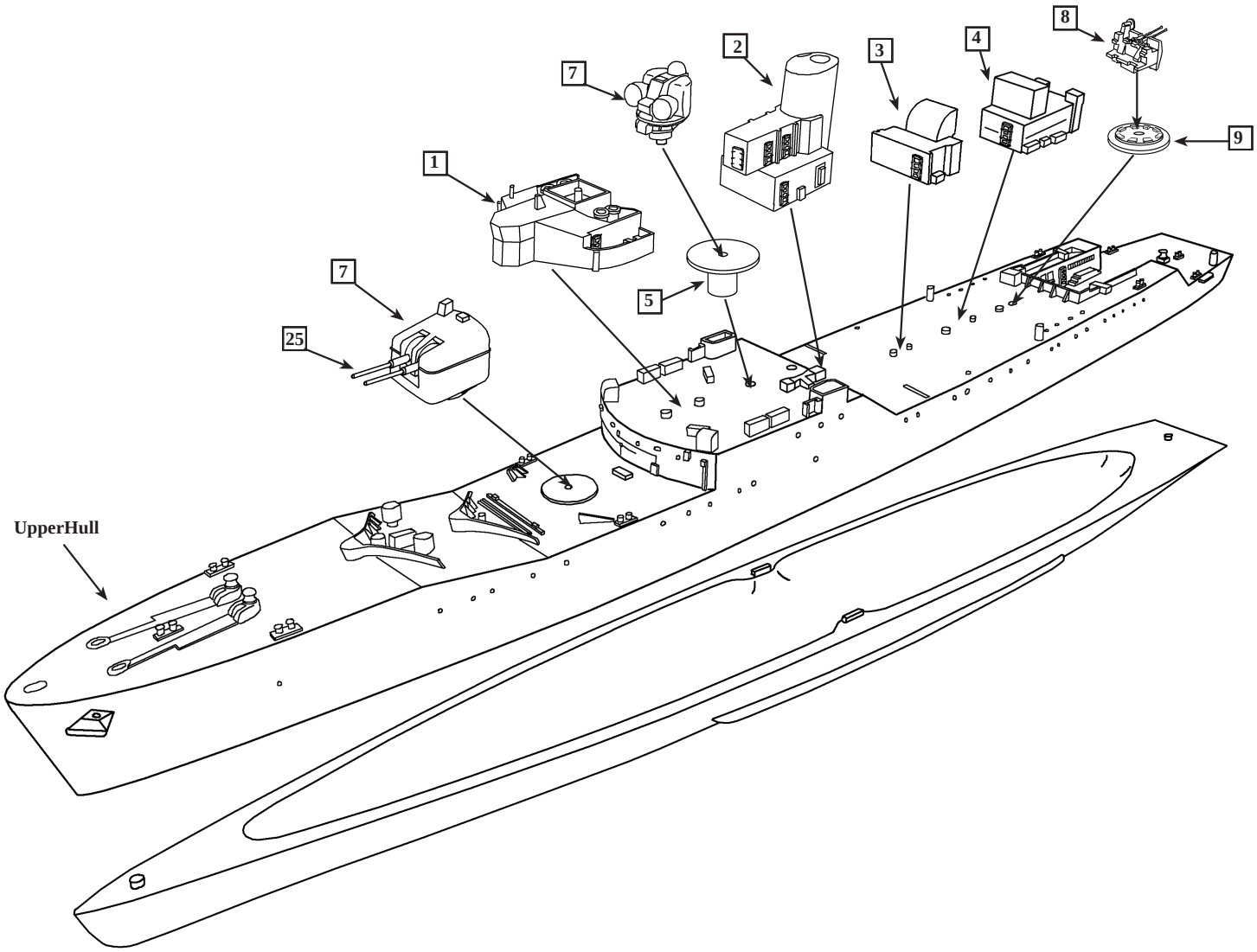
Type 12 and Type 12M Frigates (Early) 1/350

1. Railings (Main Deck)
2. Railings (Fore Deck)
3. Railings (Foc's'le)
4. Railings (Mortar Well Port)
5. Railings (Mortar Wel Stbd)
6. Foc's'le Cable Reels
7. Railings (Superstructure Sides)
8. Railings (Large Aft Deckhouse)
9. Railings (Small Aft Deckhouse)
10. Railings (Quarterdeck)
11. Railings (Mid Deckhouse Vent)
12. Railings Hull Step Fwd)
13. Railings (Aux Con Position)
14. Railings (277 Mast Base)
15. Railings (Fore Mast Platform)
16. Railings (STAAG Platform)
17. Railings (Aux Con Position 2)
18. Railings (Mortar Well Platforms)
19. Railings (Fo'c'sle Incline)
20. 277 Radar Mast Platform
21. 277 Radar Lattice Mast
22. 277 Radar Antenna
23. 277 Radar Antenna Yoke
24. Quarterdeck Cable Reels
25. Main Director Platform Deck
26. Main Director Access Landings
27. Shield Antennas
28. Lattice Fore Mast
29. 978 Nav Radar Platform
30. Fore Mast Top Platform
31. Fore Mast Front Platform
32. Fore Mast Sensors
33. Fore Mast Aft Yard Stays
34. Yardarms (Fore Mast Sides)
35. Yardarm Stays (Fore Mast Sides)
36. Fore Mast Top Antenna Array
37. Antenna Array Side Sections
38. Main Mast Lattice (Early)
39. Boat Davits
40. Yardarm Stays (Main Mast Sides)
41. Yardarms (Main Mast Sides)
42. Loading Davits
43. Yardarm (Main Mast Rear Early)
44. 293 Radar Mounting Post
45. 293 Radar Antenna (Alternative)
46. Signal Flag Lockers
47. Twin 40mm Bofors Shield
48. Bofors Gunner Seats
49. Twin Bofors Gun Sights
50. Main Mast Top Platform (Early)
51. Main Mast Top Platform (Late)
52. Main Mast Aft Yard Supports
53. Yardarm Stays (Main Mast Late)
54. Main Mast Lattice (Late)
55. Signal Lamps (Large)
56. Aux Conning Position Supports
57. Aux Conning Position Platform
58. 40mm Bofors Platform (INS Ships)
59. Amidships DF Antenna Mast
60. Sea Cat Missile Assembly
61. Torpedo Loading Davits
62. Decoy Crane Type 1
63. Decoy Crane Type 2.
64. Dan Bouy Assembly
65. Main Mast IFF Antenna (Alt)
66. LW 02 Radar Antenna Rear Frames
67. LW 02 Radar Antenna Vertical Plates
68. LW 02 Radar Antenna Mounting
69. LW 02 Radar Antenna Horizontal Spars
70. LW 02 Radar Antenna Antenna Face
71. Mounting Spindle
72. Aux Conning Position Platform (Early)
73. Aux Conning Position Front Support
74. Bridge Signal Lamps
75. Propellers
76. Ships Ceremonial Name Plates
77. Anchor Chain
78. Amidships DF Antenna
79. Sea Cat Loading Rails
80. Bridge Roof DF Antenna
81. Bofors Platform Supports (INS Ships)
82. Vent Intake Box (INS Ships)
83. Bridge Front RAS Gantry
84. RAS Gantry Platform
85. Flammable Fuel Can Stowages
86. Inclined Ladder (Funnel Step)
87. Inclined Ladders (Hull Step)
88. Inclined Ladders (Hull Step Fwd)
89. Inclined Ladders (Bofors Platforms)
90. Vertical Ladder (Stock)

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.

