Pack 07 | Build Instructions

Your 1:200 scale model of the legendary battleship Bismarck is packed with intricate details which precisely replicate every aspect of this state-of-the-art warship. Each piece has been created using premium quality materials to bring maximum enjoyment during your complete build.

In your seventh model pack, you will assemble:

STAGE 69: MOTOR FOR THE THIRD 15CM GUN
STAGE 70: THE FOURTH 15CM GUN TURRET
STAGE 71: THE NEXT KEEL SECTION
STAGE 72: MOTOR FOR THE FOURTH 15CM GUN
STAGE 73: GEAR ASSEMBLY FOR THE SECOND 38CM GUN
STAGE 74: ELEVATION MOTOR FOR THE SECOND 38CM GUN TURRET
STAGE 75: DETAILS FOR THE UPPER DECK
STAGE 76: ROPE REELS AND FUNNEL DETAILS
STAGE 77: HULL SECTION AND FUNNEL DETAILS
STAGE 78: FINAL DETAILS FOR THE FUNNEL
STAGE 79: THE NEXT HULL SECTION
STAGE 80: THE TWO AIRCRAFT HANGARS
Advice from the experts

Spare screws are included with each part. Occasionally, you may be instructed to keep spare or unused screws for a later stage. Keep these spares in a safe place and label them correctly.

Please make sure you don’t mix up the screws. They look quite similar, but the threads do vary slightly. Using the wrong screws may damage the parts.

When securing parts together using multiple screws, fit each screw loosely to ensure all the parts are correctly aligned before gently tightening them firmly, but not overtight, in the order in which you placed them.

Your screwdriver can be magnetised by stroking it with a magnet (fridge magnet, etc.) enabling it to hold the screws and make assembly easier.

If a screw is tight going into a metal part, do not force it as you may shear the head off. Remove it and put a tiny smear of Vaseline, soap or light oil on the thread. That will lubricate it and make it easier to drive home.

During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.
STAGE 69
MOTOR FOR THE THIRD 15cm GUN

COMPONENTS CHECKLIST
69-01: Motor
69-02: Cog
69-03: Motor housing
69-04: Cable label
69-05: Cable for the gun motor
PB: Three 2 x 5mm PB screws

01. PREPARING THE MOTOR

Take the cable 69-05 and the cable label 69-04. Remove the label from its backing.

Wrap the label around one end of the cable 69-05, close to one of the connectors.
**02. FITTING THE MOTOR TO THE UPPER DECK**

Take the upper deck structure 19-01/22-01/48-01 and carefully turn it upside down. Fit the motor 69-01 into the holder on the underside of deck section 48-01. The teeth of cog 69-02 engage with cog 67-04 (arrow).

Fit the connector on the unlabelled end of cable 69-05 into the socket in the circuit board on the motor 69-01.

Fit the cog 69-02 over the shaft of the motor 69-01, as shown.
Fit the motor housing 69-03 over the motor 69-01. The two screw holes on the side of the cover should align with the screw sockets on the underside of the upper deck.

Whilst supporting the deck from below, fix the motor housing in place with two PB screws.

Completed work
The motor for the third 15cm gun has been fitted to the underside of the upper deck.
STAGE 70
THE FOURTH 15cm GUN TURRET

COMPONENTS CHECKLIST

- **70-01**: 15cm gun housing (SBII – second starboard turret)
- **70-02**: Gun turret base plate
- **70-03**: Gun barrels with cradle
- **70-04**: Cog
- **70-05**: Left rangefinder hood
- **70-06**: Right rangefinder hood
- **70-07**: Cable and switch
- **70-08**: Cable label

**PB**: Two 2 x 5mm PB screws
**PB**: Four 1.7 x 6mm PB screws
**PWB**: Two 2.3 x 4mm PWB screws

01. ASSEMBLY OF THE 15cm GUN TURRET

Take the gun turret housing **70-01** and the left rangefinder hood **70-05**. Check the fit of part **70-05** on the left-hand side of part **70-01**, as indicated by the arrow. Apply a little superglue to the rim of the housing **70-05** and fix in place.
02

Fix the right rangefinder hood 70-06 to the right-hand side of the gun turret housing in the same way.

