HyperScale Resource Guide

Building the Avro Lancaster in 1/72 scale

Brett Green

Profiles
Building the Airfix 1/72 scale Lancaster B.III
Building Hasegawa's 1/72 scale Lancaster B.I Special
Building Revell's new 1/72 scale Lancaster B.I / B.III

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Welcome to the latest downloadable HyperScale Resource Guide.

The aim of this document is to offer a one-stop guide for modeling a recent and interesting kit release. The focus of this guide is Revell's 1/72 scale Lancaster B.I / B.III.

The downloadable PDF format will permit modelers to print the booklet and use it as a workbench reference while building your Lancaster.

I would like to thank Jerry Boucher for his attractive profiles; and David from Hannants for supplying the Revell kit plus Xtracrylix paints and Xtradecal markings.

I do hope that you will enjoy HyperScale's latest Resource Guide.

Brett Green
January, 2008

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Credits

Text and images by Brett Green
Colour profiles © 2008 by Jerry Boucher
Hasegawa Lancaster B.I Special by Chris Wauchop

The Avro Lancaster in 1/72 scale

As one of the most famous aircraft of all time, the Avro Lancaster has enjoyed plenty of attention in 1/72 scale from model manufacturers over the last 50 years.

The original Airfix Lancaster appeared in 1958, followed by Frog, Revell and Matchbox with their own kits in the 1960s and 1970s.

In 1980, Airfix introduced an all-new Lancaster kit. This was a big improvement over the older offering in terms of accuracy and detail. This revamped Lancaster was further developed into a Dambuster version in 1993. The 1980 Lancaster B.Mk.I/III is still in current release.

The Airfix 1/72 scale Lancaster may be old, but it still has some merit. The outline is accurate and parts breakdown is quite simple.

However, the kit is not without its shortcomings. The surface of the model is covered with thousands of raised rivets – perfectly *de rigueur* for the 1970s but not to everyone's taste today. Also, the parts provided appear to be a hybrid of Mk.I and Mk.III versions, with the short astrodome and narrow propeller blades of the early version combined with the later large nose dome. Detail is somewhat lacking, with bare wheel wells, a basic cockpit, moulded-on exhaust flame dampers and solid intake guards. Fit seems to be variable too, with some modellers reporting large gaps and serious misalignment. Curiously, I did not share those bad building experiences. The discrepancy may have to do with the age of the moulds, with more recent mouldings suffering some distortion.

In 2005, after nearly three decades, Hasegawa answered the pleas of modellers with a brand new 1/72 scale Lancaster. In fact, Hasegawa has released at least five variations of their kit to date - a B.I/III, a B.III, a Tallboy version, a B.I with Grand Slam and a Post War version (MR.3). Hasegawa's Lancasters are high quality kits with crisply recessed surface detail, although they are a bit let down by almost non-existent interior detail, incorrect canopy escape hatch position, poor transition between the engine nacelles and wing leading edge, and only a partial forward turret.

During the last few years, Revell of Germany seems to have taken a particular interest in the field of large, four-engine Luftwaffe aircraft in 1/72 scale. Recent examples include their Blohm und Voss 222, Fw 200 Condor, Heinkel He 177 and Junkers Ju 290 A-5. All of these models have featured accurate outlines, a high level of detail and fine surface texture including crisply recessed panel lines.

Not content to rest on their laurels, Revell of Germany has now extended their subject areas to the cover the RAF. In late 2007, they released an all-new 1/72 scale Avro Lancaster B.I/III. This has nothing in common with the original ancient Revell Lancaster, and it is not a re-boxing of the Hasegawa kit.

1/72 scale Lancaster Kit Summary

Brand	Variant	Comments
Airfix	Lancaster B.I / B.III	**PROS:** Accurate outline. Simple parts breakdown. **CONS:** Oversimplified detail in some areas. Raised rivets covering surface. Thick clear parts. Ambiguous variant (partly B.Mk.I, partly B.Mk.III)
Hasegawa	Lancaster B.I Lancaster B.III Lancaster B.I Special Lancaster Post War	**PROS:** Accurate outline. State of the art surface detail. Good fit. Plenty of options supplied. High quality clear parts **CONS:** Lack of detail in cockpit. Incorrectly positioned canopy escape hatch. Oversized tail wheel.
Revell	Lancaster B.I / B.III	**PROS:** Accurate outline. State of the art surface detail. High level of detail including inboard engines and good cockpit. Clever engineering and very good fit. Many options supplied. High quality clear parts. Outstanding value. **CONS:** Some experience and patience required; poor wheels; questionable dihedral of outer wing panels.

Avro Lancaster Colour Gallery

Colour artwork by Jerry Boucher

Lancaster B.Mk.I, 467 Sqn RAAF

Lancaster B.Mk.I, 166 Sqn RAF, 1945

Lancaster Mk. 10DC. Used by the Canadian Air Force as a launch platform for 'Firebee' drones.

Lancaster MR.1 of Escadrille 9S, French Aéronavale, based at Nouméa 1963.

Lancaster GR.Mk.3, 38 Sqn RAF

Lancaster G-AHJW, operated by Flight Refuelling Ltd. and used in 'hose and drogue' refuelling trials.

Building the Airfix 1/72 scale Lancaster

"Because it was there".

Considering the recent release of Hasegawa's and Revell's new 1/72 scale Lancasters, this might be the best answer to the question, "Why build the veteran Airfix Lanc?"

There will be thousands of these old but still respectable kits in storage all over the world. If you have already committed to purchasing the kit, and possibly a slew of expensive after market accessories and conversions, is it still worth building the 1970s vintage Airfix Lancaster?