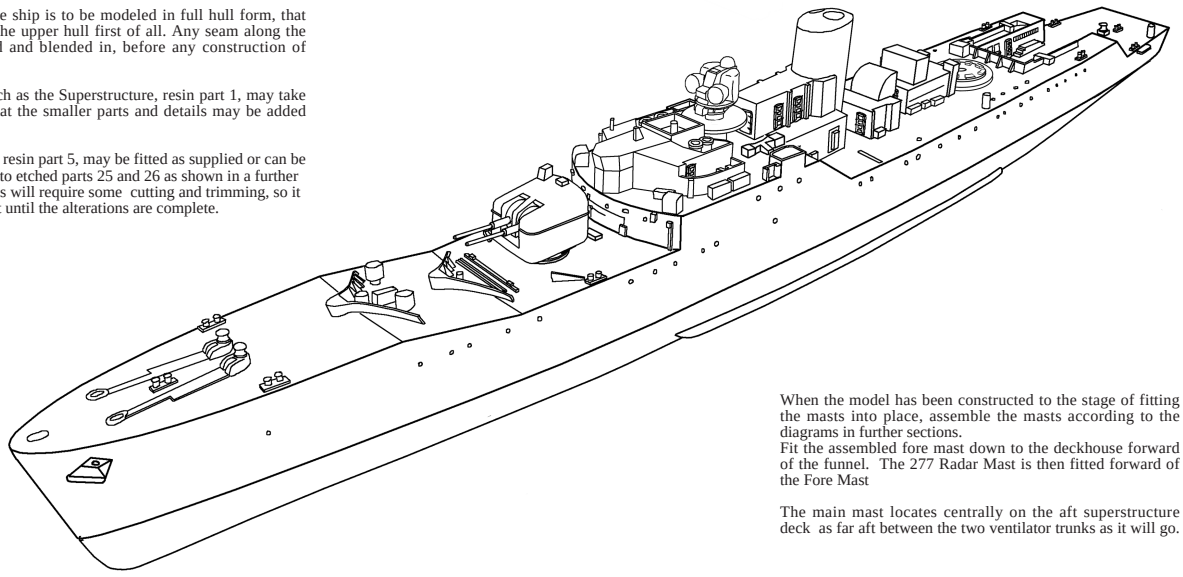
Main Structural Parts



It is recommended that if the ship is to be modeled in full hull form, that the lower hull be joined to the upper hull first of all. Any seam along the join line may then be filled and blended in, before any construction of the smaller parts takes place.

Fitting of the larger parts such as the Superstructure, resin part 1, may take place at an early stage so that the smaller parts and details may be added around them.

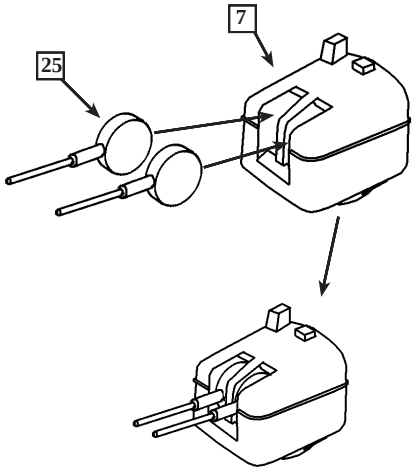
The Main Director Platform, resin part 5, may be fitted as supplied or can be further detailed using the photo etched parts 25 and 26 as shown in a further section on the next page. This will require some cutting and trimming, so it is advisable not to fit this part until the alterations are complete.



When the model has been constructed to the stage of fitting the masts into place, assemble the masts according to the diagrams in further sections.
Fit the assembled fore mast down to the deckhouse forward of the funnel. The 277 Radar Mast is then fitted forward of the Fore Mast

The main mast locates centrally on the aft superstructure deck as far aft between the two ventilator trunks as it will go.

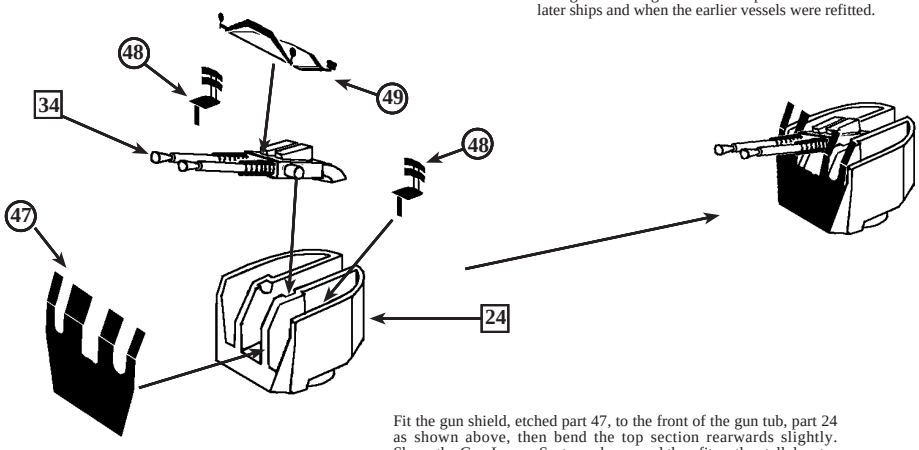
Twin 4.5” Mk6 Gun Turret Assembly



Clean off any excess material from the gun barrels, parts 25, 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 7. Elevate the barrels to the desired position and secure into place.

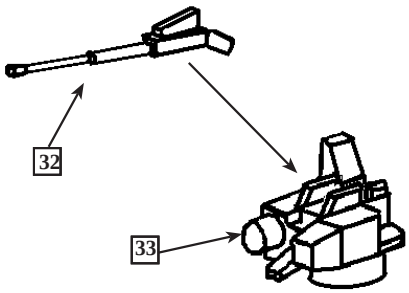
Twin 40mm Bofors Mk5 Assembly

This gun mounting was used to replace the STAAG mounting on later ships and when the earlier vessels were refitted.



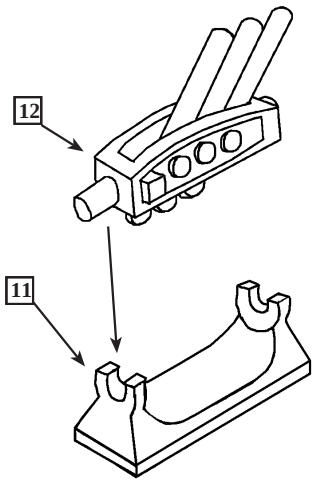
Fit the gun shield, etched part 47, to the front of the gun tub, part 24 as shown above, then bend the top section rearwards slightly. Shape the Gun Layers Seats as shown and then fit so the stalk locates against the step on the deck inside. Fold up the gun sights to 90º on the mounting frame, then fit to the top of the gun barrels as shown. Fit the gun barrels, metal part 34, into the gun tub so that the side lugs locate into the recesses in the central mounting.

Single 40mm Bofors Mk7 Assembly



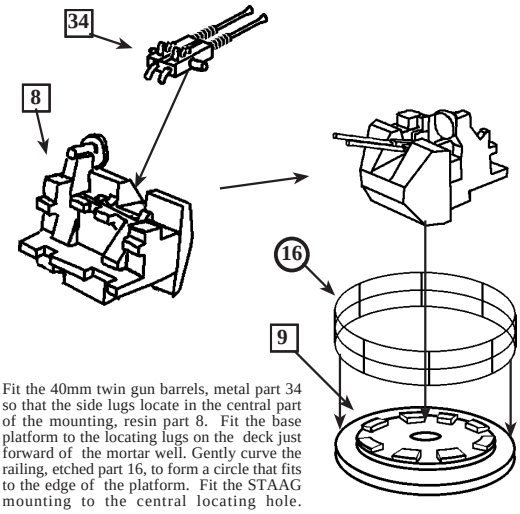
Fit the body of the 40mm Bofors gun, part 32, into the recess on the top of the Gun Mounting, part 33. Make two of these.
This gun mounting was used on some ships to replace the STAAG mounting. Also the Indian Navy ships had two of these fitted on an amidships platform.

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.

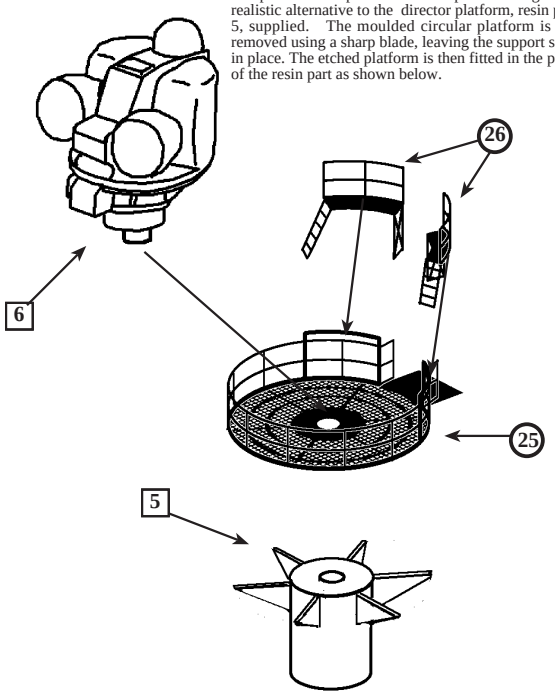
40mm Bofors STAAG Assembly



Fit the 40mm twin gun barrels, metal part 34 so that the side lugs locate in the central part of the mounting, resin part 8. Fit the base platform to the locating lugs on the deck just forward of the mortar well. Gently curve the railing, etched part 16, to form a circle that fits to the edge of the platform. Fit the STAAG mounting to the central locating hole.

