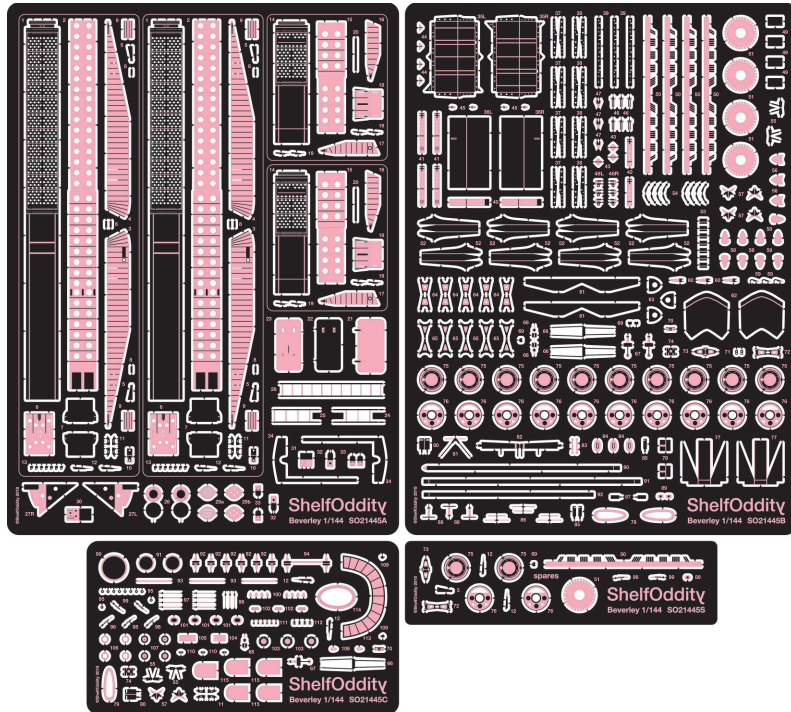


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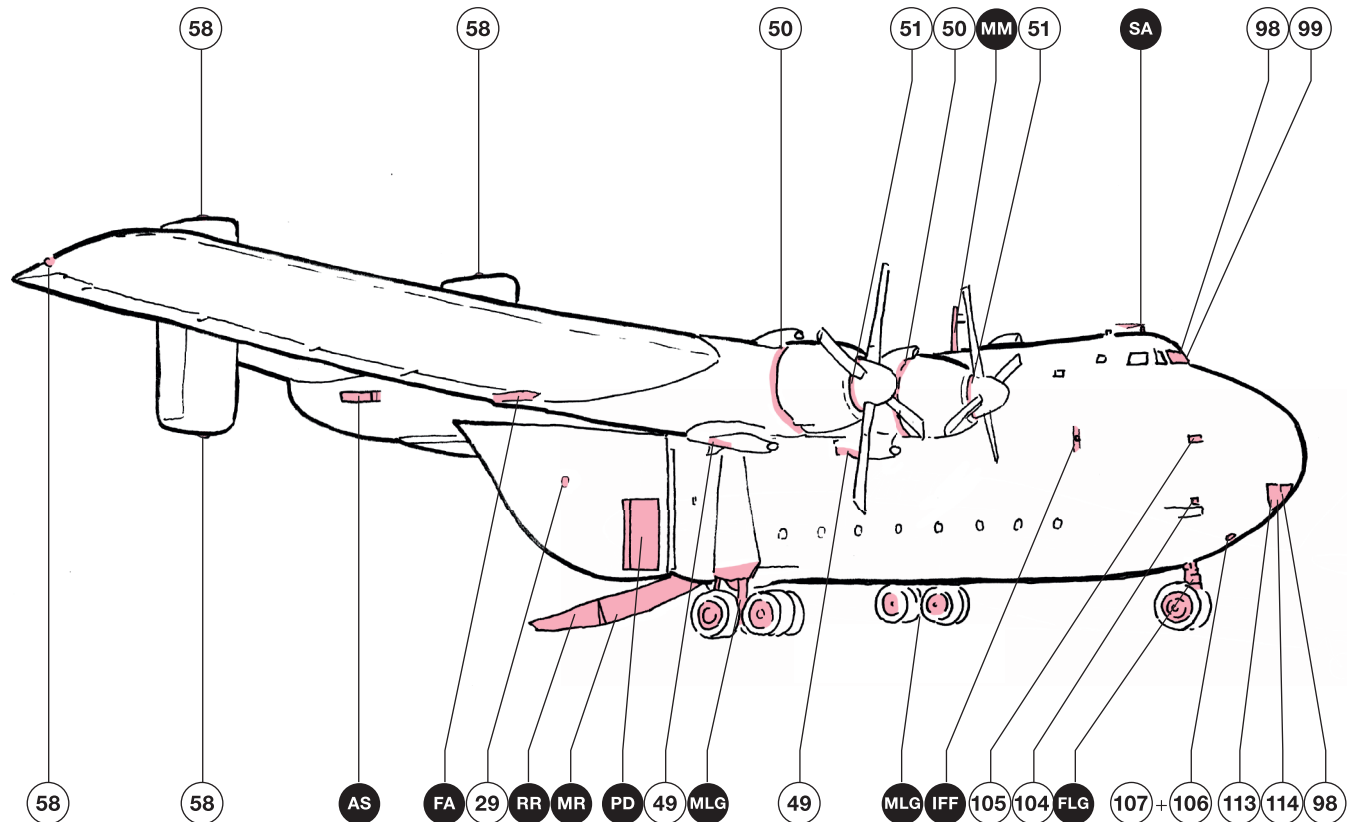
1/144 Beverley C.1 for MikroMir kit

Shelf
Oddity



This extensive set is prepared for MikroMir Beverley C.1 kit. Rather unusually for us, a big part of it is used to detail the internal area of the aircraft.

Parts are distributed on four 0.1 mm brass frets, part of the fret C and the whole fret S serve as a source of the spare items – either ones that are complicated to assemble or as a snack for your carpet.



The most visible features of this set are the perforated loading ramps simply perfect to be replicated as the photo etch. Each of both ramps is comprised of two parts – a bigger main ramp (MR), mounted to the fuselage and a smaller rear ramp (RR) which touches the ground. Please keep in mind that the port side and the starboard sets of ramps are identical (not handed).

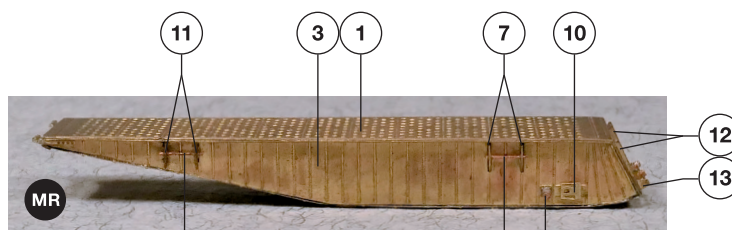
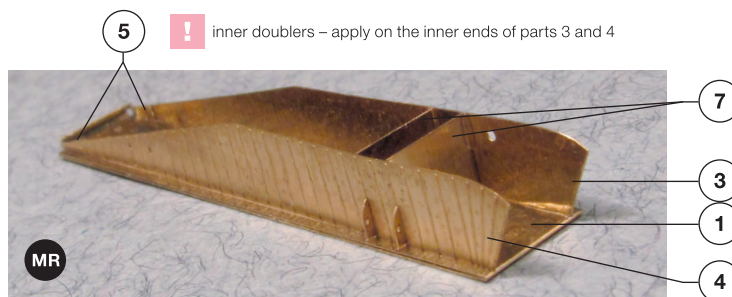
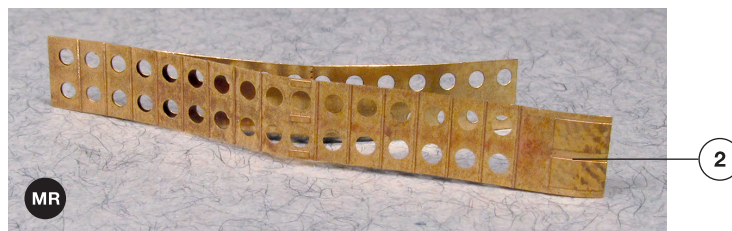
The construction of the main ramp (MR) begins with folding its upper part (1) back-to-back and then forming its opposite end to create a C-shape. The glue should be applied carefully after folding the part. The second step is to fold ramps' lower part (2) back to back and additionally bend it slightly along the dotted lines. Important: do not use the glue at this stage!