Without doubt, the Airfix kit has been superceded in terms of detail, surface finesse and engineering by both the new Revell and Hasegawa offerings. Even so, the Airfix Lancaster has an accurate outline and is not without its own quaint charm.

When I knew that the Revell kit was about to arrive, I started building the Airfix Lancaster.

The more recent boxings of this kit are moulded in grey coloured plastic, making it easier to work on that the original black styrene of the 1970s.

There is very little detail in the cockpit apart from the raised pilot's pulpit, seat, control column and instrument panel. This is not really a problem though, as little will be visible through the heavily framed canopy. I added harness straps from lead foil, and punched a disc from plastic card to attach to the seat's armour plate. The cockpit components were painted and the kit instrument decals were applied.

This is quite a simple kit so construction proceeded quickly. The wing and engine nacelles were assembled and test fitted against the fuselage.

I planned to leave the thousands of rivets in place on the fuselage, so it was important to minimise later filling and sanding that would wipe out the raised surface detail. The fuselage halves aligned quite well along the centreline join. These parts were clamped and secured using Tamiya Extra

Thin Liquid Cement, then taped for further insurance.

I thought that the large expanses of the wings needed some structural highlighting, so I scribed the main panel lines on the upper surfaces using self-adhesive Dymo tape as a guide. After scribing, the panel lines were brushed with Tamiya Liquid Cement. This technique smooths any rough edges to the newly scribed lines.

All the main components were now brought together. I found that the wings fitted better when the facing surfaces were ground down with a Dremel motor tool. This resulted in a flush fit against the fuselage, but the wings were slightly narrower than the recess in the fuselage, resulting in a narrow gap at the top and bottom. Similar gaps were present between the horizontal tail planes and the rear fuselage.

Gaps were also present where the upper leading edges of the wings met the top of the engine nacelles.

Milliput White, a slow setting two-part epoxy putty, was used to address all these gaps. This putty may be shaped and refined with a damp fingertip for some time before it sets, minimising the amount of sanding later required.

At this late stage I decided that I would build the model wheels-up in flight mode. I was uneasy about fitting the bomb bay and undercarriage doors in the closed positions, but their installation was completely trouble free.

An aeroplane in flight needs a pilot, so I used the two crew figures supplied in the Airfix kit. Painting these figures brought back vivid memories of modelling in the 1970s. A combination of Vallejo and Tamiya acrylics were applied to the figures with a fine brush. Unfortunately, the pilot completely obscured all of my work on the harness straps.

The Airfix Lancaster does not include the broad bladed propellers for the Mk.III, so I used Aeroclub's Paddle Blade Propellers and Spinners, item number P113. The white metal propellers fitted well after a few minutes cleanup. I combined the white metal props with the kit's plastic spinners.

My original plan was to use Falcon vacformed parts for the canopy and turrets because the kit parts looked thick and distorted on the sprue. However, the kit clear parts improved dramatically after a bath in Future floor polish. Contrary to the instructions, I carefully glued the side blisters to the canopy before masking with Tamiya tape.

ABOVE: Cockpit detail in the Airfix Lancaster is minimal, although little will be seen inside the black cockpit through the dense canopy framing. A set of harness straps was added from lead foil, while a circle was punched from thin plastic sheet for the seat's armour plate. I probably should have also added arms for the pilot's seat, but even the harness was later hidden by the pilot.

BELOW: Kit engineering is simple, so basic construction is fast.

I also modified the mid-upper and forward turrets to permit them to be installed after painting. The raised ring around the base of the mid-upper turret was carved off, and the locating pin on the front turret was sliced off the bottom of the part.

The canopy was glued in place in preparation for the paint job.

The model was painted using Xtracrylix paints applied with the Testor Aztek A470 airbrush.

Although I was generally pleased with the finish of the model, I did manage to reverse the upper surface colours - the Dark Green is where Dark Earth should be and vise-versa. The Airfix instructions only quoted Humbrol paint numbers, not the names of the camouflage colours, and the diagram showed Dark Earth as the darker of the colours on the upper surfaces. Even so, I really should have cross-referenced the Humbrol numbers with the camouflage colours before spraying!

The markings are for JO U, "Uncle Joe", of 463 Sqn RAAF based at Waddington in the UK during 1944. Decals are from Tally Ho! sheet 72 042. Despite the challenges of being applied over thousands of raised rivets and black paintwork, the decals performed very well after application of Micro Sol, Gunze Mr Mark Softer and Solvaset.

My Airfix Lancaster was finished with a coat of Polly Scale Flat acrylic.

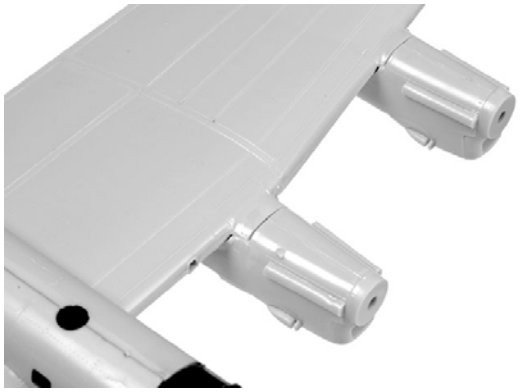
With the paintwork complete, I installed the turrets and filled the remaining small fuselage windows with Krystal Kleer. Once dry, the Krystal Kleer dries, well, crystal clear. This is certainly the fastest and easiest way to form small windows.

The final touch was to add two small triangles cut from styrene strip to the top of the fuselage nose representing the glycol windscreen washers, and aerial wires from smoke coloured nylon monofilament (invisible mending thread).

