Satellite 1:87

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Vanfare for the Common Man

Lima 12t van upgrades and conversions – by Alan Monk

The Lima 12t van is a decent rendition of the BR 'standard' 12 ton, planked-side van of diagram 1/208. 17ft 6in in length on a 10ft wheelbase steel underframe, vacuum braked. The roof profile is very slightly out, but not so much to be glaringly obvious. The only real issue is the rather flat and undersized ventilator hoods on the ends, which are the clips holding the separate roof on.

The chassis is attached by two clips at each end on the underside. Be ready to catch the steel weight when the body is unclipped from the chassis. You will likely snap at least one of these clips off. I remove them all and glue the body to the chassis as a final stage. I discard the chunky Lima wheels and lifting-latch continental couplers. The roof is also detached at this stage – I cut away the clips at either end and will glue the roof permanently in place once the body modifications are completed and the body painted.

The Lima van came in a variety of six jaunty (and spurious) liveries with the following catalogue numbers: SR 3170; Castrol GTX 3169; Fyffes 3168; Ford 3160; Tate+Lyle 3156; LMS 3157.

This article is intended as a primer or guide to some of the conversion options. It is by no means exhaustive, with various small compromises inevitable and accepted. And none of this is really new - John Allison shared some of his Lima van conversions in *Satellite* #66. The conversions detailed here get increasingly complex, including cut & shuts and sanding sides or ends right back. For the latter operations, I find a simple sanding board of 100 grit wet & dry glued (with waterproof PVA) to a piece of 5mm plywood approx. 200mm x 100mm very useful. Used wet and with some elbow grease, this quickly takes the unwanted detail off the plastic core.

My sanding board, with a Lima Fyffes van having its sides smoothed right back

As always, work from drawings or photographs to show where bracing angles and other details are. Some useful reference sources are given at the end.

Oh… and buy shares in Evergreen – you'll be using a lot of their sheet, strip and shapes!

Plasticard/microstrip sizes: 10-thou = 0.25mm, 20-thou = 0.5mm, 30 thou = 0.75mm, 40-thou = 1mm.

BR 1/208 12t ventilated van, VAN/VANFIT, later TOPS VVV – planked sides

An easy one to start. Thousands of these were built from 1950 and lasted in traffic just into the 1980s. The design was a combination of GWR practice (planked side, cupboard doors) with the corrugated steel ends of LMS/LNER practice. They ran on the four-shoe VB (vacuum-braked) underframe, with a few later batches on the eight-shoe clasp brake underframe (see the Chassis section, below, for conversion). Detail differences were common: buffers could be spindle, Dowty and Oleo; axleboxes could be split or plate-front; rainstrips could be single curved (as per the Lima roof) or three-piece straight, which can be replicated with 10-thou microstrip.

To improve the Lima model, the main work is around the ventilator hood (and is common for most of the other conversions below). A piece of 6mm x 8mm 20-thou plasticard overlays on each end hood, spaced out with an 8mm length of 1mm square microstrip at the bottom. I don't bother infilling the sides, as the gap isn't noticeable once the paint is applied. For a planked 1/208, then just a repaint and the body is good to go.

Improved ventilator hood on the BR 1/208 12t ventilated van

BR 1/251 10t insulated van, INSULMEAT or INSULATED

These had a layer of insulation material inside, so had reduced capacity and were usually used for carrying frozen meat or other produce. Very occasionally they were used for fresh fish traffic (though this was officially frowned upon) and in later years, once meat traffic had finished, they became general traffic vans. Visually, the key difference is a lack of end hoods, the ribbing carried right across the upper end. All planked sides on the four-shoe vac-braked underframe. The only body amendment is to infill the ventilator hood hole flush, then replicate the end corrugations: Evergreen #240 1mm half round strip is ideal for this. Early livery was off-white with black lettering. Some carried the 'Ice Blue' livery, again with black lettering. The last survivors in general traffic wore bauxite.