After the lower part (2) is prepared, both side walls of ramp (3,4) need to be prepared – two doublers (5) need to be applied to the inner sides of both walls' slim ends.

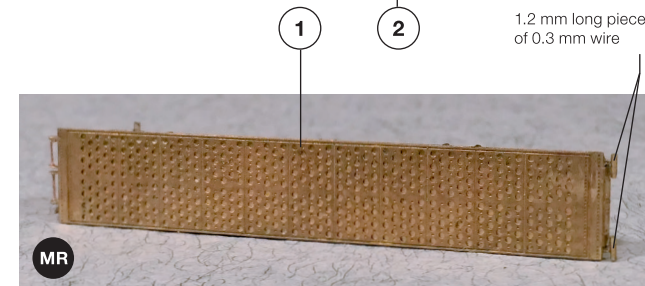
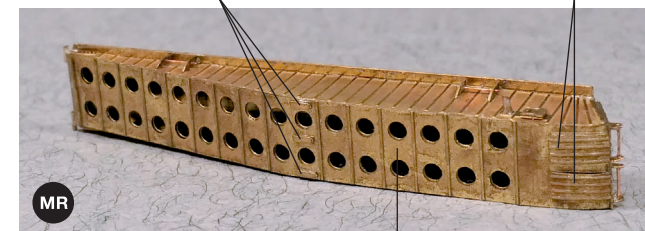
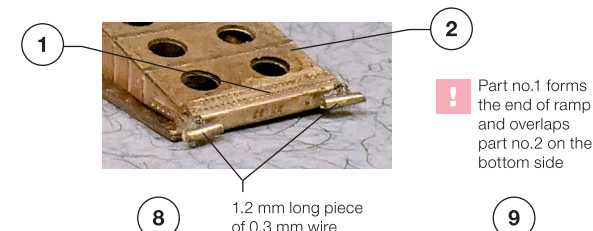
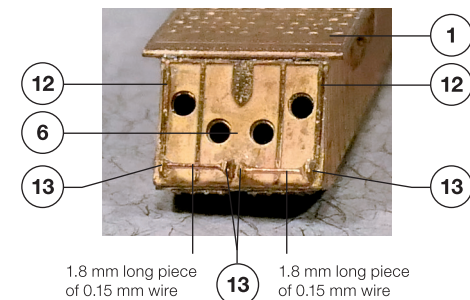
In the next step both bulkheads (7) need to be dry-positioned with side walls (3,4) and the whole sub-assembly should be placed over the upper part of ramp (1) flipped on its back. Now the glue can be applied.

After the sub-assembly is dry, the fold of the ramp bottom part (2) – still unglued! – can be slid under the C-shape end of the upper part (1) and gradually glued into the place while forming to the shape of the walls. It sounds complicated but it is not that hard to do. The front wall (6) after folding back to back can be used to close-off the ramp.

The last steps of the ramp assembly consist of adding all the small details pictured here.



1.5 mm long piece of 0.15 mm wire 1.5 mm long piece of 0.15 mm wire 0.8 mm long piece of 0.5 mm wire



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1/144 Beverley C.1 for MikroMir kit

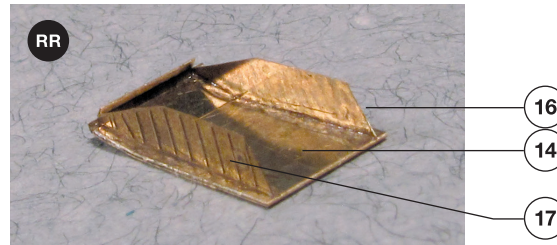
The construction of the rear ramp (RR) is quite similar to the procedure described on the previous page and begins with folding its upper part (14) back-to-back and then forming its opposite end to create a C-shape. The glue should be applied carefully after folding the part. The second step is to fold ramps' lower part (15) back to back and additionally bend it slightly along the dotted lines. Again: do not use the glue at this stage!

In the next step, both side walls (16,17) need to be glued to upper part of ramp (14) flipped on its back.

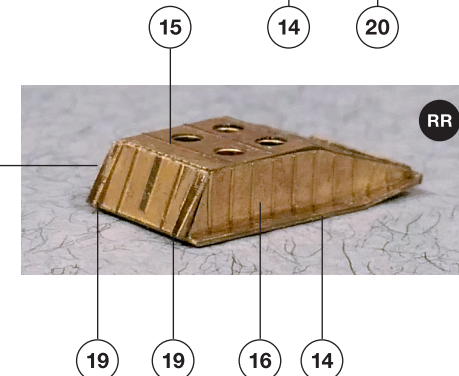
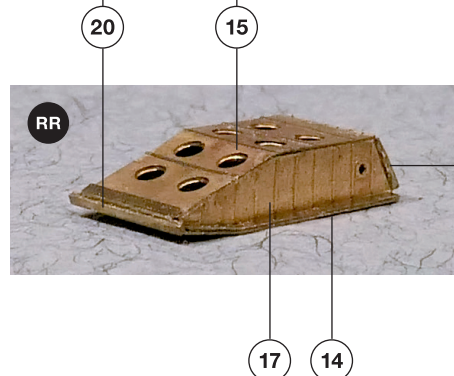
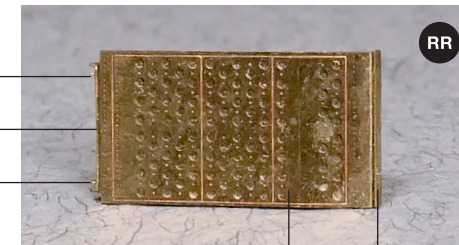
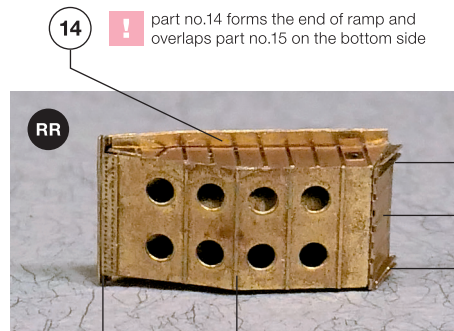
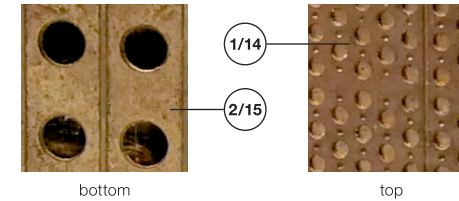
After the sub-assembly is dry, the fold of the ramp bottom part (15) – still unglued! – can be slid under the C-shape end of the upper part (14) and gradually glued into place while forming to the shape of the walls. The front wall (18), after folding back to back, can be used to close-off the ramp. Please note that two fins situated on the sides of the rear-ramp back need to be bent at 90 deg angle before assembly.

The final steps of the ramp assembly consist of adding two additional small fins (19) beside the bent ones visible on pictures here.