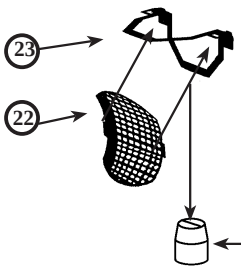
Mk 6 Gunnery Director Platform

The photo etched part 25 has been provided to give a realistic alternative to the director platform, resin part 5, supplied. The moulded circular platform is first removed using a sharp blade, leaving the support struts in place. The etched platform is then fitted in the place of the resin part as shown below.

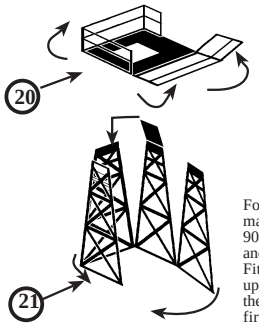


Fold up the railings on the director platform, etched part 25, to 90º and shape to fit around the edge of the platform as shown. Shape the ladders and support frames on the access platform, etched parts 26, and fit into place against the insides of the supports on the platform as shown.

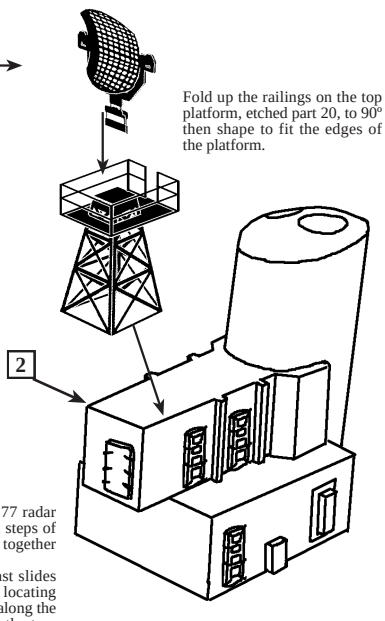
277 Radar Mast Assembly



Fold the 277 antenna mounting yoke, etched part 23, over so that it is double thickness. Fit the lugs on the sides of the scanner, etched part 22, so that they fix in between the layers of the yoke at the fork ends. When secure glue the layers of the yoke together. Fit the assembly to the top of the mounting pintle, resin part 15.



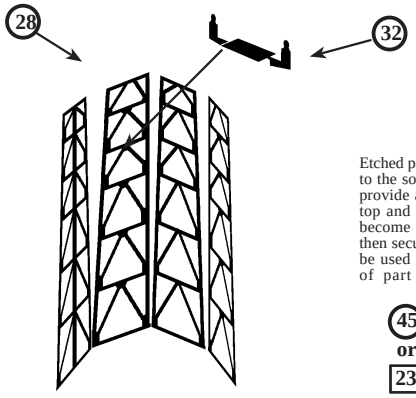
Fold the lattice panels of the 277 radar mast, etched part 21, around in steps of 90º. Bring the vertical edges in together and secure into place.
Fit the platform so that the mast slides up through the square opening locating the inner edges of the platform along the first horizontal bar down from the top. Fit the 277 antenna assembly to the top of the mast as shown right.



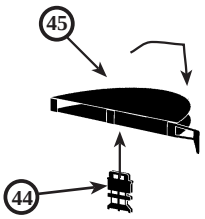
Fold up the railings on the top platform, etched part 20, to 90º then shape to fit the edges of the platform.

Fit the 277 mast assembly to the forward part of the funnel deckhouse, allowing enough room to fit the Fore Mast behind.

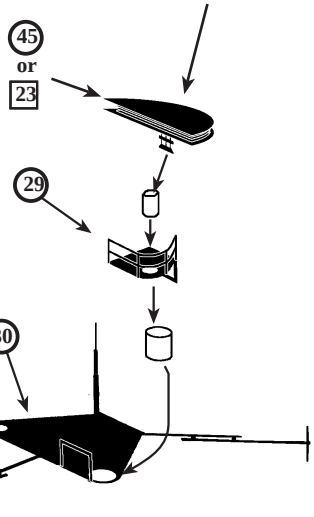
Foremast Assembly



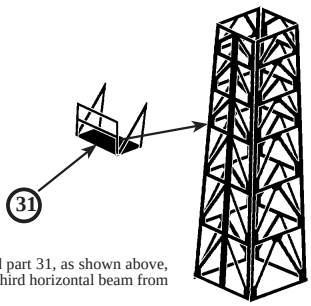
Fold the lattice panels of the fore mast, etched part 28, around in stages of 90º, then bring the vertical edges together and secure into place. Twist the sensor bells on etched part 32 round to 90º so they are parallel then fit the platform inside the mast so that the bells are outside the centres of the second horizontal beam down.



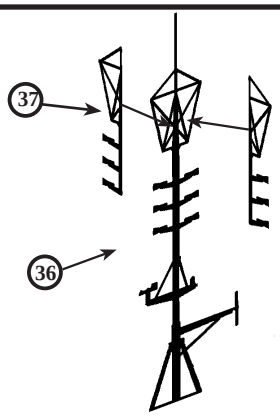
Etched part 45 has been supplied as an alternative assembly to the solid 293 radar antenna, resin part 23. This is to provide a bit more detail and is assembled by folding the top and bottom half discs over in 90º steps so that they become parallel. Fold up the rear supporting lugs to 90º then secure into place. The etched mounting spindle may be used or the resin item may be cut from the underside of part 23 and attached to the etched assembly.



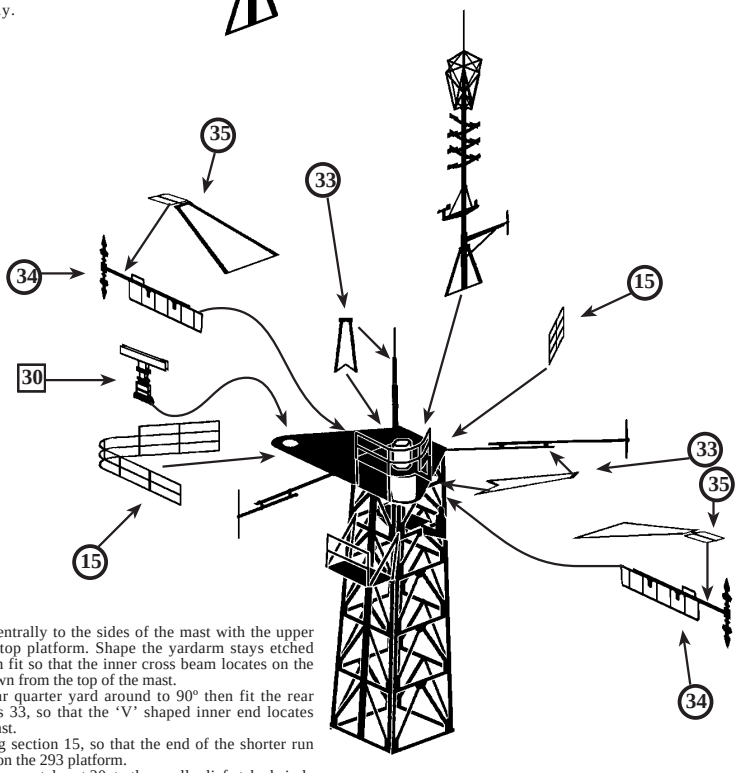
Fit the mast platform, etched part 30, to the top of the latticework so that the relief etched lines on the underside fit to the top edges of the mast. Fold up the rectangular frame on the front edge of the platform to 90º.
Cut a 2.5mm length of 2mm diameter plastic rod and fit to the relief etched circle on the port side of the platform.
Fold down the rectangular frame on the rear of the small platform, etched part 29, whilst folding up the railings and shaping them to fit around the outer edge. Fit this platform over the plastic rod so that the front edge attaches to the top edge of the front rectangular frame. Secure the bottom edge of the rear rectangular frame to the main platform deck.



Shape the mast front platform, etched part 31, as shown above, then fit to the front of the mast at the third horizontal beam from the top.

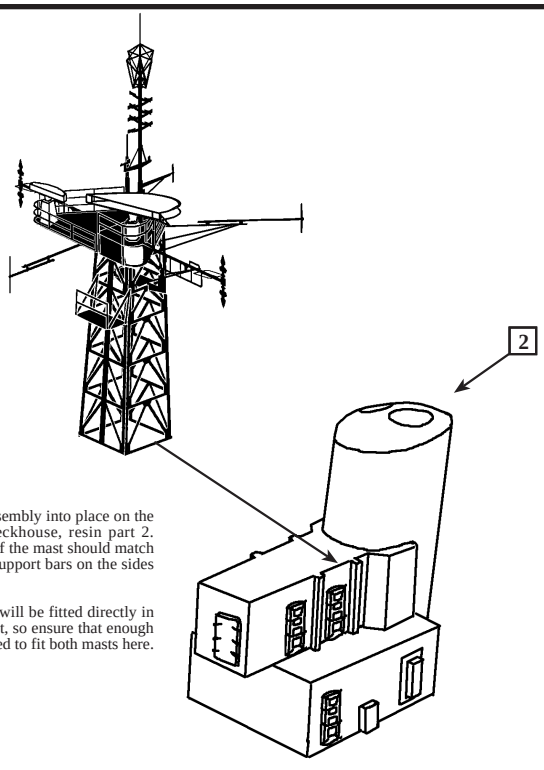


Using etched parts 36 and 37 to make the fore mast top antenna array, fit the two smaller sections centrally to the sides of the main antenna, so that they form a cross when viewed from above.