Infilled ventilator with continuous ribs

GWR 12t 'Parto' planked van

As noted above, the BR 1/208 was derived from an earlier GW design, so it is possible to back-date the Lima van. In this case, the Lima sides are correct for the GW van, so the ends need sanding right back until all the corrugations disappear. On the now flush end, add horizontal planks from 2mm wide strips of 10-thou, 27mm long. Build these up from the bottom and overlap the curved tops, then sand back to the curved profile once set.

Add the end bracing from microstrip and then the four hoods, two at each end, 8mm x 6mm of 10-thou, spaced at the bottom with 8mm lengths of 1mm square strip.

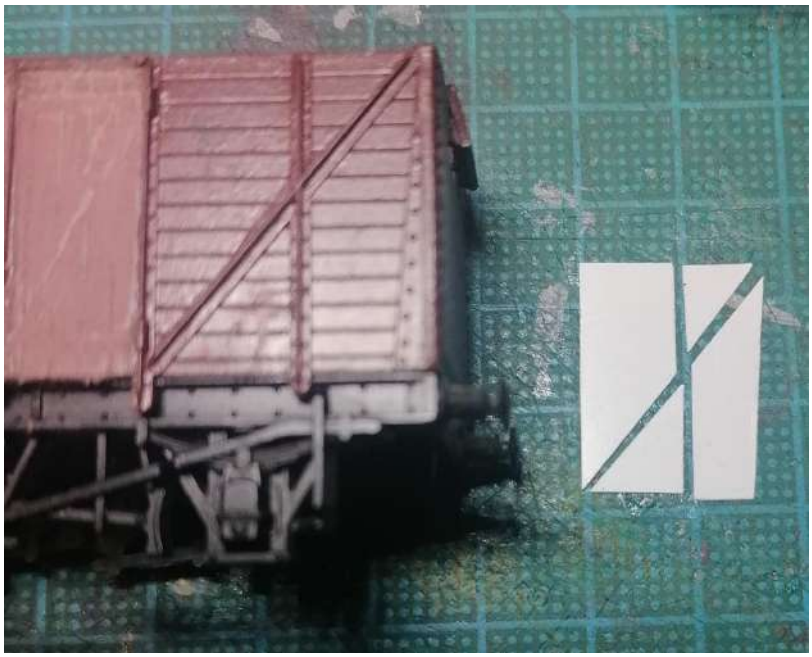
Later GW vans were built from plywood. For those, infill/overlay the side/door planking and just add the end bracing and hoods on the smoothed-down ends.

New end detail built up from plasticard and microstrip

BR 1/213 12t ventilated van, VAN/VANFIT, later TOPS VVV – plywood sides

From the late-1950s, construction changed to plywood for the main side material, still with corrugated steel ends. Early ply-sided batches retained planked doors and four-shoe VB. The majority had ply doors and ran on the eight-shoe clasp VB underframe and had Dowty or Oleo buffers. As ply was less easy to replace than planking, any damage to the sides was usually patched up with small panels, often nailed or screwed in place.

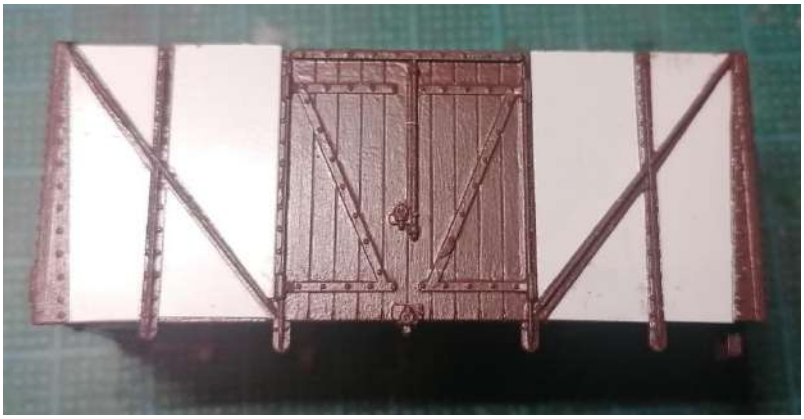
To achieve a ply-side van there are two options: fill the planking lines and sand back; or add 5-thou overlay, cut to fit around the strapping. Both need some dexterity around the strapping to get a good finish. I find the overlays method easier, though care must be taken with such thin plasticard not to melt or soften it too much with solvent glues. For ply doors, remove at least the diagonal strap from each door, leaving just the horizontal hinge straps and infill/overlay as per the sides. Again, my preference is to use overlays and I remove all the hinge strapping to make things simpler, adding back the four horizontal straps from microstrip once the overlays are on and set.