Two small close-ups of the ramp's upper and lower surfaces are included here. Please note that the upper parts of both ramps (1,14) have openings closed-off by their inner parts. The bottom parts of both ramps (2,15) need to be folded in a way that the slightly smaller openings are situated on the inner side of the bottom parts. The visible step should be visible in each of the circular openings.



! The close-up at the ramps surface structure. Parts 1 and 14 as well as 2 and 15 have identical appearance.

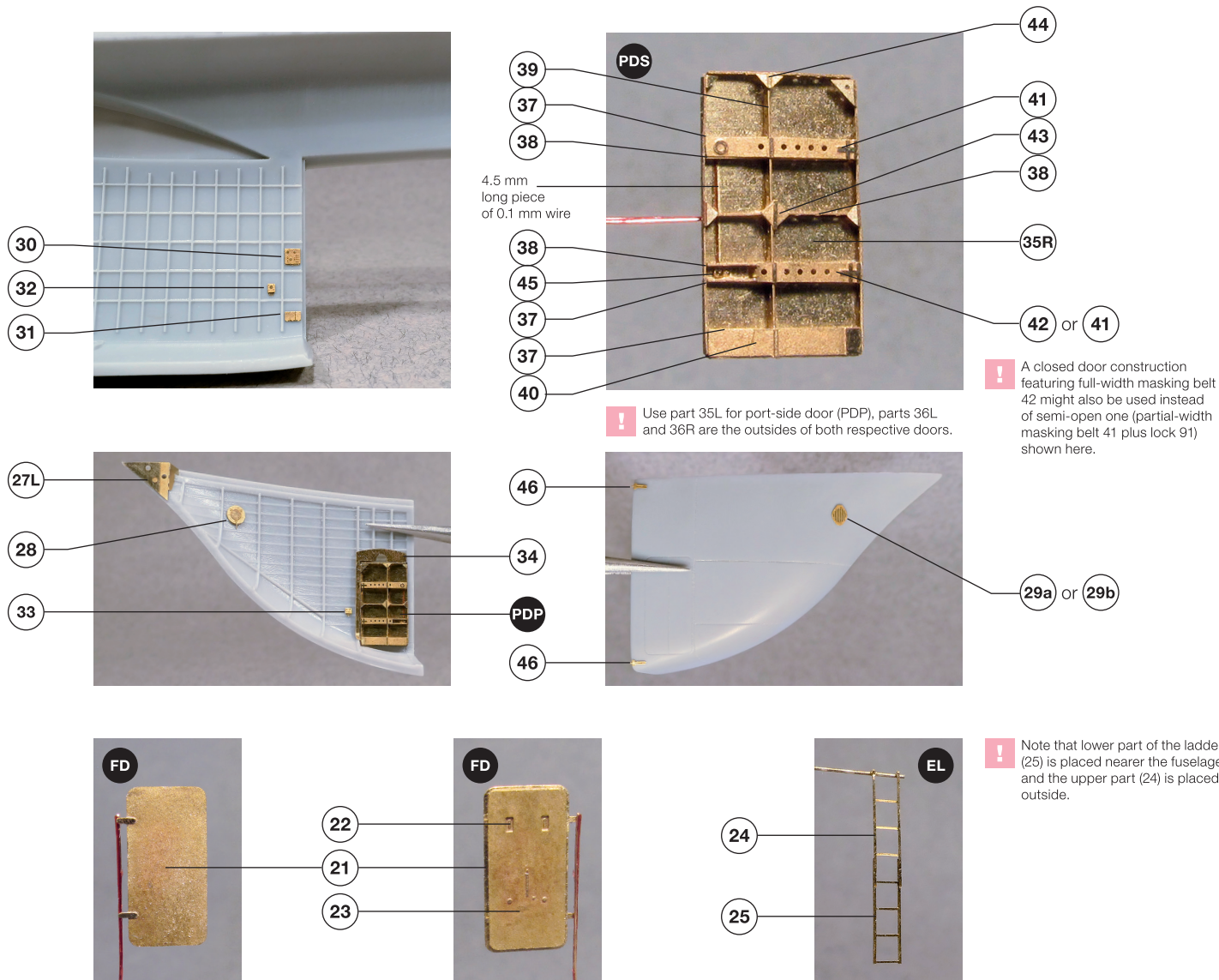


To be properly displayed, the ramps require fully opened clam shell doors, and that is why we have prepared a couple of details visible both on inner and outer side of the doors, as well as some electrical boxes placed on the cargo bay walls. Please check your sources – we have supplied a selection of various boxes (30-32).

Two pairs of folding parachute doors (PDP and PDS) complete the scene. Please note the doors are handed. The inner door outlines (34) need to be placed around the openings. Two triangle plates (27L and R) are adorning the inner ends of the clam-shell doors while parts 46 are the halves of doors' hinges. The other halves of the hinges should be attached to the fuselage sides – see the placement scheme on page 11 of this manual. The loudspeaker boxes (28) are located on the inner side of the clam-shell doors, while the loudspeaker faces (two kinds – 29a or 29b) in the same location but on the exterior. Check your references while choosing the correct loudspeaker face as they varied among the planes and the service periods.

The assembly scheme of the folding parachute doors (PD) is shown here. If you want to open those doors in your kit, use parts 36L and 36R as the external surfaces of respective parachute doors. If you would like to open only the clam-shell doors, the parts 36L and 36R can be skipped and the internal framework of parachute doors can be placed onto the internal side of the clam-shell doors.

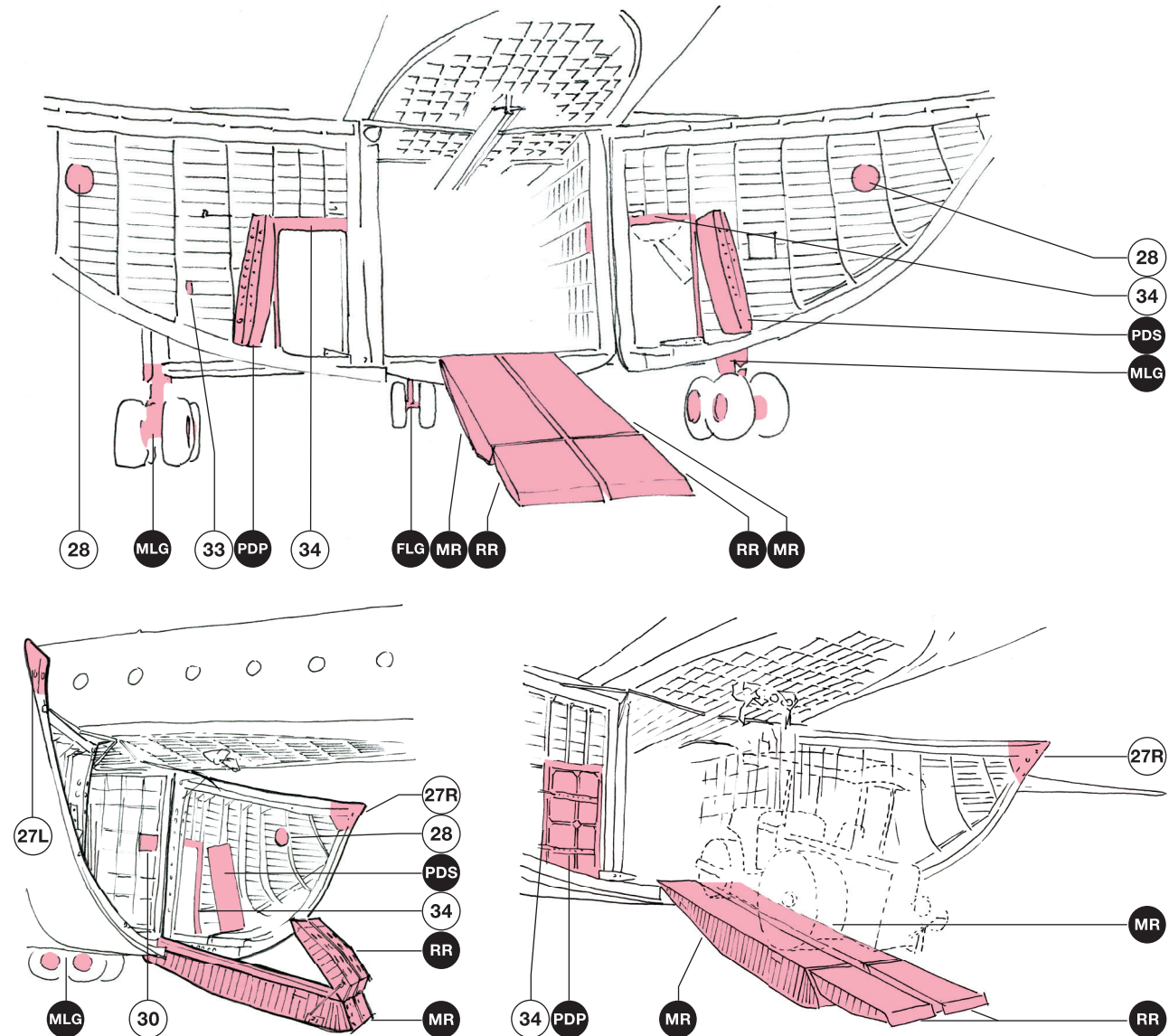
While we took an extensive care of the main cargo bay entry, we thought it would also be good to let pilots into the cockpit. To facilitate this, the sandwich front cabin door are included in the set. To make things for the crew even easier, a set of ladders consisting of the external (EL) and internal one (26) is included too.