03

Fit the gun barrels 70-03 through the holes in the front of the gun turret 70-01 and position the cradle so that the two tabs fit into recesses in the gun turret (see arrows).

04

Position the gun turret base plate 70-02 on the underside of the gun turret housing 70-01 as shown.

05

Fix the base plate 70-02 in place with one PB 2 x 5mm screw.

06

Take the upper deck assembly 19-01/22-01/48-01. Fit the gun turret assembly into the barbette 53-01, in the upper deck section 48-01.

07

Holding the gun turret assembly in place, carefully turn over the deck assembly. Fit the cog 70-04 in place on the underside of the gun turret. A tab on part 70-02 fits into a notch in part 70-04. Fix in place with three PB 1.7 x 6mm screws.
02. FITTING THE SWITCH

Wrap the cable label 70-08 around the switch cable 70-07 near the connector. Fit the switch on the other end of the cable 70-07 into the recess near the gun turret, on the underside of deck section 48-01.

Fix the switch 70-07 in place with a PWB screw.

Completed work
The fourth 15cm gun, complete with switch, has been fitted into the deck assembly. This is the second starboard 15cm gun, SBII. A motor for the gun will be supplied in a future stage.
STAGE 71
THE NEXT KEEL SECTION

COMPONENTS CHECKLIST
71-01: Keel section
71-02: Connector
PM: Five 2 x 4mm PM screws

01. FITTING THE KEEL SECTION

Take the hull assembly from stage 68. Fit the sockets on the connector 71-02 over the raised screw sockets on the edge of part 56-01.
Fix the connector 71-02 in place with two PM screws.

Fit the next keel section 71-01 under the connector 71-02 so that the screw sockets fit in place. Fix in place with two PM screws.

Completed work
The next keel section has been fitted to the hull assembly.
STAGE 72
MOTOR FOR THE FOURTH 15cm GUN

COMPONENTS CHECKLIST
72-01: Motor
72-02: Cable for the motor
72-03: Cable label
PB: Three 2 x 5mm PB screws

01. PREPARING THE MOTOR

Take the cable 72-02 and the cable label 72-03. Remove the tie from the cable and straighten it out.
Remove the backing from the cable label 72-03 and wrap it around one end of the cable 72-02 near the connector as shown.

Plug the connector on the other end of the cable 72-02 into the circuit board on the motor 72-01 as shown.

**Completed work**
The cable and motor for the fourth 15cm gun are ready to fit to the model. The three PB screws will be used in the next stage, so store them carefully.
01. FITTING THE MOTOR FOR THE FOURTH 15cm GUN

Take the motor 72-01 from the previous issue. Fit the cog 73-01 on to the shaft of the motor.

Take the deck assembly 19-01/22-01/48-01 and position it upside down on your work surface, taking care not to damage any fittings. Fit the motor 72-01 into the recess so that the teeth on the cog 73-01 engage with the teeth on the cog 70-04 (arrow).
**02. GEAR ASSEMBLY FOR THE ELEVATION OF THE SECOND 38cm GUN TURRET**

**01**
Take the gear housing 73-10 and fit the cog 73-06 into the large hole, as shown.

**02**
Fit the large cog 73-05, with the peg upwards, centrally over the small hole in part 73-10, as shown.

**03**
Fit the hub 73-07 into the centre of the large cog 73-05, so that the central holes are aligned with the hole in part 73-10.

**04**
Fix the hub 73-07 and large cog 73-05 in place with a PB 2 x 6mm screw. Note that the edge of cog 73-05 fits over the rim of cog 73-06, holding it in place.

Fit the motor housing 73-02 over the motor 72-01, as shown.