Above: The fuselage halves were clamped together to ensure accurate alignment.

Above: The surface of the Airfix Lancaster is covered with tiny raised rivets. I decided to supplement these on the wings with recessed panel lines. These were marked out based on plans, and scribed using self-adhesive Dymo tape as a guide.

Above: The shape of the model looks good, and fit was not too bad.



Above: The main areas that required additional attention were gaps between the engine nacelles and the leading edge of the wings

Above: Although the wings fitted snugly against the fuselage recesses at the wing roots, there were a few gaps that needed to be filled here

Above: The tailplanes sported a similar gap to the wing root

Above: The kit's clear parts were used but some modifications were made to permit the turrets to be installed after the model was painted. Tamiya tape was used to mask the various canopy and turret frames.

Above: Milliput, a white coloured two-part epoxy putty, was employed to fill the gaps at the wing roots, tail planes and the engine nacelles. Tamiya Surface Primer was applied over the top of the Milliput and sanded smooth when dry.

Above: As this model was to be depicted in flight, the kit's pilot and navigator figures were painted and installed.

Left: With the gaps filled and the model painted, the Airfix kit still looks the part even after three decades on the model shop shelves.

The only addition to my model was white metal broad-bladed propeller blades from Aeroclub.

Aerial wires were added using smoke coloured invisible mending thread.

Left: The markings are for a Lancaster B.Mk.III JO U, "Uncle Joe", of 463 Sqn RAAF based at Waddington in the UK during 1944. Decals are from Tally Ho! sheet 72 042

Building Hasegawa's Lancaster B.I Special

Model by Chris Wauchop

This is Hasegawa's 1/72 scale Avro Lancaster B.Mk.I with Grand Slam bomb. Chris Wauchop's model represents a machine from 617 Sqn. RAF during the attack on the Arnesberg Bridge in 1945.

The Grand Slam version of the Lancaster B.I featured faired over forward and upper turret positions, and an open bomb bay to accommodate the huge 10 ton (22,000lb) "earthquake bomb". The Grand Slam bomb was developed to destroy fortified structures that were otherwise impervious to aerial bombing.

Construction

Hasegawa provides all the parts needed to accurately build the Grand Slam version of the Lancaster in their Limited Edition kit number HAS00819. No additional cutting is required, as the bomb bay is supplied as an insert.

Construction was completely straightforward with almost perfect fit of all parts.

Relatively few enhancements were made:

- Eduard's exterior photo-etched detail set (72450) was used.
- A yellow circle added to top of the pilot's seat
- Some filler (Milliput White) was required around the fuselage side windows and, following examination of reference photos, one of the starboard side windows was filled in and overpainted.
- The ends of all gun barrels were hollowed out using a new scalpel blade

Painting and Markings

Most of the additional effort was expended on the paint and markings.

All paint was applied with the Testor Aztek A470 airbrush fitted with the fine tan-coloured tip.

The kit includes the markings and colour scheme used on this aircraft.

Lower surfaces were first painted with a mix of Tamiya X-18 Semi-Gloss Black with XF-1 Flat Black in a 50/50 mix, with a dash of XF-64 Red Brown added.

Upper surfaces were painted Gunze Sangyo H72 Dark Earth (after an abortive coat of Tamiya Flat Earth - just did not look right), and H330 Dark Green.

The wheel hubs were first painted silver, followed by a heavy application of the black/brown mix.

Decals

Kit decals were used with the exception of the fuselage roundels (which were too large anyway) and fin flashes. The only criticism that I have of the kit is the red in the roundels is too pale.

Unfortunately, Chris's client wanted this particular aircraft so the kit decals had to be used for the codes and serials, but I think that the result doesn't look too bad.

All decals were applied using Gunze Sangyo, Mr Mark Setter and Mr Mark Softer. They performed flawlessly.

Weathering

Exhaust stains were first sprayed with a black/brown mix, then the centre of the stain was oversprayed with Tamiya XF-57 Buff.

In two photos of this particular aircraft, which appear in SAM Publications' "Lancaster Modellers Datafile", it can be seen that the upper ventral turret fairing has been removed. The area underneath this fairing appears to have been left unpainted, with a darker coloured round panel covering the hole where the turret was previously installed.

These two photos are still from movie footage. After completion, I discovered that I had about 3 seconds of this footage on DVD.

The teardrop shaped area under the fairing was painted silver, and the round cover was initially painted a wood colour to suggest unpainted plywood. Chris thought that this combination

ABOVE: Hasegawa's cockpit is barely better detailed than the Airfix offering from the 1970s. Chris supplemented his kit cockpit using Eduard photo-etched detail parts, although most was forever hidden.

BELOW: This is the "Grand Slam" version – a Lancaster Mk.I with a heavily modified bomb bay and weight saving measures including fairing over of the nose and mid upper turrets. A robust fit and precise dihedral is ensured by the stout wing spars that run through the fuselage.

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BELOW: Hasegawa's cockpit is barely better detailed than the Airfix offering from the 1970s. Chris supplemented his kit cockpit using Eduard photo-etched detail parts, although most was forever hidden.

BELOW: The main wheels and undercarriage are very nice, but the tail wheel is too large in diameter.

looked disturbingly like a fried egg, so he repainted the circular cover Dark Green instead. The area was toned down with the black/brown mix to blend in with the surrounding camouflage.

Panel lines and various dirty patches on the upper surfaces were emphasized using the thin Tamiya Red Brown / Flat Black mix thinned around 80% with alcohol. Some panel lines and hinge lines on the lower surfaces were post-shaded with 100% Flat Black which, in the right light, shows up subtly against the black mix of the airframe.