Fit the side yardarms centrally to the sides of the mast with the upper bar locating under the top platform. Shape the yardarm stays etched parts 35, as shown, then fit so that the inner cross beam locates on the first horizontal beam down from the top of the mast.
Twist the front and rear quarter yard around to 90º then fit the rear yard stays, etched parts 33, so that the 'V' shaped inner end locates onto the comer of the mast.
Shape and fit the railing section 15, so that the end of the shorter run locates onto the upright on the 293 platform.
Fit the 974 Radar Antenna, metal part 30, to the small relief etched circle on the starboard side of the platform.
Fit the short section of railing onto the port side of the platform with one end locating on the inner upright of the 293 radar platform.
Fit the mast top antenna array centrally to the rear of the mast platform.

Fore Mast Location

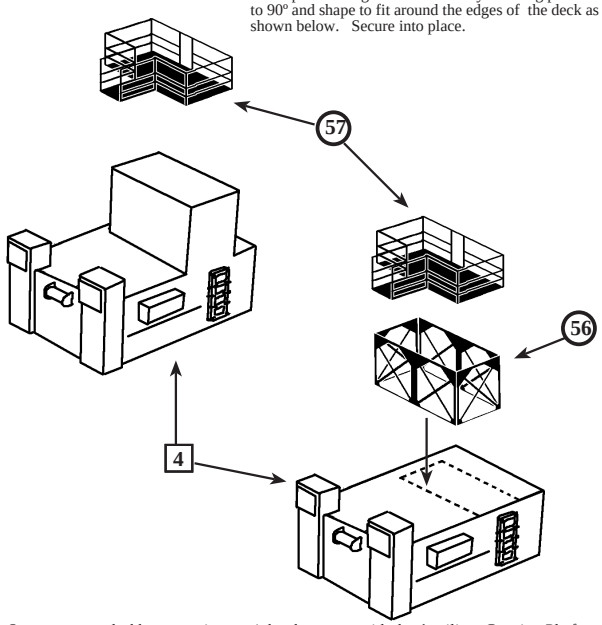


Fit the Fore Mast Assembly into place on the top of the funnel deckhouse, resin part 2. The bottom corners of the mast should match up with the vertical support bars on the sides of the deckhouse.

The 277 Radar Mast will be fitted directly in front of the Fore Mast, so ensure that enough space has been allowed to fit both masts here.

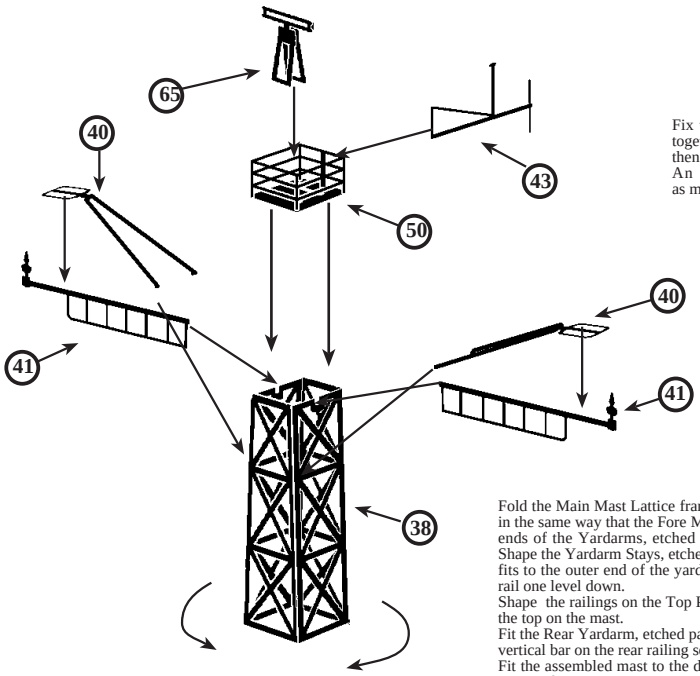
Auxiliary Conning Platform Assembly

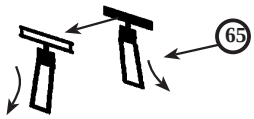
Fold up the railings on the Auxiliary Conning platform to 90º and shape to fit around the edges of the deck as shown below. Secure into place.



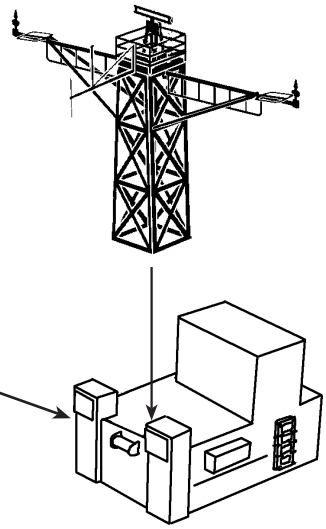
The Aft Superstructure deckhouse, resin part 4, has been cast with the Auxiliary Conning Platform housing in place as a solid item, as these were eventually plated in to form another deckhouse, on the actual ships of the class. Etched part 56 has been supplied for those who wish to model the ship in it's early guise, with an open framed platform.
First remove the moulded deckhouse with a sharp blade or razor saw, and smooth down the surface of the deck. Mark the position of where the deckhouse had been. Shape etched part 56 as shown and fit to the deck of the Aft Superstructure in place of the deck house. Etched part 57 can then be fitted in place on top of either version.

Early Main Mast Assembly



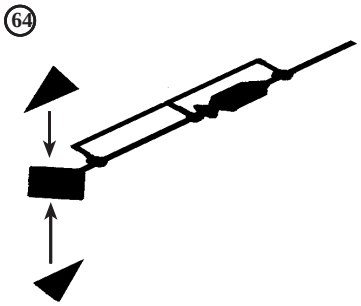


Fix the two sections of the IFF antenna, etched parts 65 together at the top, so that the cross bar is double thickness, then pull the legs apart to give a four legged support stand. An alternative IFF Antenna has been supplied as metal part 31 for fitting to later ships.



Fold the Main Mast Lattice frames around in stages of 90° and join together in the same way that the Fore Mast was constructed. Fit the lugs on the inner ends of the Yardarms, etched parts 41 into the slots on the top side rails. Shape the Yardarm Stays, etched parts 40 and fit so that the oval antenna bar fits to the outer end of the yardarm. Fit the inner feet to the horizontal side rail one level down.
Shape the railings on the Top Platform, etched part 50, as shown, then fit to the top on the mast.
Fit the Rear Yardarm, etched part 43, so that the vertical inner bar, fits to the vertical bar on the rear railing section.
Fit the assembled mast to the deck of the aft superstructure, so that the rear corners fit between the two ventilator trunkings.

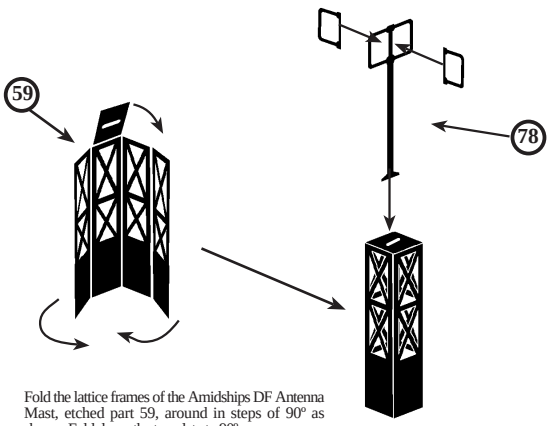
Dan Buoy Assembly



Assemble the radar reflectors on the Dan Buoys, etched parts 64, as shown above.
Fit the rectangular bracket arrangement onto the side railings on each stern quarter.