Fix the motor housing in place using two PB 2 x 5mm screws, supplied with stage 72.
Position the peg on cog 73-05 on the left-hand side of the assembly as shown (arrow). Fit the slot in the gear arm 73-08 over the peg, taking care to position it in the correct orientation.

Fit the shaft 73-11 into the hole in cog 73-06.

After carefully checking the parts are positioned correctly, fit the second part of the gear housing 73-09 over the gear arrangement, as indicated.

Fix the two halves of the gear housing 73-09 and 73-10 together as shown, using four PB 2 x 6mm screws.

Turn the gear assembly over. Take the right support bracket 73-04 (marked R) and identify the fixing point on the housing 73-10, as indicated by the arrow.

Fix the support bracket 73-04 in place with a PB 2 x 4mm screw.
Take the deck assembly from step 4. Identify the cog 53-07 on the underside of the deck, beneath the second 38cm gun. The screw holes in the angled sides of the support brackets 73-04 and 73-03 align with screw holes in the cog 53-07, as indicated.

As you position the gear housing, guide the end of the gear arm 73-08 round the motor mounting 51-07. Two small pegs on the end of the gear arm snap into place on the motor mounting (arrow). Make sure the parts are fully supported whilst doing this.

Fix the gear housing support bracket 73-03 in place on the cog 53-07 with two PB 2 x 4mm screws.

Fix the other gear housing support bracket 73-03 in place with two PB 2 x 4mm screws.

Completed work
The motor for the fourth 15cm gun has been fitted. The gears for the elevation control of the second 38cm gun turret have been assembled and fitted in place.
STAGE 74
ELEVATION MOTOR FOR THE SECOND 38cm GUN TURRET

COMPONENTS CHECKLIST
74-01: Motor
74-02: Cable label
PB: Three 1.7 x 6mm PB screws

01. FITTING THE MOTOR

Take the motor 74-01 with its cable. Remove the cable label 74-02 from its backing and fit it around the end of the cable near the connector.
Take the deck assembly from the previous stage with the gear housing for the second 38cm gun turret. Make sure the deck is fully supported, to avoid damage to any of the parts. Identify the cog 73-06 in the gear housing assembly. Fit the shaft of the motor 74-01 into the cog, as indicated by the arrow.

Align the screw holes in the brackets on the side of the motor 74-01 with the raised screw sockets on part 73-10. Fix in place with two PB 1.7 x 6mm screws.

Completed work
The motor for the second 38cm gun has been fitted to the gears. This will control the elevation of the gun barrels.
STAGE 75
DETAILS FOR THE UPPER DECK

COMPONENTS CHECKLIST
75-01: Port lower hull section
75-02: Deck details (A–D)
75-03: Four bollards
75-04: Two roller fairleads
PM: Four 2 x 4mm PM screws

01. FITTING THE NEXT HULL SECTION

Take the hull assembly from stage 71. Check the fit of the port lower hull section 75-01 against the keel section 71-01 and the hull section 59-01.

When you are happy with the fit, fix the hull section 75-01 in place using three PM 2 x 4mm screws.
02. DETAILS FOR THE UPPER DECK AND FORWARD BARBETTE

Take the upper deck assembly from stage 18. Position it carefully on your work surface, supporting it so that the gear housing and other details on the underside are not damaged. Take two bollards 75-03 and check the fit in recesses in the deck section 10-01 on the starboard side behind the breakwater, as shown. Glue them in place.

Still working on the port side of the deck, check the position of the first roller fairlead 75-04, to the aft of the bollards. Glue in place.

On the opposite side of the deck assembly identify the fixing point for the second pair of bollards 75-03. Check the fit and glue in place, using a little superglue.

On the starboard side of the deck, glue the second roller fairlead 75-04 in place to the aft of the bollards.

Cut part B from frame 75-02 and remove any rough edges. Check the position of the detail, in a recess in front of the forward 38cm gun. Glue in place.