Paint chipping was done with a very sharp Prismacolour Silver Pencil.

A very thin wash of Tamiya X-18 Semi-Gloss Black was brushed around the canopy framing.

Hasegawa's 1/72 scale Lancaster B.Mk.I Grand Slam is a beautiful kit of a fierce looking bird!

ABOVE: Kit decals were used except for the fuselage roundels and fin flashes.

ABOVE: Wartime photos suggest that bare metal was exposed when the large streamlined fairing mid-upper turret fairing was removed. Chris originally painted the circular turret fairing in a pale wood colour, but decided that the result looked a bit too much like a fried egg on the fuselage spine!

BELOW: The big Grand Slam bomb slung under the fuselage dramatically alters the profile of the Lancaster.

BELOW: Hasegawa has positioned the canopy escape hatch (the squarish panel inside thicker frames on top of the canopy) too far forward.

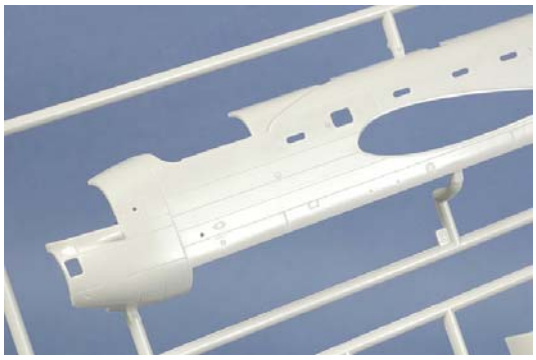
BELOW: This image was composed in Adobe Photoshop, portraying Chris's Lancaster flying into the half light of dusk.

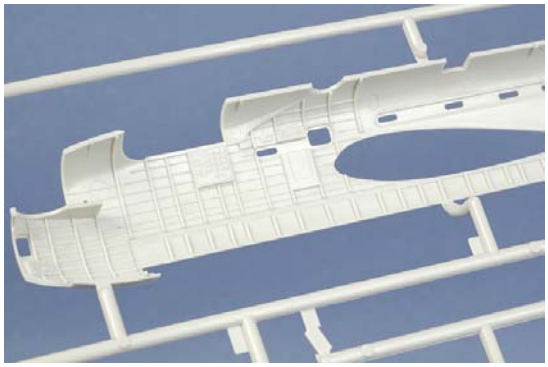
Revell's new 1/72 scale Lancaster in the box

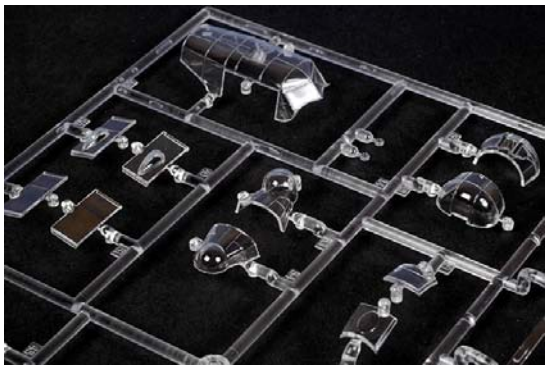
Revell's 1/72 scale Lancaster B.I/B.III kit comprises 244 parts in pale grey plastic, 34 parts in clear and markings for two aircraft.

The exterior surfaces feature very fine and crisply recessed panel lines combined with raised detail and subtle fabric texture as appropriate.

The fuselage interior is alive with structural detail and instruments moulded to the sidewalls. This authentic environment is complimented by separate detail parts for the pilot's, navigator's and radio operator's cockpit positions. The pilot's seat is very impressive, with raised cushion and shoulder harness details (there are no lap belts though). The armrests are cleverly moulded in place. The instrument panel looks great too, with its recessed dials and crisp throttle quadrant. You'll have to add the handles yourself though, as long as you have a good eye and a steady hand. Tables, bulkheads and boxes help populate this busy front office.







This high level of interior detail is carried through to the bomb bay, which offers optional ordnance including a nice looking cylindrical Cookie bomb. The inside of the bomb bay doors feature the characteristic double curve too.

Revell has supplied two nicely detailed Rolls Royce Merlin engines for the inboard nacelles, which may be displayed behind open cowlings if desired. The level of structural detail in the wheel wells is outstanding too. Separate parts are included for the open lattice structure opening onto the interior of the wings.

A large number of options are offered. These include:

- both B.I and B.III style clear nose, astrodome and canopy sides (blisters or flat sections)
- both narrow and paddle blade propellers
- alternative pilot's seats (one with armoured headrest and back cushion, and one without)
- H2S fairing in clear plastic
- shrouded or unshrouded exhausts
- fairings for covering upper and ventral turret positions as required
- different styles of rear turret fairing

Moudling quality is first rate. There are only a few sink marks, and there is no flash. There are a few holes in the back of the armoured pilot's seat and a few bulkheads (a result of the deeply moulded parts), but these can easily be filled and sanded flat. There are a couple of ejector pin circles on the inside of the fuselage, but these have been positioned so that they will not be visible once the halves are joined.

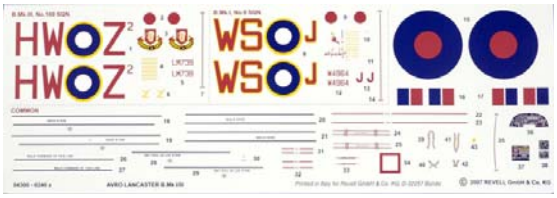
The only areas that are not up to the standard of the rest of the kit are the wheels, which look slab sided and have featureless hubs (even the Airfix wheels are better), and the underdetailed machine guns. Fortunately, Quickboost has released a set of 1/72 scale machine guns for Hasegawa's Lancaster that will be suitable for this kit too.