Door smoothed; new overlays cut to shape

Overlays applied

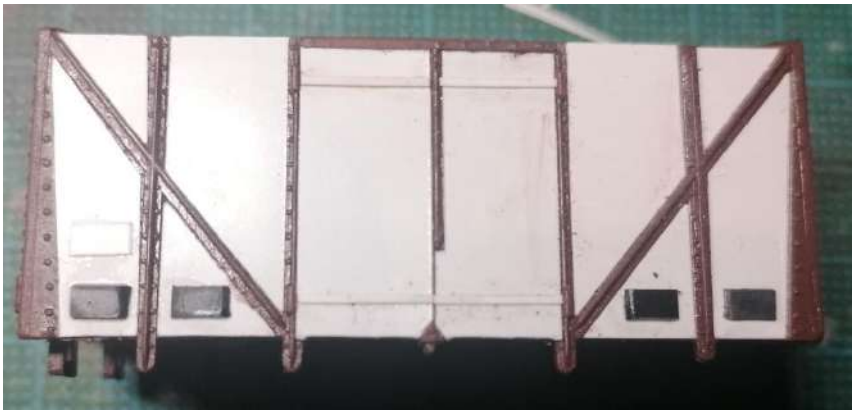
Most of these vans had three-piece straight rainstrips – carve, file or sand away the Lima curved rainstrips on the roof and replace with three strips of 10-thou strip, 1mm width, two lengths of 8mm and a central one of 40mm. Apply the long one first, centred down about 1mm from the lower edge of the roof. Make sure it's straight and level. Then apply the outer pieces in line, leaving a 2mm gap between those and the centre strip. Ventilator hoods as per 1/208.



Side panels done, door to remain planked

BR 1/233 12t ventilated fruit van, FRUIT, later TOPS VVV – plywood sides

A subtle variation of the ply BR van is the 1/233 fruit van, identical to the 1/213 but with the addition of four air scoops low down on each side, either side of the vertical bracing open ends facing the van ends. 4mm x 2mm pieces of 20-thou would replicate these nicely. Round off the short inboard side of each before gluing in place.



Full ply sides and doors, low ventilator scoops added

SHOCVANs

Shocvans had a body 1ft shorter than standard, so 16ft 6in in length. The chassis remained at 17ft 6in, with the body attached to the chassis via long springs along the solebars on both sides to give improved shock-absorbing cushioning of the load in the case of heavy shunting (and hence the name). These springs were covered by a long metal strip after a short while to prevent shunters getting their fingers trapped in the exposed springs.

As with the standard van, Shocvans came in planked and ply-sided variants and on the 4- and 8-shoe underframe, all vac-braked. All were bauxite, with three vertical half-height white stripes on the doors and ends initially, later three white squares, all located at the bottom edge.

To add the shock springs, I use a 30mm x 1.5mm strip of 20-thou plasticard either side, centred on the doors and spaced off the solebar to just be proud of the channel. A 2mm length of 1mm rod at either end of the strip represents the ends of the springs.