Here, a few ways of ramp display are shown for some inspiration. Unfortunately, any model of the vehicle using the ramps needs to be procured separately.

The parachute doors (PD) can be opened as a whole or they can be folded in half after the opening. Their half-open state can be replicated using the spare parts included in the set – at least one door can be shown folded. The only drawback is that parts 35L and 35R forming the main frames of those doors need to be cut in half by yourself.

Also, the boom crane with its fittings visible on the ceiling of the cargo bay needs to be scratch-built. The same thing applies to the folding benches used during parachutist deployments and remaining cargo bay equipment not really visible from outside.



As the cockpit area is hardly visible through the kit's transparencies, we skipped it and went to take look at four Beverley's Centaurus power eggs. The cooling fans of the engines are quite prominent, even if the nacelle front opening is rather small. The nacelle front openings need to be enlarged slightly in order to fit fan discs.

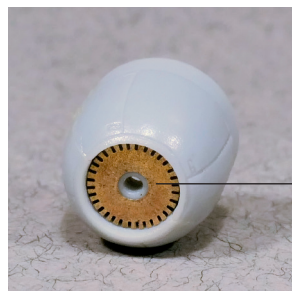
Another prominent feature completely omitted in the kit are the exhaust pipes stacks unevenly distributed around the nacelles. To make life easier during their positioning, a full circumference bands featuring the sets of stacks have been prepared. To install them properly, you need to thin down the rear walls of each nacelle.

The adjustable outlet flaps (49) of the oil coolers placed beneath the engines complete the picture. The coolers supplied in the kit need to be reshaped to simulate air outlets covered by the flaps.

The last touch to the engine nacelles can be made with two pieces of 0.4 mm inside diameter tubing bent at ca. 45 deg angle. Two such outlets are visible on both sides of each engine nacelle.

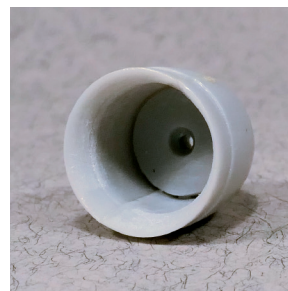
Another interesting feature are the de-icing heaters' air scoops, placed on the leading edge of both wings roots. As their placement in the kit is slightly wrong it is recommended to replace them with brass tubing 1.3 mm inside diameter. The exhaust is ducted to the lower side of both wings. The exhaust openings (1 mm diameter holes) are covered with semi-circular vertical fairings (115) which should be formed appropriately before application. The fairings should extend about 2 mm over the wing's lower surface.

The correct placement of the heaters system details is shown on the drawing on page 12.



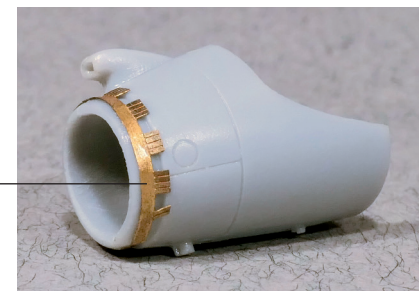
51

! The front opening must be enlarged slightly.

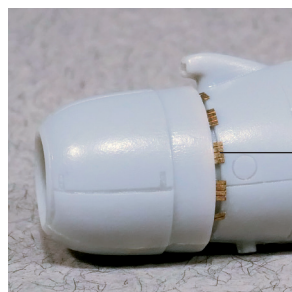


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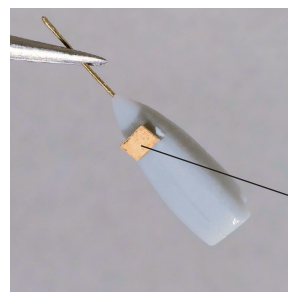
! Rear part of the engine cowling needs to be thinned down from the inside to allow space for the exhaust belt (50).



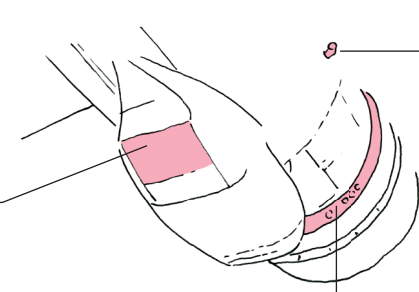
! The exhaust belt joint should be placed on the bottom of the nacelle.



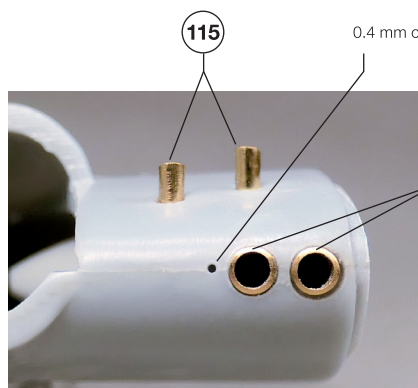
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49



brass tubes 0.4 mm inside diameter placed symmetrically on both sides of each nacelle

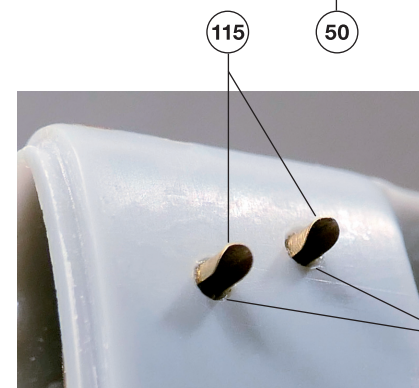


115

0.4 mm circular opening

brass tubes 1.3 mm inside diameter

! Note the de-icing heaters setup is symmetrical on both wings.