The kit breakdown is fairly typical of a modern mainstream model. The parts feature locating pins to assist alignment. The wings and horizontal tailplanes will be mounted on large box spars which are installed between the fuselage halves, much like the real aircraft. This should result in a robust fit and positive dihedral.

The transparencies are very thin and crystal clear.

In addition to all the options required for both the B.I and the B.III variants, the clear parts include the strip of fuselage windows seen on early Lancasters, landing lights, navigation lights and inserts for the small round windows on the upper fuselage.

The decals are satin in finish. Register is good.



Markings are supplied for a Lancaster B.III of 1000 Squadron RAF in April 1945, and a Lancaster B.I of 9 Sqn. RAF during 1945.

Stencil markings are included, as are optional decals for the instrument panels, radios and harness straps.

Building Revell's new 1/72 scale Lancaster

Revell's new Lancaster boasts nearly 280 parts compared to Hasegawa's count of a little over 200.

The gap is explained mainly by Revell's extra parts for the engines, wheel wells and cockpit interior.

Due to this high parts count, it is advisable to be very familiar with the instructions before starting the model.

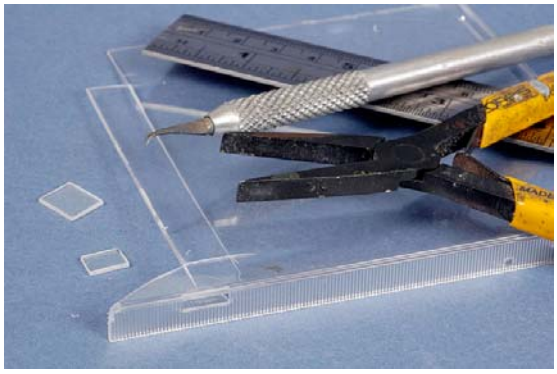
I did not conform to the assembly sequence suggested in the instructions. Instead, I kicked off with two pieces of fairly minor surgery. My Lancaster was destined to depict the MR.3 variant. These were unarmed maritime reconnaissance aircraft. Most of the options needed for this minor conversion are supplied in the Revell box, including the blanking plate for the unoccupied mid-upper turret position, the unshrouded exhausts and paddle bladed propellers.

The only customisation required was the addition of two windows in the rear fuselage. I cut some oversize rectangles from the clear plastic of a compact disk jewel case. Next, corresponding shapes were cut out of the rear fuselage. The clear plastic was dipped in Future floor polish and, after they were allowed to dry overnight, secured in the fuselage with super glue. The windows and the surrounding plastic was then sanded and polished to ensure that they were totally flush. The interior and exterior of the windows were masked with Tamiya tape, and surrounding panel lines were scribed.

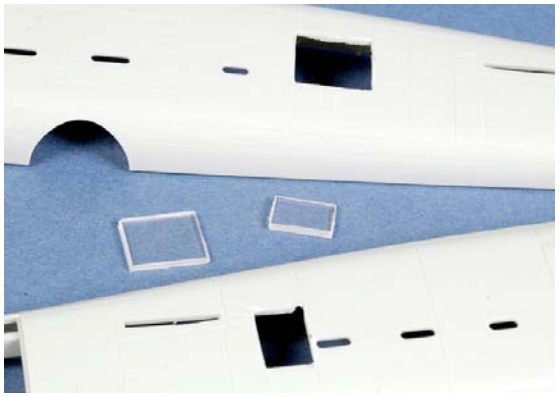
Although the surgery was successful, the interior of the Lancaster fuselage is so dark that I could have much more easily painted a glossy black rectangle on the rear of each fuselage side for almost identical effect.

One of the comments made about Revell's Lancaster when it was first released was that the dihedral angle of the outer wing panels appeared to be flatter than either the Airfix or the Hasegawa kits. Straight from the box, the dihedral of Revell's outer wing panels is around 4°.

According to some references, the dihedral angle should be around 7°. Photos of the aircraft in flight seem to confirm this steep dihedral. However, images of Lancasters on the ground are less



ABOVE: The Lancaster MR.3 was fitted with two additional windows in the rear fuselage. First, oversized rectangles were removed from the clear plastic using the "score and snap" method.



ABOVE: Now, corresponding rectangles were cut out of the kit fuselage sides. The rectangles were first scribed deeply, then a Dremel motor tool was used to cut diagonal lines between the corners. The resulting triangles were then pushed in to create the rectangles. The rough edges were cleaned up with a hobby knife.

persuasive. The dihedral does seem to be a degree or two less when the Lancaster is parked, with the wings free of the forces of lift and possibly laden with fuel. I am not willing to suggest that there is a single correct answer to this question. To some, the flatter dihedral of the Revell kit will be perfectly acceptable.

However, I thought that it would be a fairly simple matter to crank the dihedral up around 2°, so I set to work.

First, I deepened the chordwise outer wing panel line on the upper wing halves with a scriber, then cut the outer panels off using an Xacto razor saw. There are two parallel panel lines in this area. I cut along the most outboard of the two. There were no modifications made to the lower wing halves, which are quite flexible at the outer panel join due to the presence of the long openings for the wheel wells.

Each wing was now assembled. The newly separated upper wing halves were glued to the lower wing halves. When these assemblies had dried, the new dihedral was set by stretching Tamiya tape from the wing tip to the wing root. When I was satisfied with the new dihedral angle, Tamiya Extra Thin Liquid Cement was brushed along the join. The result was a wing with a dihedral angle of around 5-6°. Only minor gaps along the upper wing join remained to be cleaned up.