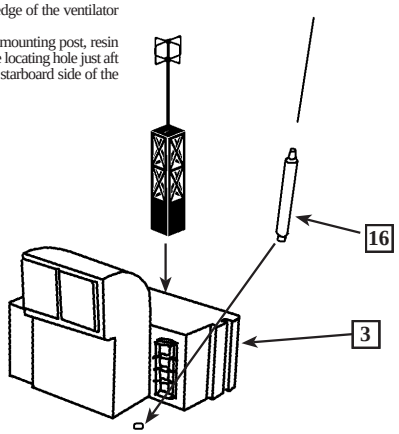
The colour of the reflector and body of the Dan Buoys varied from Dayglo Orange which was the most common, to Red and White 90° alternate sections
These were usually fitted to the railings, outboard , on each side of the quarterdeck

Amidships DF Antenna Assembly and Whip Aerial Fitting



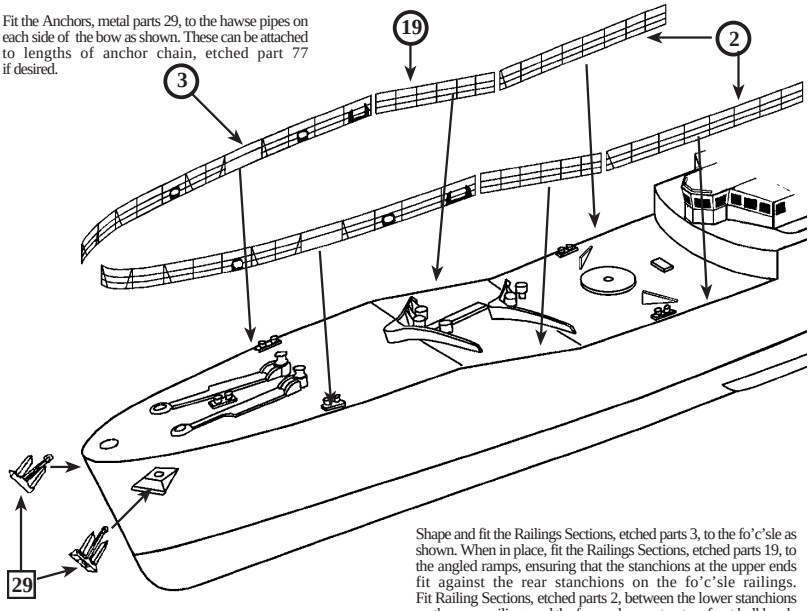
Fold the lattice frames of the Amidships DF Antenna Mast, etched part 59, around in steps of 90° as shown. Fold down the top plate to 90°
Assemble the DF Antenna so that the half loops are fitted to the central post to form a cross when viewed from above.

Fit the antenna mast so that it is central against the front edge of the ventilator housing deck.
The Whip Aerial mounting post, resin part 16 fits into the locating hole just aft of the door in the starboard side of the deckhouse.



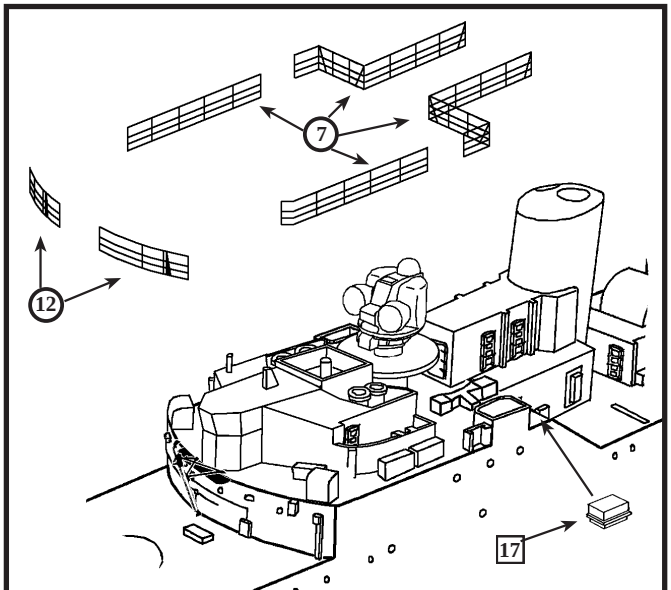
Fo'c'sle Railing Location

Fit the Anchors, metal parts 29, to the hawse pipes on each side of the bow as shown. These can be attached to lengths of anchor chain, etched part 77 if desired.



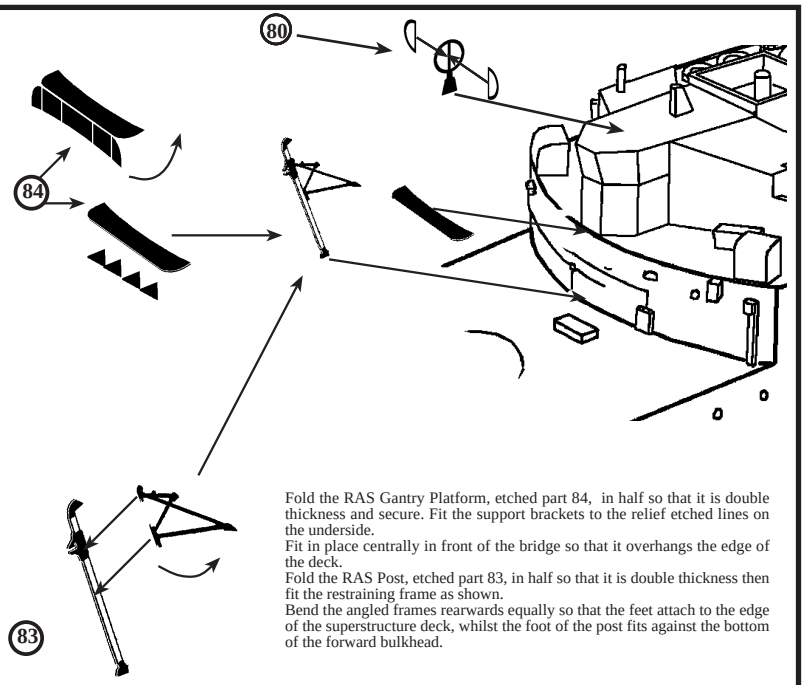
Shape and fit the Railings Sections, etched parts 3, to the fo'c'sle as shown. When in place, fit the Railings Sections, etched parts 19, to the angled ramps, ensuring that the stanchions at the upper ends fit against the rear stanchions on the fo'c'sle railings. Fit Railing Sections, etched parts 2, between the lower stanchions on the ramp railings and the forward superstructure front bulkhead..

Forward Superstructure Railings



Gently curve the Railing Sections, etched parts 1 to fit the forward edges of the deck step. The larger fitting on the Port side. Shape and fit the Railings Sections, etched parts 7, to fit the sides of the superstructure deck as shown above. The longer front section goes to the Port side.

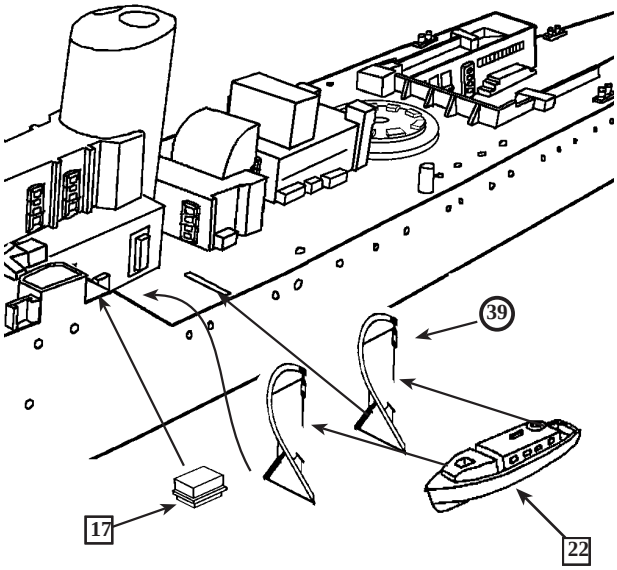
Forward RAS Equipment Assembly



Fold the RAS Gantry Platform, etched part 84, 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.
Fold the RAS Post, etched part 83, in half so that it is double thickness then fit the restraining frame 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.