BR 1/209 12t SHOCVAN (planked), later VSV

The reduction in the body length was from the inboard panels either side of the door, which makes shortening the Lima body a relatively easy task. Razor-saw up the inside (nearest the door) edge of the middle strapping, either side, then across the floor to give a centre section with the doors and two end sections. Whilst the body is in pieces, remove the diagonal strapping from both sides on all three sections. Then mark out and remove a 1.75mm strip from either end of the centre section, joining the side cuts across the floor as before. True-up using the sanding board, then reattach the end sections to the middle, taking care to align correctly. Strips of plasticard inside will help strengthen and align the body. Allow to set, then add replacement diagonal strapping from microstrip. I used 30 x 10 thou strip for the flat and the angle, getting the flat into place first, then adding the angle. Four-shoe underframe.

Body cut into three sections (note this has filler overlaid to convert planked to ply pre-smoothed

Body reassembled; replacement diagonal strapping added from microstrip

The roof will also need shortening by 3.5mm. I take this out of the middle, taking good care to keep the cuts square across the roof. Masking tape is useful as a blade guide. Rainstrips were curved: smooth the remains of the Lima one and replace with a curved piece of microstrip.

BR 1/220 12t SHOCVAN (plywood), later VSV

Shorten the Lima body and roof as above. Whilst the body is in three sections, infill or overlay the planked sections, including the doors, and simplify the door strapping as per 1/213 above. Easier to do this before adding the replacement diagonal strapping. Most of these have the three-piece rainstrips (see 1/213).

The very last batch had a modified spring arrangement, with the long springs moved to within the chassis frame, so the solebars of this batch were unadorned plain channel.

When attaching the shock body to the chassis, glue it roughly centrally, with equal amounts of chassis protruding either end.

Body of SHOCVAN reassembled, showing difference in length over standard van

Chassis detail of SHOCVAN and body located centrally on chassis and spring/cover attached to chassis

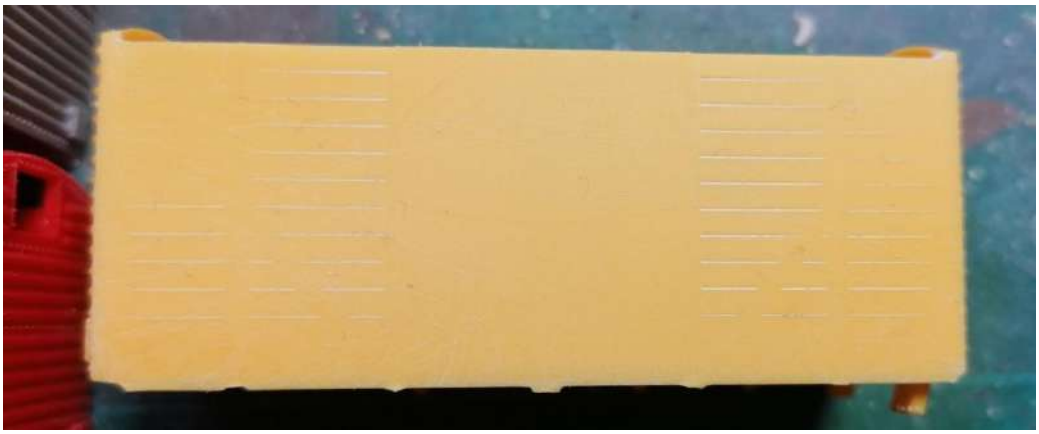
BR 1/217 VANWIDE, later VWV, VEV, VEA

2000 of these were built from 1960, the final development of the 17ft 6in, 10ft wheelbase van. In place of the cupboard doors of the standard design, a wider, 9ft doorway was provided with a pair of 4ft 6in doors which slid outward in runners to either end. Sides and doors were ply; corrugated steel ends. All ran on the eight-shoe clasp VB underframe, though there were six prototypes converted from earlier vans – these retained their original four-shoe VB underframe. Buffers were Oleo or Dowty.