With the wings set aside to dry, I started work on the inboard engines. These are nicely detailed straight from the box, but the mounts are quite fiddly to align with minimal recesses to locate the shallow pins. The orientation of the mounts to the firewall is not entirely obvious either. Further complications arise if the engines are installed with unshrouded exhausts behind closed cowlings – it is very tricky to thread the exhaust stacks through the slots in the engine cowlings.

I would suggest that, if the engine cowlings remain buttoned up, you omit the engines and simply install the unshrouded exhausts. You will need to add a blanking plate to mount the exhausts inside the cowling, but this will be far less time consuming than actually assembling the engines. If you are building a Lancaster with the exhaust shrouds, it will be even simpler – just glue the shrouds to the outside of the cowlings. You will always need to install the rear firewall and parts 84, as these are the mounts for the main undercarriage legs.

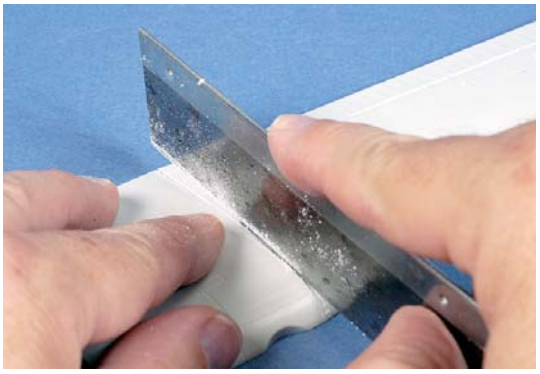
Despite the relative complexity of the engines and nacelle assemblies, fit was close to perfect.

The wheel wells match the engines for authenticity. Once again, plenty of test-fitting and careful alignment is necessary for a good result. I found that the sidewall rib structure (parts 94) protruded slightly beyond the bottom surface of the wings, interfering with the fit of the inboard engine cowlings. I sliced and sanded the excess flush with the wing surface before installing the nacelles.

Only at this point of construction did I return to Step 1 in the instructions – the cockpit. What a delight this is. The detail moulded to the sidewalls

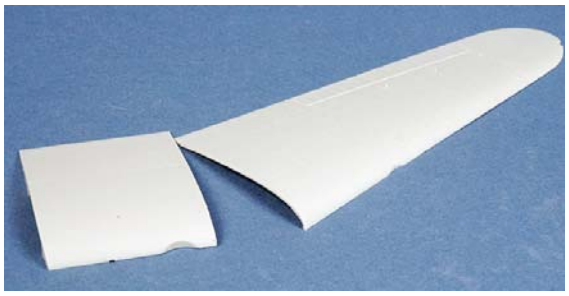
ABOVE: Increasing the dihedral of the outer wing panels is as simple as cutting the upper wings into two pieces. The outer panel line was scribed to offer a more positive cutting line for the razor saw.

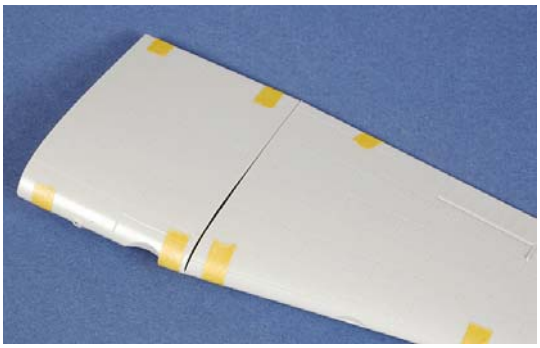
BELOW: This is the only surgery required.



ABOVE: An Xacto razor saw made short work of separating the outer panels from the upper wing halves.

BELOW: The two upper wing parts are glued to the lower wing half. The width of the razor cut is sufficient to increase the dihedral by around 2 degrees.





is excellent, and the supplied parts deliver a suitably busy front office. Careful painting brings out the detail nicely. I used the kit-supplied decals for the instrument panel and radio sets. These look really good; especially the radio where the decals conform perfectly to the raised knob and switch detail.

The big box wing spar is glued directly to the interior floor, forming a rigid "T" shaped support structure for the wings and fuselage. A stout spar is also provided for the tail surfaces.

After installing the side windows (which were destined to be overpainted anyway) and removing the masking tape from the inside of the new rear windows, the fuselage haves were joined. From this point, the balance of construction was very fast and easy. The fit of all parts ranged from very good to perfect. The join between engine nacelles and the wing leading edges was good, in marked contrast to the Hasegawa kit.

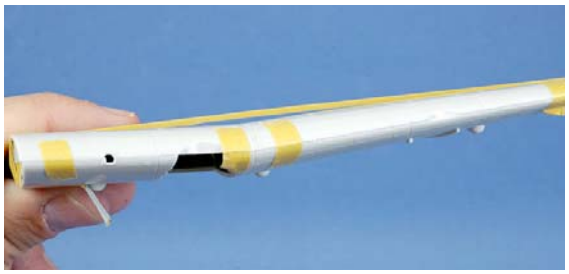
The one-piece bomb bay doors were fitted in the closed position. This resulted in the only serious filling required for the whole model, at the rear of the bomb bay, although it might have been more to do with my fitting than Revell's engineering.

I did smooth the contours of the upper engine nacelle to wing leading edge join with Milliput, and faired in the windows with Tamiya Surfacer. Tamiya Surfacer was also used to fill some narrow gaps above and below the wing and tail plane roots.