Cut the hatches A from frame 75-02 and fit the first one into the recess in the deck section 10-01 as shown. Glue in place.
To the aft of the forward 38cm gun, fit the second and third hatches A, gluing in place in slight recesses in the deck, as shown.

Turn the gun slightly to port. Fit the second part C in place on the barbette, fixing in place with a little superglue.

With the gun positioned so that you can access the aft starboard section of the barbette, fix the second part D in place with a little superglue, as shown.

Check the instructions for turning the forward 38cm gun in stage 18. To stop the gun in the desired position, turn off the power using the switch on the battery box. Turn the gun slightly to the starboard side. Cut parts C from frame 75-02. Fix one in place on the barbette as shown, using a little superglue.

Turn the gun so that you can access the aft port section of the barbette. Cut the parts D from the frame 75-02. Fix the first part D in place as shown, using a little superglue.

Completed work
Further details have been fitted to the forward section of the upper deck and to the barbette of the forward 38cm gun. We have also fitted another section of the hull (not shown in the image above).
STAGE 76
ROPE REELS AND FUNNEL DETAILS

COMPONENTS CHECKLIST

76-01: Large rope reels (A1, A2)
76-02: Small rope reels (B1, B2)
76-03: Crane platform
76-04: Searchlight hoods (x 2)
76-05: Crane booms (x 2)
76-06: Crane details (C1–C4)
76-07: Port hull support (L)
76-08: Starboard hull support (R)
76-09: Hull support base
76-10: Companionway components (D1–D3)
76-11: Six ladders (E1–E3)
76-12: Radar antenna
76-13: Rope

01. ASSEMBLING THE ROPE REELS

Cut the first parts A1 and A2 from frame 76-01. Check how the parts fit together, ensuring that the 'legs' are aligned (see step 2). Apply a little superglue to the central rim of part A1 and fix the parts together.

This shows the first rope reel 76-01 assembled.
Take the rope **76-13** and use a drop of superglue to stick the end of the rope to the drum of the rope reel **76-01**. Wrap a few centimetres of rope around the drum of the rope reel.

When you have two or three even layers of rope in place cut the rope and fix the end in place with a little superglue.

Repeat steps 1 to 4 with the remaining parts **A1** and **A2** on frame **76-01**, so that you have four rope reels.

In a similar way, make six small rope drums using parts **B1** and **B2** from frame **76-02**, as shown.

**02. FITTING THE ROPE REELS**

The first two large rope reels **76-01** are glued into the recesses on the port side of the upper deck section **48-01**.

The other two large rope reels **76-01** are glued in the same place on the starboard side of the upper deck section **48-01**.
The first small rope reel 76-02 is fitted at the front of the upper deck 19-01, on the port side of the turret Bruno. Glue in place, as shown.

The second small rope reel 76-02 is glued to the upper deck section 19-01, close to the first rope reel.

The next two small rope reels 76-02 are fitted on the other side of the turret Bruno. Note how they are positioned at right angles to each other. Fix in place with a little superglue.

The last two small rope reels 76-02 are fixed centrally in front of the bridge on superstructure deck 21-01. Glue in place as shown.

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**03. AIRCRAFT TRANSFER CRANES**

Take a crane boom 76-05 plus a trolley C2 and hub C3 from frame 76-06. These parts will be used to assemble the port aircraft transfer crane. Note that parts C2 and C4 are mirror images of each other – make sure you have the correct one.

The trolley C2 fits on to the tab on the lower edge of the crane boom 76-05; the hub C3 fits on to the pin at the bottom of the crane boom. Glue in place. It may help to label this as the port crane.
Repeat the previous step to assemble the starboard crane, using the second boom 76-05, trolley C4 and hub C3.

Create a mirror image of support D3 by bending up the sides of support D1, as shown, noting the position of the tabs.

Fit the pins of the crane booms 76-05 into the upper side of platform 76-03. Note the positions of the trolleys C2 and C4. Do not glue in place.