115

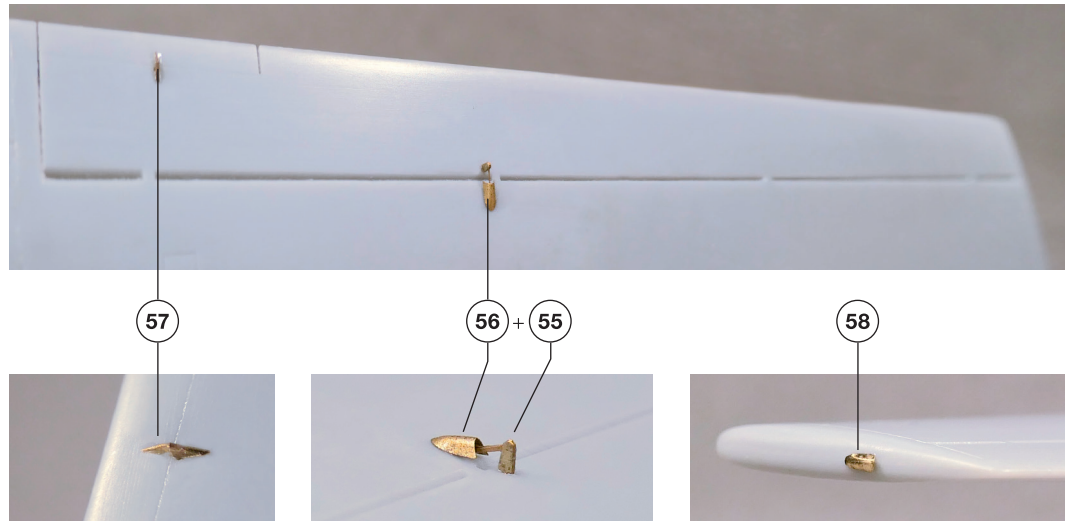
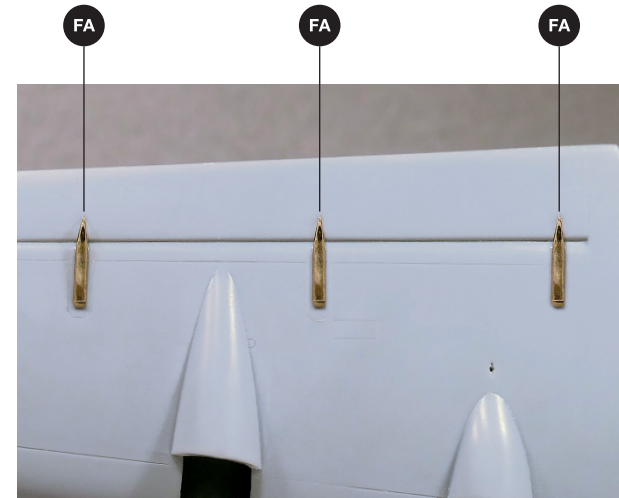
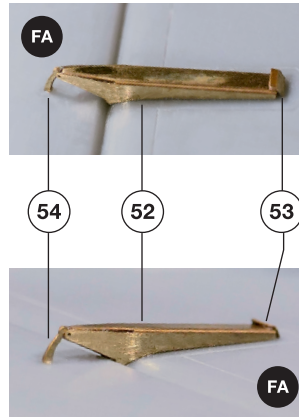
50

1.0 mm circular openings

While we are at the wings, let us take a look at their bottom side. The flaps actuators fairing (FA) replacements has been prepared – each one comprising of three parts. Before the installation, their kit's plastic representation need to be removed. The actuators arms (54) need to be folded before attaching to the flap.

Moving to the upper side of the wings, a complete set of control surfaces actuators also needs to be added. Please note that actuator fairing (55) need to be dome-shaped, and aileron and trimmer actuators (56 & 57) need to be folded in half before application onto wing surface.

The tips of both wings and both tips of each vertical stabilizers are adorned by small air outlets (58) which need to be dome-shaped before glueing. Again, their kit's plastic representations need to be removed first.

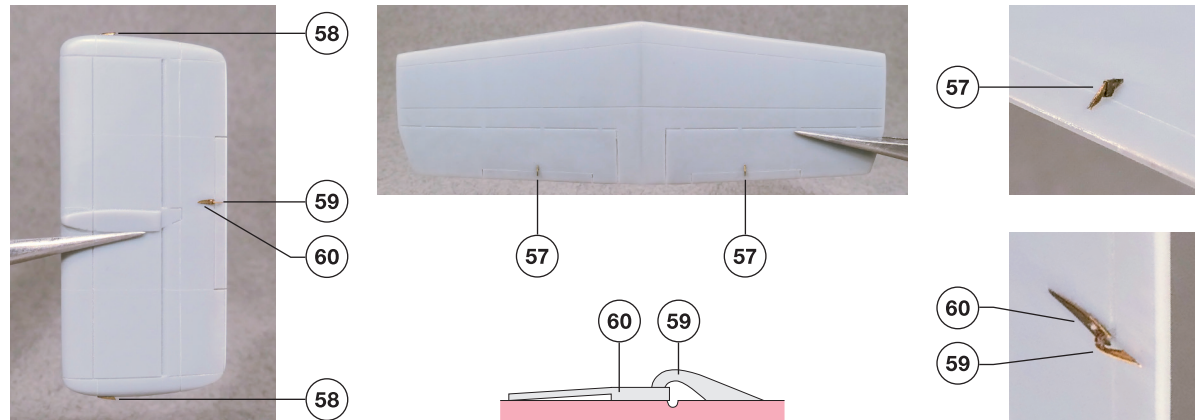


It is time for the tail section.

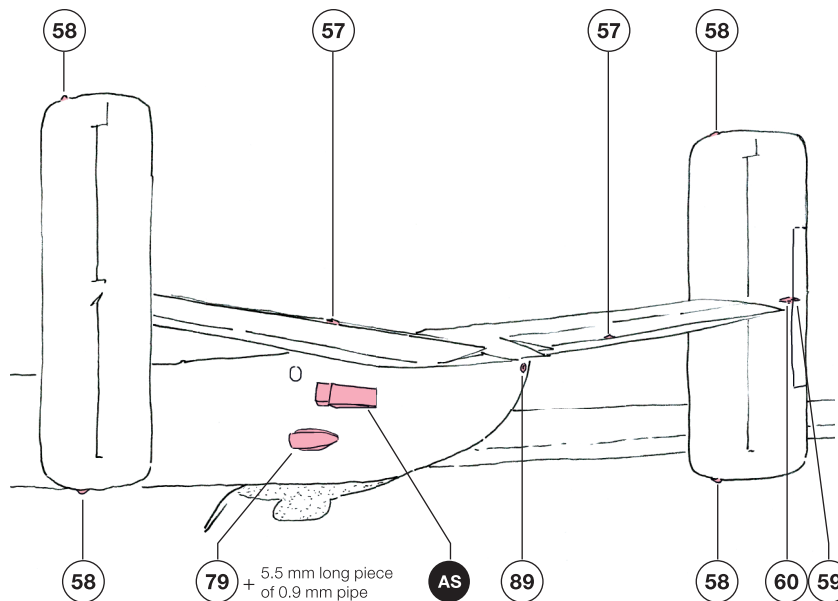
Trimer actuators on horizontal control surfaces (57) need to be folded in half before application.

The actuators of vertical control surfaces are represented by two parts (59, 60). Please note that the flat side of the actuator fairing (60) goes on top – the triangle end should make a gradual slope towards its end (towards the front of the airplane).

When placing the navigation light (89) on the very end of the fuselage the drawing shown here (or the usual look at references) may be helpful.



! Vertical stabilisers layout is symmetrical.



Before the application of the usual photo-etched suspects (all kinds of antennae and assorted tiny details), your model needs to stand properly on its own legs.