I dipped the clear parts in Future and mated the main canopy part with the rear section (tall astrodome – part 53) and the side blisters (parts 49 and 50) before masking. Does anybody actually

enjoy masking canopies? I must admit, I was less than enthusiastic about cutting intricate masks from Tamiya tape for my second 1/72 scale Lancaster in a row. Hopefully, Eduard and others will soon come to the rescue of lazy modellers like me with die-cut masks for the Revell Lancaster.

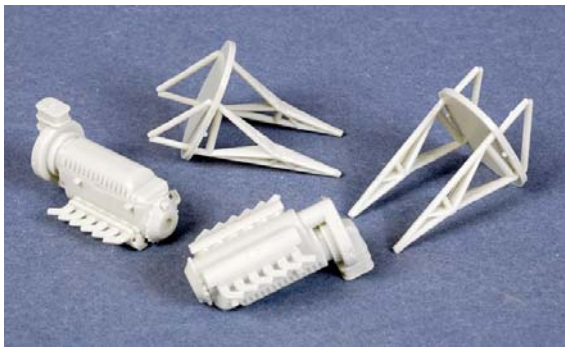
This drudgery was worth the effort though, as the canopy looks fantastic once installed. It fits extremely well too. The turrets are equally thin and



ABOVE: Tamiya 10mm masking tape was stretched from the wing tip to the wing root, closing the narrow gap between the upper wing parts and also increasing the dihedral. Once I was satisfied with the angle, I applied Tamiya Extra Thin Liquid Cement to the upper wing join line.

ABOVE: This simple surgery results in a subtle but noticeable increase to the wings' dihedral. Just make sure that the new dihedral is the same on both wings!

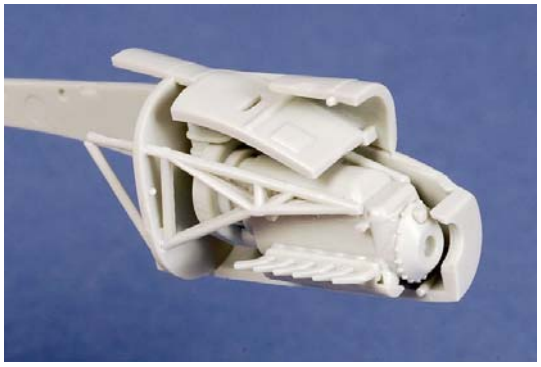
BELOW: The two inboard engines and mounts are nicely detailed and may be displayed behind open cowl panels. Construction of the mounts is a bit fiddly. If the engines are not to be displayed, it is possible to simplify this stage of construction..



BELOW: The wheel wells are almost works of art. They are realistically deep and authentically detailed. Once again, some patience is required to correctly align all these parts.

ABOVE A narrow gap resulting from our dihedral surgery was filled with a wedge of Milliput

ABOVE: The engines fit snugly inside the nacelles. The kit parts are precisely engineered for almost perfect fit but, if you are not planning to expose the engine, some tricky manipulation is needed to thread the ejector exhaust stacks through the slot in the other nacelle half.



distortion free – you will not need vacform replacements for the clear parts in this kit.

Painting, Markings & Finishing Touches

The paint job was prefaced with a grey primer coat, using Alclad's Micro Filler applied with my trusty Aztek A470 airbrush. Xtracrylix Medium Sea Grey followed on the upper surface.

White is a temperamental shade to use. Coverage is often difficult, and the result can sometimes look stark and unrealistic. I used Tamiya White Primer, decanted from the spray can and poured into a paint cup for application by my Aztek air brush. Tamiya's white primer covers better than most regular white paints, is tough, fast drying and sports a useful semi-gloss sheen.

After a coat of Polly Scale Gloss, the model was ready for decals.

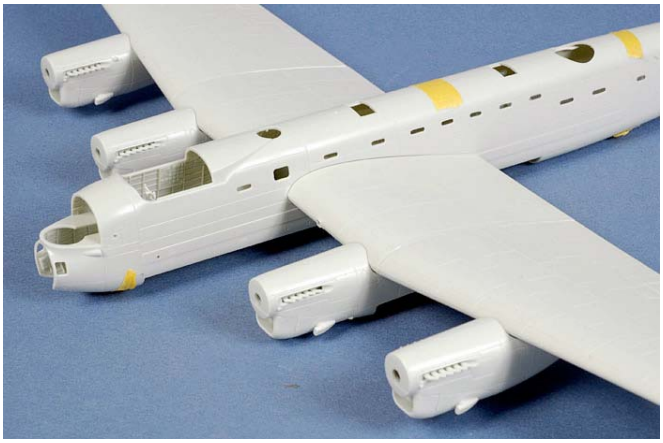
Xtradecals' 1/72 scale set number X72061, "The Avro Lancaster in Post-War RAF & Foreign Service", was used. The decals were thin, opaque and in perfect register. They settled down beautifully on the surface of the model. I supplemented the Xtradecals with several stencil markings from the kit sheet. These performed well too after a treatment of Micro Sol.

After the model was painted I installed the undercarriage. Like the engines and the wheel wells, assembly required care but the fit is excellent if the parts are lined up correctly. I was going to "borrow" a set of wheels from an Airfix Lancaster, but I wound up using the kit parts. I am certain that we will soon see better detailed and more accurate after-market replacements for Revell's main and tail wheels.