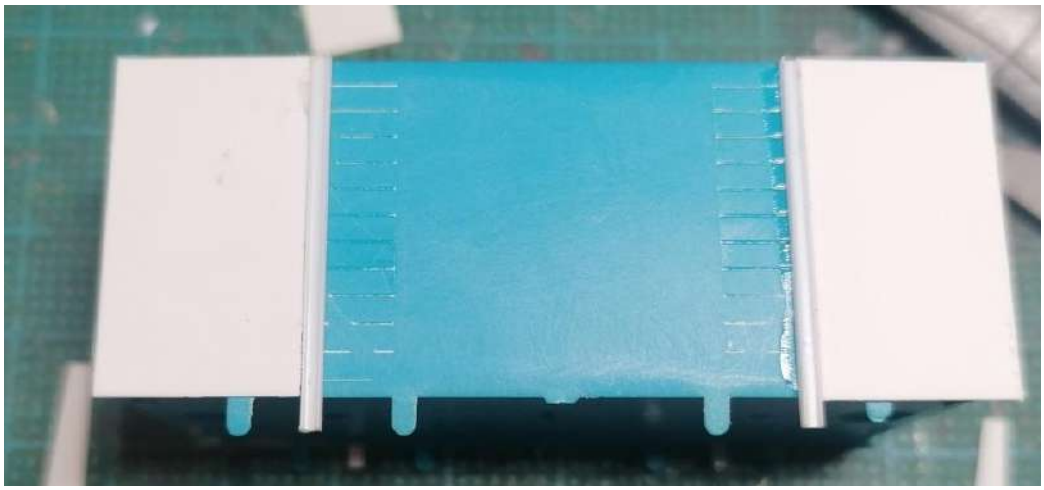
In later years, many were retro-fitted with roller bearing axleboxes for MoD use (TOPS code VEV or VMV). Later still, some 500 were converted with air-brakes and single-link suspension as TOPS VEA, again for MoD use. These remained in traffic into the 1990s and later still in MoD internal use.

Using a sanding board, sand the whole side right back until all the door, planking and other detail disappears. I found the 'Fyffes', 'Castrol GTX' and 'Tate & Lyle' vans the easiest to work with, as the quantity of lettering along the side makes it easier to see where more sanding is required. Take care to keep the body flat on the board and avoid rocking the body whilst sanding. You're aiming for a smooth, flat side with no detail or protrusions left. This includes the thicker door section which needs to be flush with the outer sides.

Adding the new side, I started with the outer panels of 10-thou sheet, 23.4 x 13.5, glued flush with the end and top. A 26mm length of Evergreen #261 1.5mm channel goes vertically against the inner edge, flush with the top of the side and protruding 2mm below the bottom edge. I then added the wrap-round steel corners – these are cut from 10-thou sheet, 23mm long, 4mm wide at the base and tapering to 2mm wide at the top. Cut four and apply to each corner with the angled side facing inwards. This should leave a 31mm gap between the channel for the doors. This is filled with a 31mm x 24mm piece of 10-thou sheet. The diagonal strips on the outer panels can go on next, 20 x 10 thou strip.



Lima van core with sides smoothed right back



New outer sides added to smoothed core, channel section to define 9ft door width

I drafted the doors on the Silhouette, to get consistency across all four doors. There is a flush outer frame around the door. This was scored in and the two rectangular recesses cut through. I cut the doors in 10-thou sheet and overlaid these onto the blank sheet attached earlier. This leaves the doors slightly proud of the channel lip. Triangular door corner plates were added, as were the frames around the recesses (again, cut on the Silhouette in 10-thou). Door handles and the opening bars were added in 0.5mm and 1mm rod.

A final touch are the full-length door runners top and bottom, added in 1mm square strip, with a curved dip carefully taken from the middle, centred on the doors.

Mine is an original Vanwide, so retains the Lima moulded springs and oil axleboxes. For a VEV, carefully saw the axleboxes off and replace with roller bearings either salvaged from a 4mm kit or model or fabricate from plastic tube/rod.