It is important to bend supports D1 and D3 the correct way. Study this photograph and the next step very carefully, noting the position of the tabs (arrows). Cut the supports D1 and D3 from frame 76-10. Take frame D3 (noting the positions of the tabs, see arrows) and bend the sides up at right angles as shown.

Take the crane platform 76-03 and position it upside down on your work surface. Identify the recesses for the tabs on supports D1 and D3, and glue them in place.

Check the fit of the central tab on the platform 76-03 in the aft of the funnel. At the same time, the pins on the top of the crane booms fit into holes in the underside of the searchlight platform 63-05.
This view of the underside of the searchlight platform 63-05 shows the pins at the top of the crane booms located in the holes in the platform (see arrows).

When you are happy with the fit, glue the tab on the platform 76-03 in place. The two crane booms 76-05 should be able to rotate, so they can be folded away flush with the sides of the funnel.

04. FITTING THE COMPANIONWAYS

Cut the two railings D2 from frame 76-10. One of these will be a left-hand railing, the other will be a right-hand railing: bend the support pins in opposite directions, as shown.

Cut the two companionways C1 from frame 76-06. Taking care with the orientation of the companionways (note the position of the flat ledges, red arrows, and feet, blue arrows) stick them to the railings, as shown.

The assembled companionways fit beside the protective hoods at the side of the funnel. This shows the first companionway in place beside the starboard hood 65-03, leading up from the deck 63-03.

The second companionway fits on the other side of the funnel, beside the port protective hood 65-02. When you are happy with the positions of the companionways, glue them in place.
05. SEARCHLIGHT HOODS AND LADDERS

01

Take one of the searchlight hoods 76-04. The hood has two holes at the hinge points (arrow), which fit over pegs on the side of the hood rim 65-03 on the starboard side of the funnel. Note the position of the notch on the hood (see step 2). This is a push-fit connection.

02

The hood 76-04 pivots on the hinge points. A small notch on the top (blue arrow) fits over a raised tab on the rim of part 65-03 (red arrow) to hold the hood closed.

03

In the same way, fit the second hood 76-04 to the rim of the protective hood 65-02 on the port side of the funnel.

04

Cut the two long ladders E1 from frame 76-11. Bend the four pegs at right angles. Then bend the lower end of each ladder slightly outwards, as shown.

05

Cut the next two ladders E2 from frame 76-11 and bend the pegs at right angles, as shown.

06

Finally, cut the two short ladders E3 from frame 76-11 and bend the pegs at right angles, as shown.
Check the fit of one set of ladders \textbf{E1}, \textbf{E2} and \textbf{E3} on the port side of the funnel, positioning them as shown, with the pegs located in corresponding holes in the funnel. Glue the pegs in place.

Similarly, take the second set of ladders \textbf{E1}, \textbf{E2} and \textbf{E3} and fit on the starboard side of the funnel. When you are happy with the fit, glue the pegs in place.

**06. RADAR ANTENNA AND SUPPORT STAND**

Take forward superstructure and the radar antenna \textbf{76-12}. Check the fit of part \textbf{76-12}: two tabs fit into corresponding holes on the radar unit \textbf{37-02}. Part \textbf{76-12} protrudes above part \textbf{37-02}. Glue in place.

Glue the two hull supports \textbf{76-07} and \textbf{76-08} to the hull support base \textbf{76-09}. Note that the supports are labelled “front”.

You can now position the hull assembly on the four support stands that have been assembled. Make sure that the labelled sides of the hull supports are facing towards the bow of the hull assembly.

**Completed work**

We have continued assembly on three parts of the model: the funnel, the forward superstructure and the upper deck. We have also built a fourth support stand.
STAGE 77
HULL SECTION AND FUNNEL DETAILS

COMPONENTS CHECKLIST
77-01: Lower starboard hull section
77-02: Railings and supports (A–E)
PM: Four PM 2 x 4mm screws

01. FITTING THE HULL SECTION

Fix in place with three PM 2 x 4mm screws.