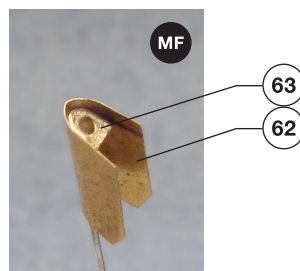
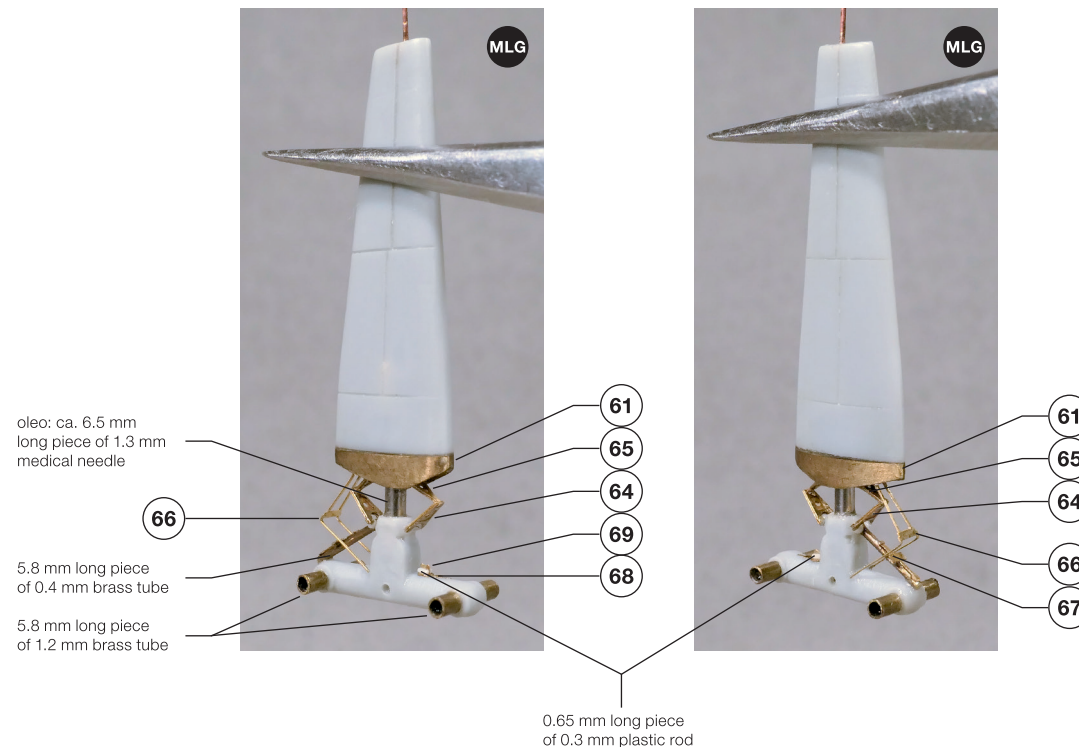
This is the most work-consuming part of our set because Mikromir portrayed the main landing gear as fully extended, meaning in flight position. If you want to properly display your Beverley on the ground the oleos in both MLG legs need to be shortened. The thickest medical syringe needle available (1.3 mm external diameter) may be of great help. Ask at your local chemist's.

To properly accommodate the oleo scissors, the lower parts of the tall MLG struts need to be hollowed. To make life easier, we prepared the brass replacements of this area (61) but the assembly is a bit tricky. It is recommended to pre-shape the parts before attaching them to the bottom side of struts.

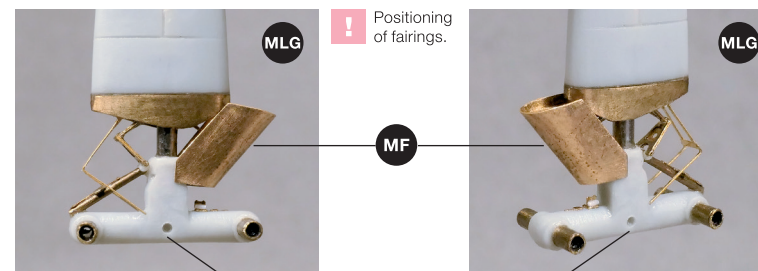
As the plastic bogeys axles were a bit misshaped in our kit, we have replaced them with brass tubing. This should allow easier attachment of the wheels later on.

In order to get correct thickness of oleo scissors, both their parts (64, 65) need to be folded in half before attaching to the main gear leg sub-assemblies.

Several small details (66-69) as well as the moveable fairings (MF) complete the MLG picture.



! Port and starboard fairings are identical.



The front gear leg also got the treatment. We chose to rebuild the main part of the leg with brass tubing (less sanding required) but the kit's original part may also be used.

In order to get a correct thickness of oleo scissors, both their parts (72, 73) need to be folded in half before attaching to the front gear leg sub-assembly.

The other weak point of the kit's landing gear is the wheels. Their hubs are pronounced rather delicately – our parts should enhance this area. Three balance tabs made of 0.15 mm wire complete each wheel assembly.

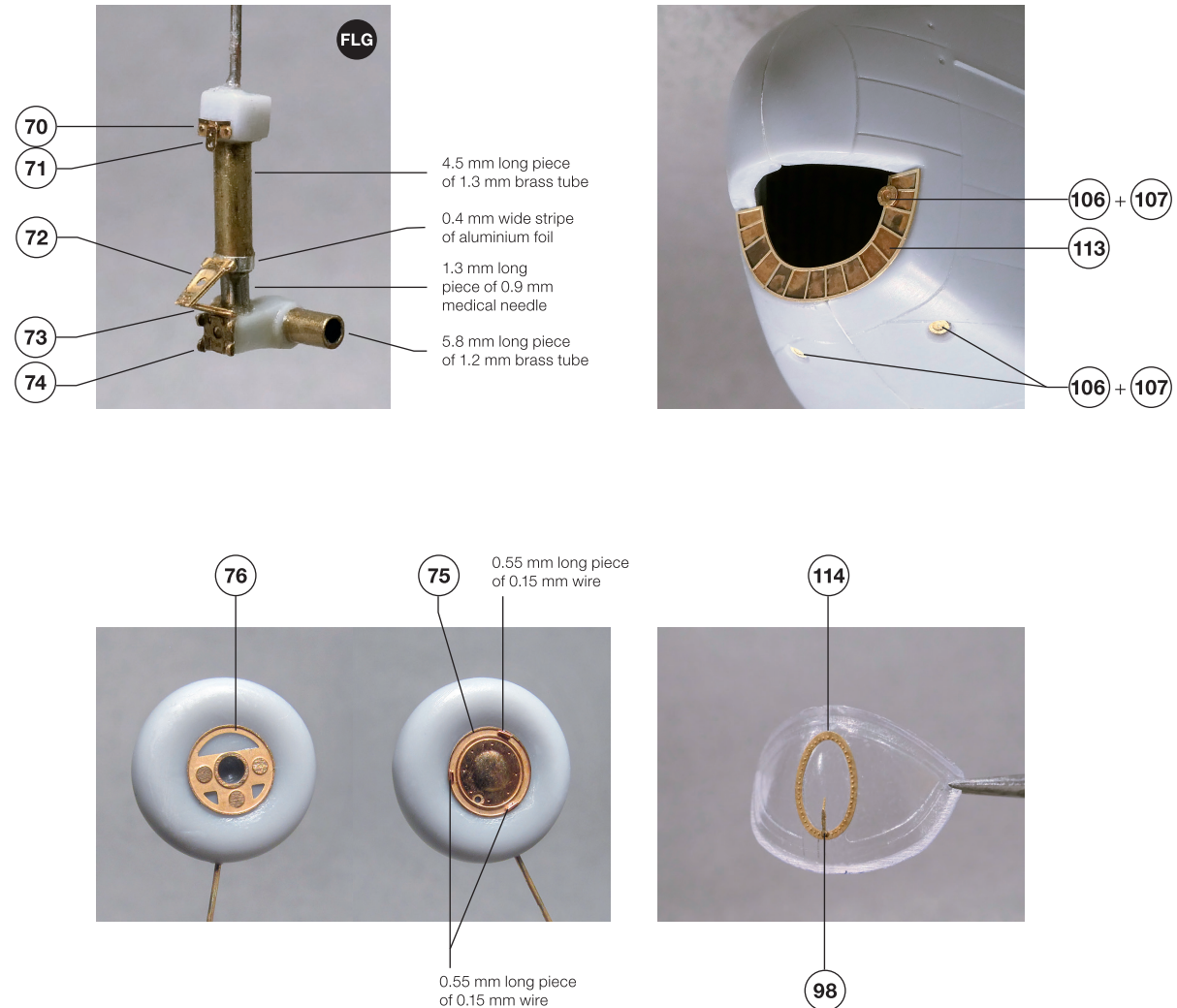
The central part of each outer wheel hub (75) should be bulged using blunt tool or a small bearing's ball. The area which should be bulged is marked on the reverse side of the hub – the brass is half-thick there.