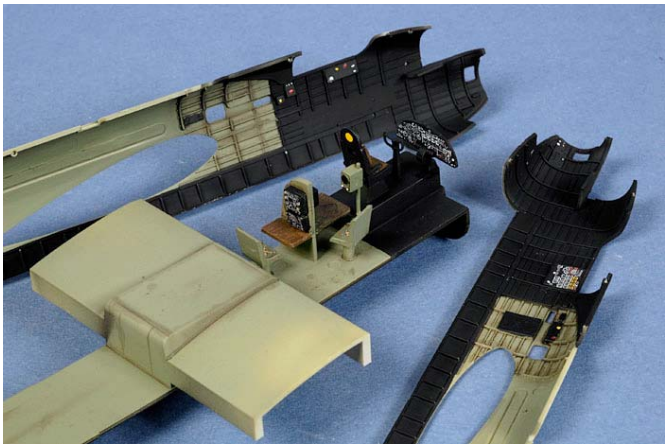
Finishing touches included whip antennas cut from stretched sprue for the spine and rod aerials from brass wire underneath the fuselage. I also replaced the radar arrays on the side of the nose with fine copper wire, as I thought that the plastic parts looked a bit over scale. I did not install the propeller baseplates early in construction as suggested in the instructions, instead building the entire assemblies, painting them and gluing them in place at the very end of the job.

ABOVE: The engine components ready for installation.

BELOW: Overall fit is excellent. In this photo, the fuselage, wings and engine nacelles are test fitted. The nacelles have no glue or tape applied – they simply snapped into place.



BELOW: Revell's busy Lancaster cockpit includes tables and chairs for the radio operator and the navigator. Deeply moulded structural detail and boxes on the sidewalls, raised radio and dial detail, plus the choice of two pilot's seats with shoulder harness moulded in place.



Conclusion

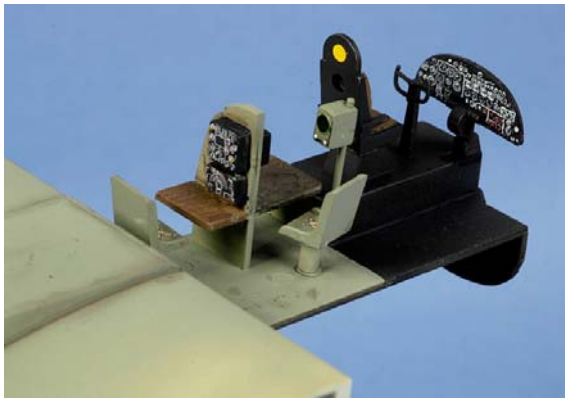
In 2008, modellers are fortunate to have the choice of three Lancaster kits in 1/72 scale which all have their benefits.

The Airfix kit remains accurate in outline and relatively simple to build, although some time will need to be spent filling and sanding. If you have an Airfix Lancaster collecting dust on your shelves, it may still be worth building some day.

Hasegawa's Lancaster family features finely recessed surface details, is generally accurate and offers a nice selection of options for modellers wishing to build different variants. It is somewhat let down by its basic cockpit detail and a few minor inaccuracies, including the backless forward turret and incorrectly placed canopy escape hatch, but it is a good example of modern model manufacturing capabilities.

Revell's new 1/72 scale Lancaster, in my opinion, scores level with the Hasegawa kit in terms of surface detail and finesse. I would rate the two kits around the same level in accuracy too, although each has different shortcomings. In the case of the Revell Lancaster, it is the half-hearted main wheels and the question of the outer panel dihedral. However, both of these issues may be addressed fairly easily.

The Revell kit clearly wins the detail category though. Its cockpit is much better than either the Hasegawa or Airfix kits, and the inboard Merlin engines are a nice option. Revell's Lancaster is outstanding value too, with a retail price of less than half the Hasegawa kit in the UK; and even being significantly cheaper than the 30 year old Airfix offering.



ABOVE: I used the kit supplied cockpit decals, which conformed beautifully to the plastic parts. I was especially impressed with the radios, which lined up perfectly under the decal knobs and dials for an impressive three-dimensional effect.

ABOVE: There is no avoiding the tedium of canopy masking. With no commercially available pre-cut masks available yet, Tamiya tape was used for this task. For the circular windows in the fuselage spine, Tamiya tape was stuck onto very thin plastic sheet and punched using a Waldron Punch and Die set.

BELOW: The fit of the clear parts was as impressive as the rest of the kit. The masked canopy and fuselage spine inserts were carefully glued in place before painting commenced.

BELOW: The new rear windows were also masked. Tamiya Surface Primer was brushed over the other fuselage windows, which were either painted or faired over on the full sized Lancaster MR.3

ABOVE: Revell even supplies the rotating H2S radar dish even though it will be hidden under the distinctive aerodynamic fairing. The area under the fairing was marked out to be painted black prior to application of the main camouflage.

ABOVE: The various openings were plugged with small pieces of rolled up paper. The engine intakes were masked with shaped blobs of Blu-Tack. Canopy and turret frames were painted black

BELOW: The model received an overall coat of Grey Primer. Alclad's Primer / Microfiller was used for this important job. The primer coat revealed a few seam lines and poorly filled gaps which were repaired before proceeding.

BELOW: The fuselage spine, the top of the wings and the horizontal tail planes were painted Medium Sea Grey. When dry, the areas that would remain grey were masked with various widths of Tamiya tape.

ABOVE: Tamiya's white primer was decanted into the airbrush cup and sprayed over the rest of the model.

ABOVE: The white canopy frames offer a dramatic contrast to the dark interior of the Lancaster. Precise masking and painting is essential for this scheme, as every tiny inconsistency is illuminated in stark relief. A few of the panel lines were touched up with white paint and the tip of a narrow black marker.

ABOVE: Weathering was generally kept fairly subtle, but the dark exhaust stains on top of the wings were frequently seen on the real aircraft. These stains were built up from fine streaks of heavily thinned paint.

ABOVE: Revell has included tiny details – even the miniscule balance horns for the rudder trim tabs. Machine guns were removed from the turrets of the Lancaster MR.3.