Check the fit of the next starboard hull section 77-01: The screw sockets fit under the raised screw sockets of hull sections 71-01 and 60-01, as indicated.
02. FITTING THE RAILINGS

01. Cut railing B from the frame 77-02. Take the funnel assembly from stage 76 and check the fit of the railing across the rear of the funnel.

02. When you are happy with the fit, glue the pegs at the bottom of the railing in place on the crane platform 76-03.

03. Cut the struts D from frame 77-02. Fit the first one at one end of the railing B: the peg on one end fits into a hole in the railing, and the peg on the other end fits into a recess on the underside of the crane platform 76-03.

04. The second strut D fits at the other end of the railing. When you are happy with the fit, glue the struts D in place.

05. Cut railing A from the frame. It has to be bent in a gentle curve to match the shape of the searchlight platform 65-01 at the front of the funnel (see next step). It’s advisable to find a cylindrical object of a similar diameter to bend it around.

06. Apply a little superglue to the three pegs on the bottom of railing A and fix the railing in place.
Cut railing **C** from frame **77-02** and bend the two ends at right angles, as shown.

The railing fits at the rear of the funnel assembly: four pegs on the railing fit into holes in the funnel extension **65-04**. When you are happy with the fit, glue in place.

Cut the railing and platform **E** from frame **77-02**. Identify the fold lines on the part. Bend the two sides upwards at right angles, as shown.

Fold the platform upwards, as shown.

**Completed work**

Another section has been added to the hull (not shown here). Railings and supports have been fitted to the funnel assembly. The railing and platform will be fitted in a future stage. Store the parts carefully until they are needed.
STAGE 78
FINAL DETAILS FOR THE FUNNEL

COMPONENTS CHECKLIST

**78-01**: Foremast base

**78-02**: Lockers and steam whistle (A1 – A6)

**78-03**: Foremast

**78-04**: Supports (B1 – B3)

**78-05**: Searchlight bracket (x2)

**78-06**: Railings and mast details (C1 – C4)

**78-07**: Railing

**78-08**: Railing

**78-09**: Ladder, mast top and supports (D1 – D3)

**PWB**: Three 2 x 4mm flange screws

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**01. DETAILS FOR THE FUNNEL**

Cut the lockers **A5** and **A6** from frame **78-02**. Fit one of each type of locker to the searchlight platform on the port side of the funnel. Pegs on the bases of the lockers fit into corresponding recesses in the deck. Glue in place.

Similarly, glue a locker **A5** and a locker **A6** in place on the starboard side of the funnel, as shown.
Cut two lockers **A4** from frame **78-02**. These fit on the searchlight platform behind the funnel, as shown. Glue in place.

Cut the steam whistle **A2** from frame **78-02**. Check the fit at the rear of the funnel: a peg on the base of the whistle fits into a slot in the funnel. Glue in place.

Take the railing and platform, part **E** (from frame **77-02**), which was shaped in the previous stage’s instructions. Fit the platform of part **E** around the base of the steam whistle **A2**. Glue in place.

The remaining two parts from frame **78-02**, parts **A1** and **A3**, fit on the foremast platform **78-01**. Glue in place as shown.

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**02. METAL PARTS FOR THE FUNNEL**

Cut the two supports **B1** from frame **78-04** and bend them to form pyramid shapes, as shown (see also steps 4 and 5, opposite).

Cut the two supports **B2** from frame **78-04**. Study the photograph carefully, noting where the sides of the parts differ. Bend both sides up at right angles, to create two identical supports.
Cut the two supports B3 from the frame 78-04 and note how the sides are bent the opposite way to supports B2. Bend both sides up at right angles. **NOTE:** Parts B2 and B3 are mirror images of each other; the arrow indicates where the parts differ.

The tabs at the corners of the pyramid shape B1 should protrude through the searchlight bracket 78-05. Glue the tabs in place.