Having sorted out no less than 10 wheels it is time to cheer up a little.

We like our Beverley model to be one happy plane – therefore the smilin' front fuselage bulkhead (113) has been prepared. Usually one landing light (106,107) was mounted directly on this bulkhead. Sometimes a second, identical light was visible on the lower port-side part of this bulkhead – your references will be needed here.

Two further lights are situated in cone-shaped recesses in the front lower area of the fuselage. Drawings on page 12 of this manual show their position.

An oval window frame (114) with a wiper (98) brings even more happiness to the front fuselage section.



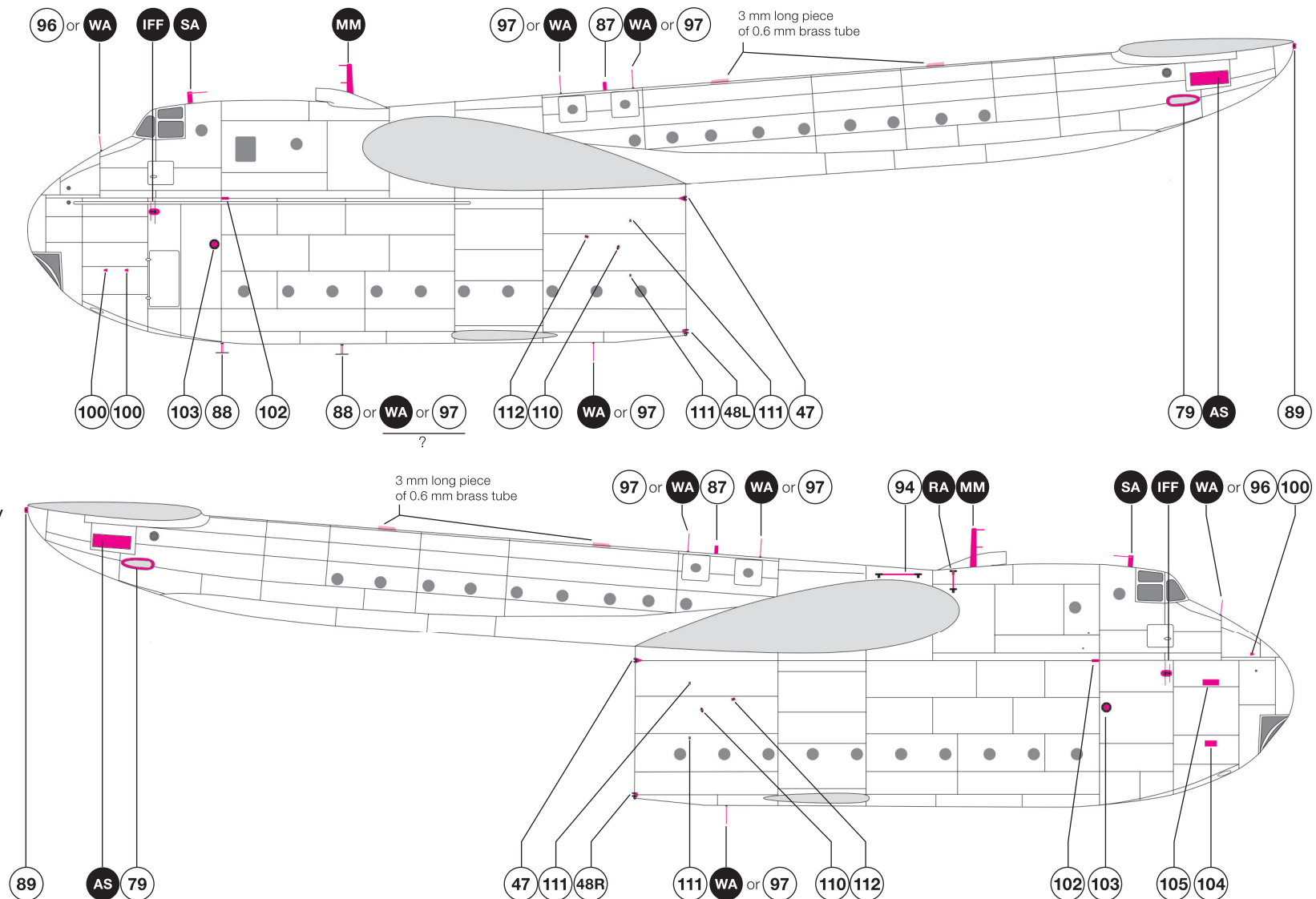
OK, when your kit finally stands on its own legs and smilin', there is a time to place all the different antennae and surface details.

To allow some degree of orientation among the myriad of those tiny and tinier bits, we prepared a set of line drawings showing their placement. Our line drawings also feature the most probable way the fuselage skin was divided into separate panels. The panel lines were drawn after fairly long observation of available close-up photos but there still may be some inaccuracies.

Here, both sides of the fuselage are shown. The clam-shell doors are omitted for clarity.

In all cases marked with '?' check your references because those details were present in some airplanes only.

As the placement of details and antennae on the bottom side of the fuselage may vary between the airframes – please use your references.