Port Side Boat Fitting

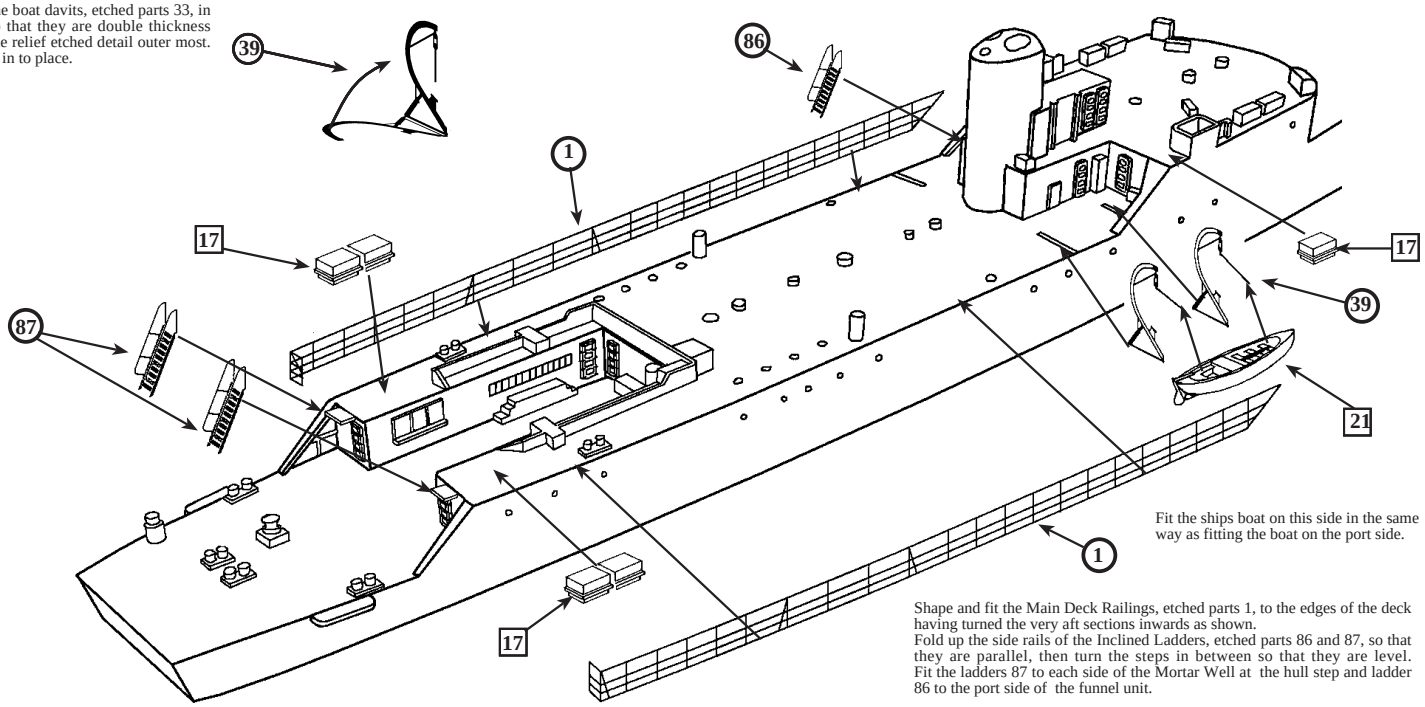
Fit the boat davits as shown on to the raised strips molded on the deck port and starboard.



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.
Cut the Life Raft Containers , resin parts 17, into two and fit two single units next to the hull step aft of the signal lamp enclosure, one on each side of the ship.

Main Deck Railing Location and Starboard Side Boat Fitting

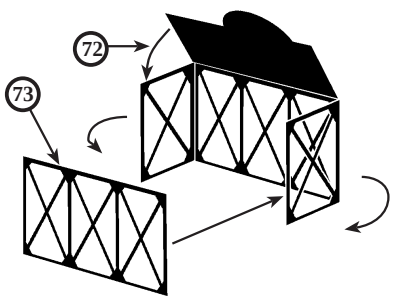
Fold the boat davits, etched parts 33, in half so that they are double thickness with the relief etched detail outer most. Secure in to place.



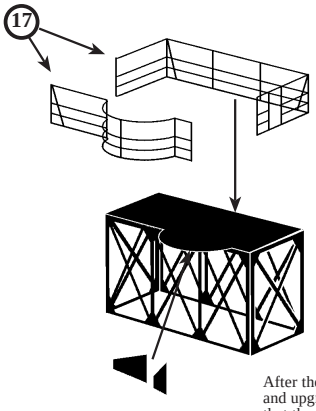
Fit the ships boat on this side in the same way as fitting the boat on the port side.

Shape and fit the Main Deck Railings, etched parts 1, to the edges of the deck having turned the very aft sections inwards as shown.
Fold up the side rails of the Inclined Ladders, etched parts 86 and 87, so that they are parallel, then turn the steps in between so that they are level. Fit the ladders 87 to each side of the Mortar Well at the hull step and ladder 86 to the port side of the funnel unit.

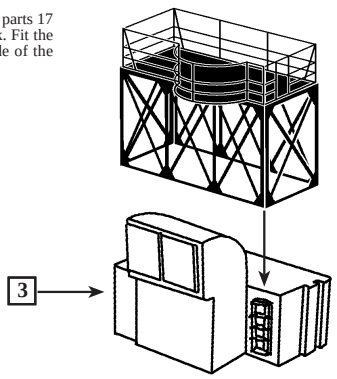
Alternative Auxiliary Conning Platform



Fold the frame end panels of the support structure etched part 72, to 90º so that they are parallel. Fit the single open frame, etched part 73, to the open edges of the end panels. Fold down the platform to 90º and secure the edges of the deck to the top of the support structure as show.

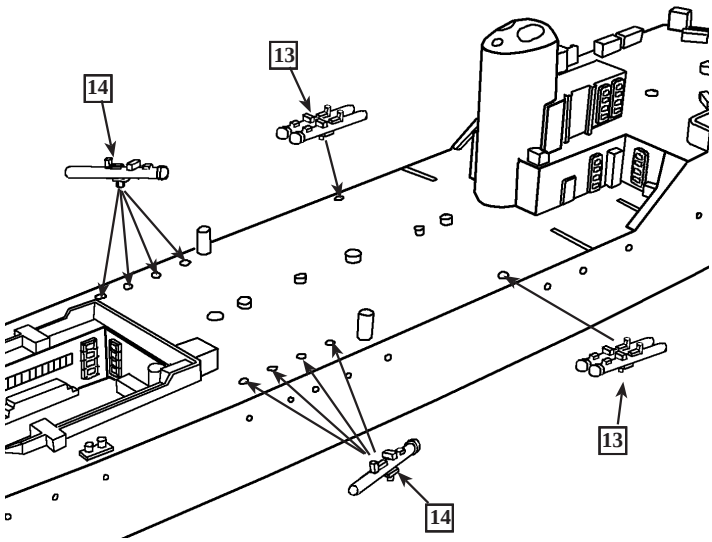


Shape and fit the railings, etched parts 17 to the edges of the platform deck. Fit the support brackets to the underside of the curved extension.



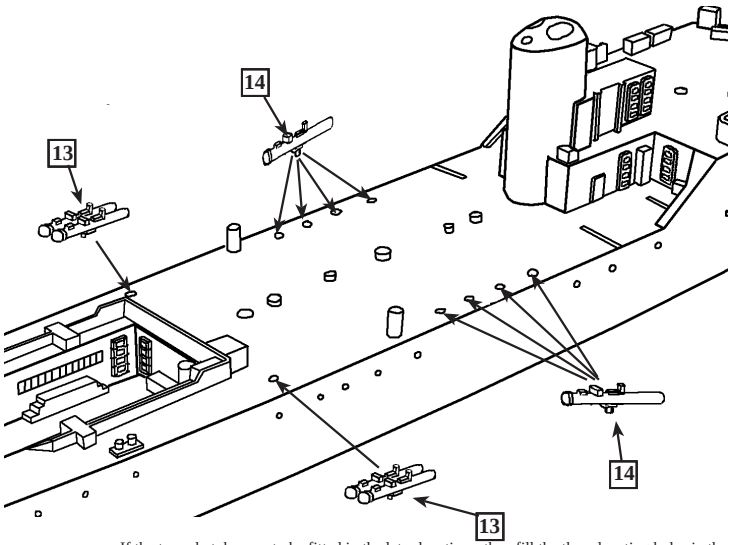
After the ships of the class had been in service for a while and had been through refits and upgrades. It was found that the aft deck house needed to be enlarged, which meant that the Auxiliary Conning platform had to be moved from it's position in front of the main mast. This was then re built on an open frame work again, this time in front of the large ventilator box, which is kit resin part 3. This assembly has been provided for those who are wishing to model their ship in a later fit.

Torpedo Tube Fitting and Alternatives



Fit the torpedo tubes into the locating holes in the deck, with the four single tubes on each side angled towards the rear. When these tubes were deployed, they were angled further outwards away from the ships side.

In the very early days of these ships careers, Torpedo Tubes, resin parts 13 and 14, were fitted to the edges of the main deck. Some ships had them fitted as shown left, with the bank of four single tubes at the aft location and trainable aft, with the twin tube mountings in the forward location. Later the fitting location was reversed, so that the twin tube mountings were located aft and the four singles forward as shown below.