Take a searchlight bracket 78-05 and a support B1 from step 1. Check the fit across the inside of the bracket 78-05. The tabs on part B1 fit into slots in part 78-05.

The first support B2 fits over the other side of the support B1. Glue in place.

Take a support B3 and fit it over one side of the support B1, on the underside of the searchlight bracket 78-05. Glue in place.

Repeat the previous three steps to fit the remaining parts B1, B2 and B3 to the underside of the second searchlight bracket 78-05.
Check the fit of the first bracket 78-05 on the starboard side of the funnel, beneath the searchlight platform 65-01. When you are happy with the fit, glue in place.

The second searchlight bracket 78-05 is glued to the port side of the funnel beneath the searchlight platform 65-01 as shown.

03. FINAL FUNNEL ASSEMBLY AND FOREMAST

Place the forward superstructure assembly on your worktop. Take the funnel and thread its three cables through the opening in superstructure deck 24-02, indicated by the red arrow.

Fit the funnel onto the forward superstructure so that it butts up against the bridge deck 26-01.

Holding the funnel assembly in place, carefully turn the work so that you can access the underside of the superstructure deck 24-02. Use two PWB 2 x 4mm flange screws to fix the funnel in place, as shown.

Fit the foremast base 78-01 between the forward superstructure (level with the admiral’s deck, 43-01) and the funnel, as shown. Glue the ends of the foremast base in place.
The railing **C2** from frame **78-06** has to be bent to fit around the curve at the edge of the foremast base **78-01** (see also step 7, below).

Glue the railing **C2** in place on the starboard side of the foremast base **78-01**.

Cut the rigging spar **C4** from frame **78-06**. Identify the four tabs and bend them at right angles as shown.

The railing **C1** from frame **78-06** has to be bent to fit around the curve on the other side of the foremast base **78-01** (see also step 8, below).

Glue the railing **C1** in place on the port side of the foremast base **78-01**.

Take the foremast **78-03**. Check the fit of the two central tabs on the spar **C4** near the top of the mast. The tabs fit into the lower two of the three holes. Glue in place.
Cut part **C3** from frame **78-06**. Bend it to shape as you fit it in place: the loop in part **C3** fits over the top of the mast **78-03**, then the arms are bent down to the sides, as shown, so that the ends of the arms fit beneath the tabs at the ends of the arms of part **C4** (arrows).

Fit the ladder up the back of the foremast: the peg at the base of the ladder fits into a hole near the base of the mast **78-03**, then the arms are bent down to the sides, as shown, so that the ends of the arms fit beneath the tabs at the ends of the arms of part **C4** (arrows).

Cut the antenna **D3** from frame **78-09**. Study the photograph carefully, and bend the part to make the shape shown. One spar is bent upwards at right angles (right, above); the other is bent twice along the fold lines.

Fit the base of the mast into the central hole in the base plate **78-01**. The mast also fits into the recess in the mast support platform **B2** from frame **57-06**. Note that the ladder is on the side of the mast facing away from the forward superstructure. When you are happy with the fit, glue it in place.

Fit the antenna **D3** over the top of the mast as shown, ensuring that you have it facing the right way. Glue in place.
Cut the first of the two long struts D1 from frame 78-09. The small peg at the base fits into a hole in the foremast base 78-01, the wider tab at the top fits into a vertical recess on the rear of the superstructure (see also next step).

Fit railing 78-08 along the starboard side of the foremast base 78-01. When you are happy with the fit, glue in place.

The second long strut D1 fits in the same way from the foremast base 78-01 to the rear of the superstructure. Glue the two struts in place.

Fit railing 78-07 along the port side of the foremast base 78-01. Glue in place, as shown.