The single-link suspension for a VEA could be salvaged from the longer Jouef/Playcraft chassis, or perhaps the Lima four-wheel tank wagon

Completed vanwide body

LNER and LMS planked vans

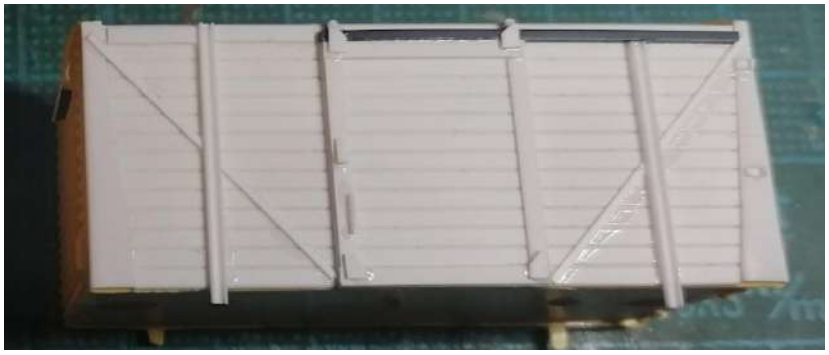
The LMS introduced the corrugated steel end around 1930 and the LNER soon followed suit. Each company had various designs with 9ft and 10ft wheelbases, unfitted and vacuum-braked, vertical and horizontal planking, but almost always with a rightward-sliding, top-hung door of about 5ft width. Many of the 10ft wheelbase unfitted vans were retro-fitted with vacuum brakes by BR and generally lasted into the 1970s.

Sand the entire Lima sides back smooth as above, then add new planked sides using Evergreen #2067 20-thou O gauge 'Car Siding', which gives accurate 6in width planking for H0.

I did a vertical-planked LNER diagram 116 van and a horizontal-planked LMS van to their diagram 2039. In each case I first put a 60mm x 24mm new base side on, then the four corner plates as per the Vanwide in 10-thou. The doors are 22mm (h) x 18mm (w) pieces of the Car Siding, centred on the body side and flush at the bottom edge. This gives enough gap above the door for the top runner, which is a 37mm length of 1mm square strip, aligned from the left side of the door and running right. Generally, the door planking was the same orientation as the sides, with only a few exceptions. Add any door and side bracing as required from strip or channel, depending on the prototype, along with door catches, grabs, stops and other small details.

LNER diagram 116 new side and door on smoothed core, corner plates still to add

LNER diagram 116 completed side

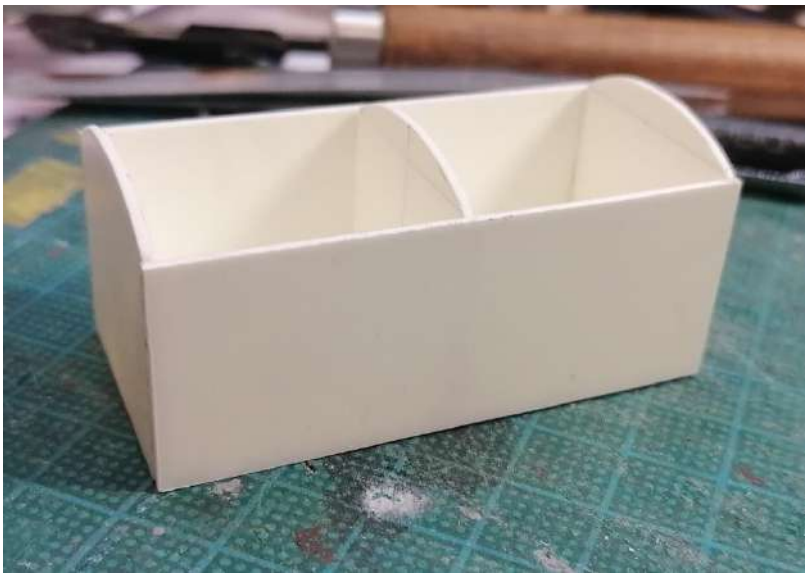


LMS diagram 2039, completed side

Plywood Vans – Pre-Nationalisation and early BR builds

As with the GWR, the LNER and LMS moved to all plywood construction, notably during WW2 when steel was in short supply. The very early vans built post-Nationalisation were continuations of GW, LMS, LNER and SR designs, but almost universally in ply, until the reversion to planked sides/corrugated ends with the BR 1/208 design.