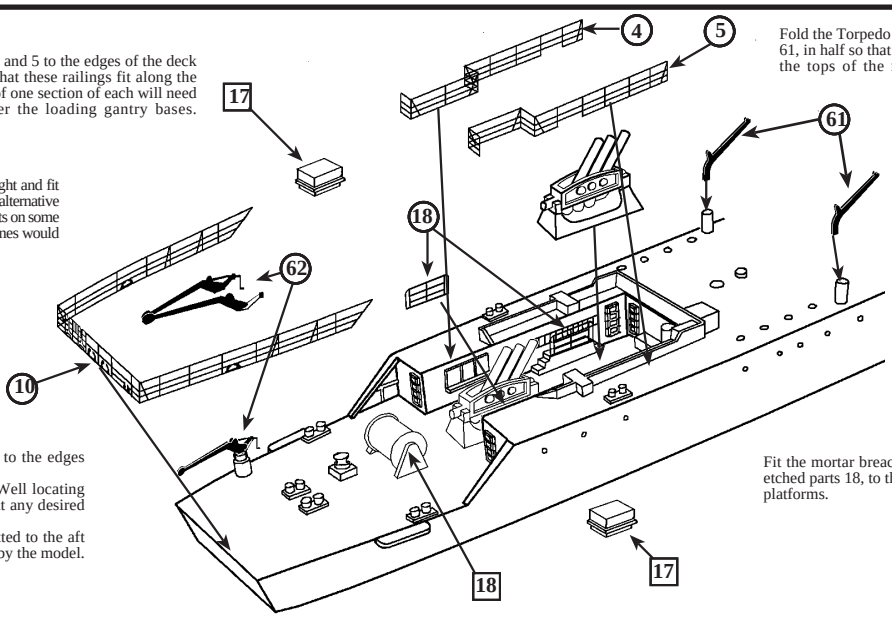


If the torpedo tubes are to be fitted in the later locations, then fill the three locating holes in the deck nearest the loading crane post. Then drill three new holes in corresponding positions in the deck forward of the loading crane post.

Quarterdeck and Mortar Well Fittings

Shape and fit the Railings Sections, etched parts 4 and 5 to the edges of the deck surrounding the mortar well. It should be noted that these railings fit along the outside of the raised bulwarks, so the bottom rail of one section of each will need to be cut away to allow the railing to fit over the loading gantry bases.

Shape the paravane crane, etched part 62, as shown right and fit to the top of the mounting pillar on the stern deck. The alternative crane, etched part 63, 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.

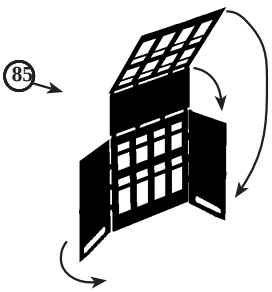


Fold the Torpedo Loading Crane Jibs, etched parts 61, in half so that they are double thickness. Fit to the tops of the moulded crane posts as shown

Shape and fit the Railings Section,etched part 10 to the edges of the quarterdeck.
Fit the Mortar Mk10 Assemblies into the Mortar Well locating holes. The mortar barrels can be secured in place at any desired angle to suit the model.
The Life Frat containers, resin parts 17, may be fitted to the aft potions as either single or double units, as required by the model.

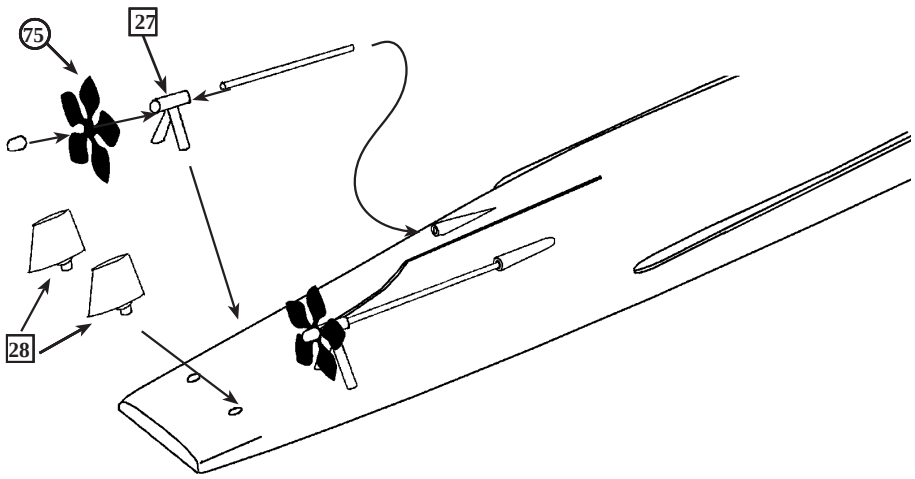
Fit the mortar breach access platform railings, etched parts 18, to the outer edges of the access platforms.

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 in the vicinty of the ships boats, but the exact location will have to be researched by the modeller.Normally painted red

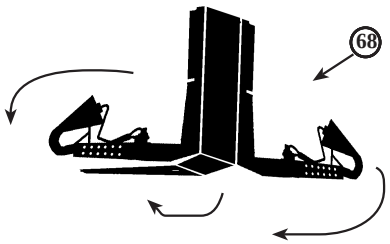
Propeller and Rudder Asembly



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. Cut two 30mm lengths of the 1mm diameter plastic 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 75, 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 28, in to place in the locating holes on the stern.

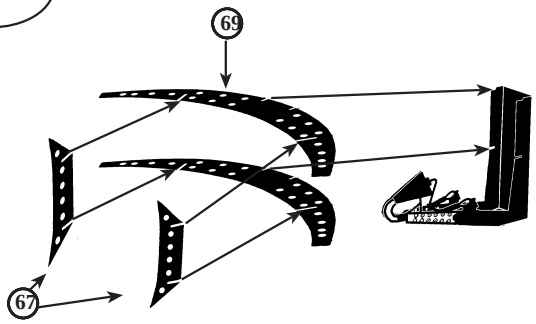
LW-02 Radar Antenna Assembly

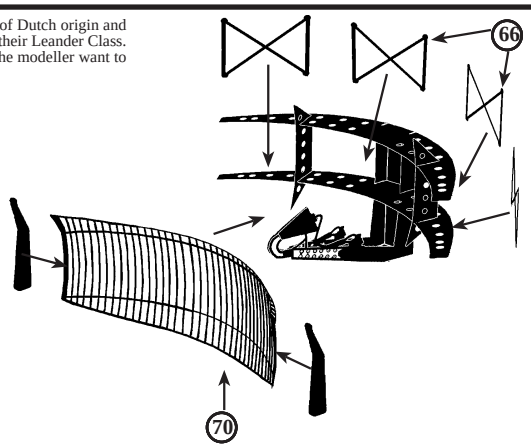
The Hollandse-Signaal LW-02 Radar was a long range air search radar of Dutch origin and employed by the RAN on their Type 12 Frigates and by the RNZN on their Leander Class. Although not immediately used in this kit, it has been included should the modeller want to convert the kit to an RAN version.



Fold the sides of the mounting, etched part 68, forward to 90º so that they are parallel, then fold up the tapered central plate until the edges meet the bottom edges of the side panels. Secure into place.
Bring the transmitter horn parts on the side plates together and secure so that it is double thickness.

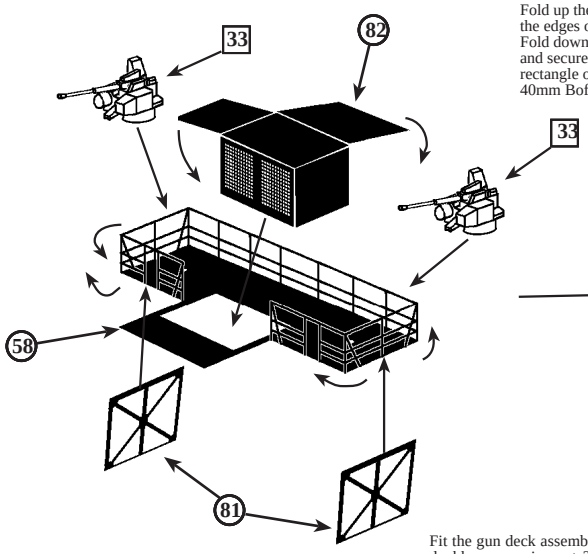
Fit the two horizontal formers, etched parts 69, into the slots in the front of the centre mounting. Fit the two vertical formers, etched parts 67, into the slots in the front of the horizontal formers