Completed work
The funnel has been attached to the forward superstructure. The foremast has been assembled and fixed in place.
STAGE 79
THE NEXT HULL SECTION

COMPONENTS CHECKLIST
79-01: Upper starboard hull section
79-02: Connector
PM: Five 2 x 4mm screws

01. FITTING THE HULL SECTION

Take the hull assembly from stage 77. Check the fit of hull section 79-01; the two screw sockets at the base of the hull section fit on top of the screw sockets in part 77-01, as indicated.
Fix hull section 79-01 in place with two PM screws.

Fit the connector 79-02 over the join between hull sections 68-01 and 79-01 so that the sockets in the connector fit over the raised screw sockets on the hull sections. Fix in place with two PM screws.

Completed work
Another section has been added to the starboard side of the hull assembly.
STAGE 80
THE TWO AIRCRAFT HANGARS

COMPONENTS CHECKLIST

80-01: Port hangar
80-02: Starboard hangar
80-03: Details for the port hangar (A–H)
80-04: Boat cradles (sides of hangars) (I–K)
80-05: Details for the starboard hangar (L–R)
80-06: Boat cradles (roofs of hangars) (S–U)
80-07: Support struts (V, W)

NOTE: The cradle parts on frame 80-06 are all very similar. Take some time to identify the three different parts so you can fit them in the right order in the steps on page 44.

01. DETAILS FOR THE HANGARS

Take the port hangar 80-01 and the frame with the details for the port hangar, 80-03. Smooth any rough edges when the parts are removed from the frame in the following steps.

Separate part D from frame 80-03. Check the fit of the peg in the hole on the outer wall of the hangar. Fix in place with a small amount of superglue.
Take the large vent B and smaller part C from the frame 80-03. Check the fit and glue in place as shown.

The door G and column H fit next to part B on the outer wall of the hangar 80-01. Glue in place.

The vent A is fitted near the forward end of the side wall of the port hangar 80-01. Glue in place.

Check the fit of the roof vents E and F on either side of the roof of hangar 80-01 and glue in place.

Now take the starboard hangar 80-02 and the frame 80-05. Cut parts L and M from the frame, check the fit and glue in place as shown.

The large vent Q is fitted along the side of the hangar, next to part L, as shown. Glue in place.
The door, part N from frame 80-05 is fitted on the outside of part Q. The vent R is fitted near the forward end of the hangar 80-02. Glue them in place.

The two roof vents O and P are fitted on either side of the roof, as shown. Glue them in place.

02. THE BOAT CRADLES

Take the port hangar 80-01: identify the first three boat cradle parts I, J and K from frame 80-04 and arrange them in the order shown, making sure they are the right way round. Part K has an extra hole (circled).

Rectangular pegs on the cradles fit into matching holes in the side of the hangar. Check the fit of part I so that it extends at right angles from the hangar wall and glue in place as shown.

Boat cradle K is glued into the next rectangular hole at the top of the outer wall of hangar 80-01, as shown.

Boat cradle J is glued into the rectangular hole at the forward end of the outer wall of hangar 80-01.
Repeat the steps to fit the boat cradles on the starboard hangar 80-02: glue the rectangular peg on cradle I into the hole at the top of the hangar, near the door N.

Fix boat cradles K and J to the outer wall of the right hangar 80-02 as shown.

The roof cradles S, T and U from frame 80-06 are fitted next. Starting with the port hangar 80-01, identify cradle section T and fix in place on the roof in line with side cradle K. The cradle fits between two flanges at the ridge (arrow).

Next, the boat cradle U from frame 80-06 is glued to the roof of hangar 80-01, as shown in the photo. The legs on this part fit into recesses in the roof, rather than holes.

Finally, the boat cradle S is glued to the roof of hangar 80-01, as shown.

Similarly fit boat cradles S, T and U from frame 80-06 to the roof of the starboard hangar 80-02 in the order shown, so that part U fits into recesses and the other parts fit into holes.
Completed work
Details have been fitted to the two aircraft hangars, including boat cradles on the roofs and sides. The hangars will be fitted on either side of the funnel in a future stage.