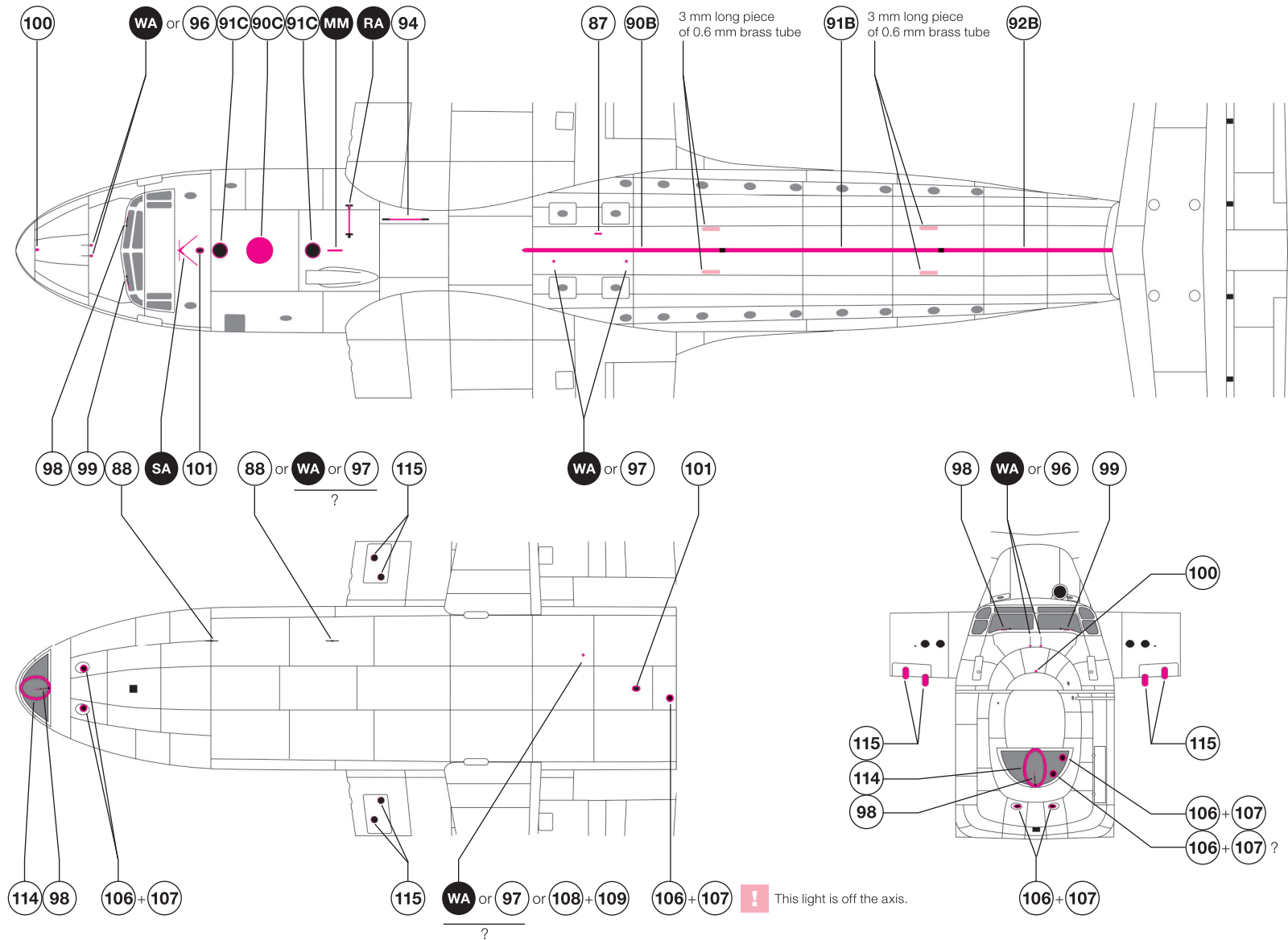


Now let us see the top-, bottom- and front-side views of the fuselage. In the bottom view, the clam-shell doors are omitted for clarity.

Again, in all cases marked with '?' check your references because those details were present in some airplanes only.

As the placement of details and antennae on the bottom side of the fuselage may vary between the airframes – please use your references.

Some airframes had the plexiglass astro-dome faired over – please use flat round cover (90C) instead of the kit's transparency.



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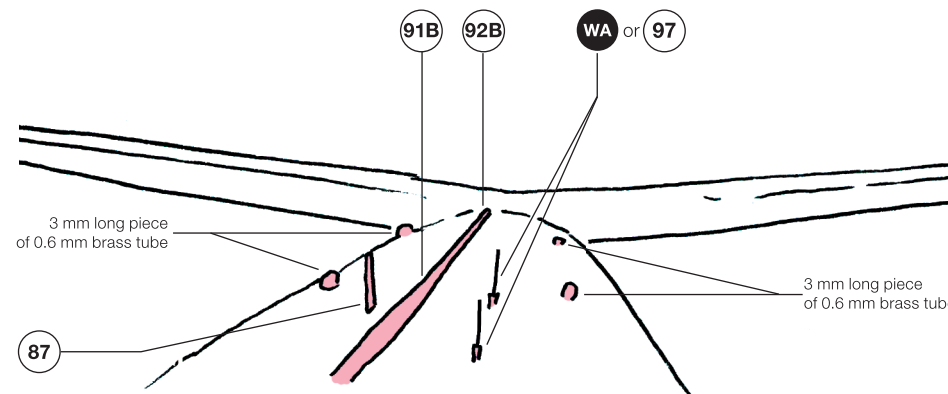
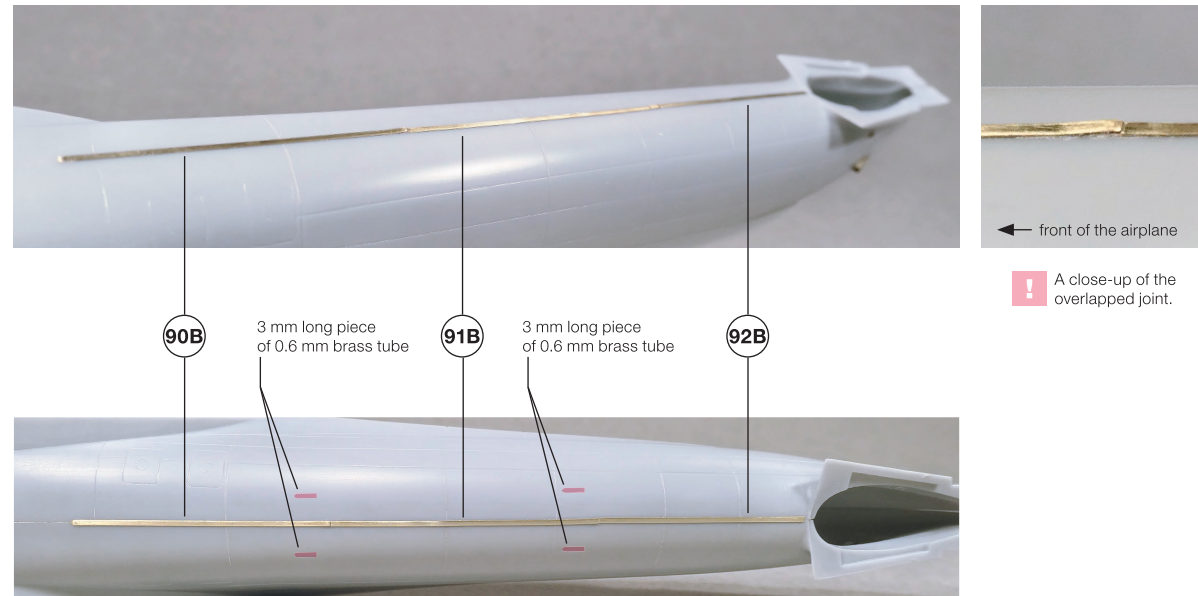
1/144 Beverley C.1 for MikroMir kit

Shelf
Oddity

Stripes 90B, 91B and 92B (situated on fret B) should be placed on top of the fuselage. Their application should start from the rear part (92B) and move towards the front. This assembly order should ensure correct orientation of the overlapped joints of the stripes.

The markings on those stripes show the length of the overlaps.

The four air vents marked on both sides of this stripe may be replaced with ca. 3 mm pieces of 0.6 mm brass tubing. The front part of each vent should be buried in the fuselage and the openings of the vents should face to the rear of the airplane. Check your references and the drawing below. See also rear fuselage air scoop (79) shown on the last page of this manual.



Several small sub-assemblies are shown here.

Please note: the oval parts masking the fuselage joints of the circular air scoops (79) are very fragile. It is recommended to dry-fit the brass-piping scoops to the fuselage before applying those ovals. The openings for those scoops need to be done at a very sharp angle to the model surface.

The main part (77) of the rectangular air scoop (AS) needs to be formed gently before adding its L-shaped front part (78).

The IFF antennae are one of the most fragile parts in this set. Please proceed with caution to avoid bending the dipoles.

The wire antennae may be assembled using hexagonal bases (95) and 2 or 3 mm long piece of 0.1 mm wire or simply added as flat parts (respectively 96 or 97).

Sources:

Blackburn Beverley – Aeroplane Monthly 2009/11 – Database
Blackburn Beverley – Aircraft Illustrated 1980/06
My Side's Airborne... – a MikroMir Beverley's build by Mike Verier
– Scale Aircraft Modelling 2017/07

With special thanks to Mr. Mike Verier from SIG144.