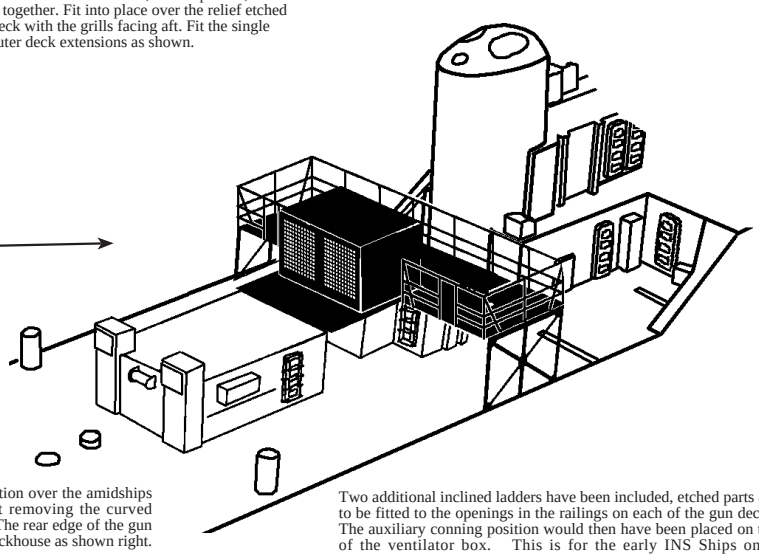
Gently curve the radar antenna screen, etched part 70, until it fits snugly against the front edges of the formers, with the two horizontal formers following the horizontal lines on the screen.
Fit the end plates onto the outer ends of the radar screen and also to the outer ends of the horizontal formers.
Fit the cross bracing supports to the rear edges of the horizontal formers to fit into the sections formed by the vertical formers.

40mm Single Bofors Platform Assembly (INS Talwar and Trishul)



Fold up the railings on etched part 58 to 90º then shape to fit around the edges of the gun platforms as shown left.
Fold down all four sides of the ventilator box, etched part 82, to 90º and secure the corners together. Fit into place over the relief etched rectangle on the gun deck with the grills facing aft. Fit the single 40mm Bofors to the outer deck extensions as shown.

Fit the gun deck assembly into position over the amidships deckhouse, resin part 3, after first removing the curved part of the moulded ventilator box. The rear edge of the gun platform should fit against the aft deckhouse as shown right.



Two additional inclined ladders have been included, etched parts 89, to be fitted to the openings in the railings on each of the gun decks. The auxiliary conning position would then have been placed on top of the ventilator box. This is for the early INS Ships only.

Other Instructions and Information

1. The photo etched detail set supplied in this kit, contains several parts and sub assemblies that are included as extras to help with building the model as one of the modified ships in service with the Commonwealth Navies. For example the additinal Bofors gun platform as fitted to the Indian Navy Ships Talwar and Trishul and the LW-02 Radar antenna as later fitted to HMAS Parramatta and HMAS Yarra the first two Type 12s built for the RAN.

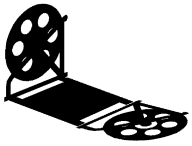
2. Stock lengths of vertical ladders. etched parts 90, have been supplied to be cut to the required lengths for fitting to masts platforms and bulkheads as required.

3. Long lengths of Anchor Chain, etched parts 77, have been supplied to be cut and fitted to the focsle deck, from the hawse pipe holes to the capstans. There is also sufficient to run from the awse pie holes, down to the surface of the water in a seascape diorama if that is being modelled.

4. A selection of cable and cordage reels, etched parts 6 and 24 has been supplied to be fitted as desired to the focsle and quarter deck.

5. Name plates for all the ships of the class, etched parts 76, including other nations ships, have been supplied for fitting as required. These can be painted in the appropriate background colour and then the raised etching scraped clean back to brass to represent the metal lettering on these ceremonial name plates. These were fitted to a bulkhead adjacent to where an accommodation ladder or gangway would be positioned on each side of the ship.

To assemble the cable reels, first fold up the drum ends to 90º so that they are parallel, then cut a length of plastic or brass rod to fit in between as a centre spindle. Super glue in to place.



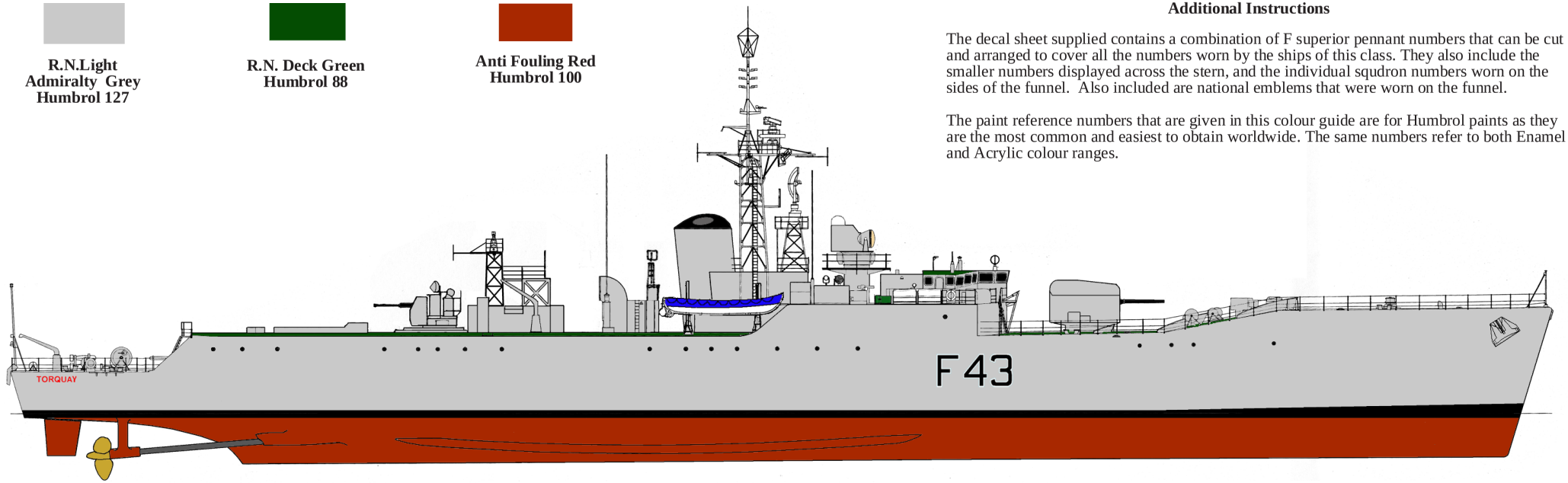
To add extra depth and realism to the cable reels, lengths of thin fuse wire can be wound round the centre spool to represent the wound on cables or hoses.

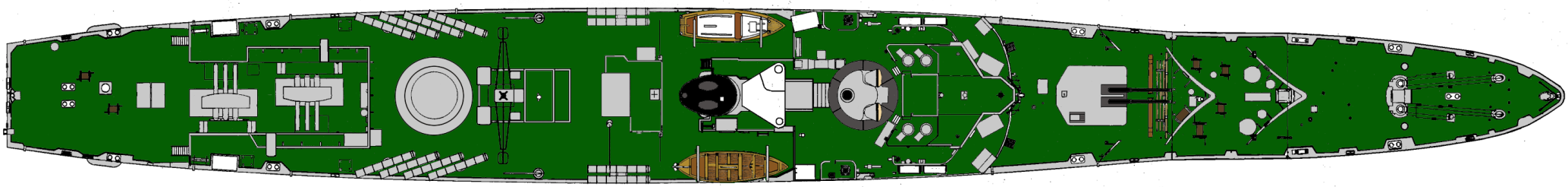
Main Colour Chart and Painting Guide

R.N.Light Admiralty Grey Humbrol 127

R.N. Deck Green Humbrol 88

Anti Fouling Red Humbrol 100





Additional Instructions

The decal sheet supplied contains a combination of F superior pennant numbers that can be cut and arranged to cover all the numbers worn by the ships of this class. They also include the smaller numbers displayed across the stern, and the individual squdron numbers worn on the sides of the funnel. Also included are national emblems that were worn on the funnel.

The paint reference numbers that are given in this colour guide are for Humbrol paints as they are the most common and easiest to obtain worldwide. The same numbers refer to both Enamel and Acrylic colour ranges.

Pennant Numbers for all Ships of the Class

F36 HMS Whitby F43 HMS Torquay F63 HMS Tenby
F65 HMS Scarborough F73 HMS Eastbourne F77 HMS Blackpool

F140 INS Talwar F143 INS Trishul

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 Funnel Cap. Gun Barrels. Waterline Boot Topping.
Matt White	Fore Mast Top Array. Life Raft Canisters. Bollards and Fairleads. Coachwork on Motor Boat
Bronze	Propellers. Elevation Discs on 4.5" Guns.
Natural Wood	Boat Thwarts and Interior. Motor Boat Decking.

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