GWR ply vans – infill or overlay the Lima side planking, remove the end corrugations and add the end bracing to the smoothed ends



LMS ply vans – smooth the sides as above, then use plain 20-thou sheet to build up the side rather than Car Siding.

To model the all-ply LNER vans, I would take all the side and end detail off a Lima van and add door overlays and bracing as per drawings and photos.

An alternative would be to use a Lima van as a template to cut new sides and ends from 40- or 60-thou plasticard and fabricate an entire new body with doors, bracing, etc. from 20-thou sheet

and 10-thou strip. An all-ply LNER diagram 195 van is on my 'to-build' list using the latter technique. There was also a Fruit version of the ply LNER van. Like the BR Fruit, this had the four air scoops low down on each side for a subtle variation.

There were also Shocvan versions of the LMS and GW-derived plywood vans. These could use a smoothed down and shortened Lima core but may be easier to fabricate from scratch in 40-thou plain sheet. The LMS corrugated end could be achieved using Evergreen #240 1mm half-round strip.

SR Vans

Possibly the simplest option, as Lorenzo has drawn up three varieties of the SR van (even-planked, mixed-plank, and plywood) as a one-piece 3D-printed body which will fit directly on the Lima chassis or his own 3D-printed chassis. Availability and ordering details in previous *Satellites* or via the Group.io I've done two, using Lima 7-plank chassis as they are the same as the van chassis and can be easier to find on the pre-owned market.

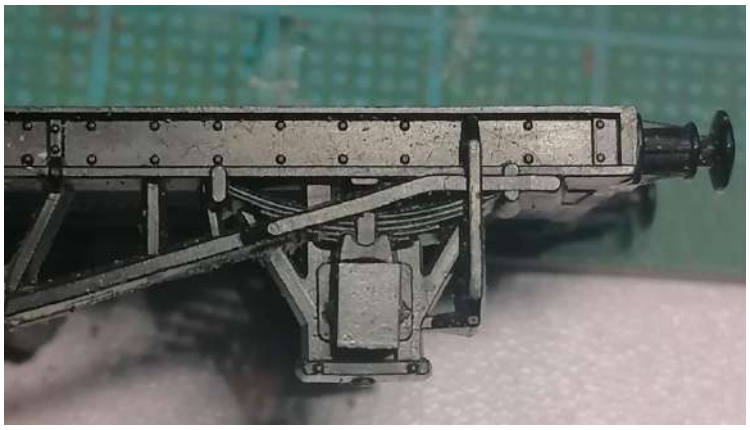
Yes, we have no Bananas!

Also possible from the Lima core are the various BR Banana vans. 8-ton Diagrams 1/242, 1/243 and 1/244 had vertical planked sides and ends, with flush planked doors and simple strapping/bracing. Alternatively, these would be suitable for scratch-building entirely from Evergreen Car Siding (#4067 is the 40-thou version with 6in planking for H0). These all ran on the four-shoe VB chassis.

The later 12-ton 1/246 banana vans were based on the 1/213 ply vans, with an additional middle door hinge and a flush blank plate where the ventilator hood would be. Eight-shoe clasp VB chassis, Oleo buffers. I'd likely use the Lima van as a basis for this with the ply overlays and infill the hood holes flush.

Chassis

The Lima chassis isn't perfect; certainly the brake gear needs work as the brake blocks would miss the wheel treads by quite some margin. It's also missing the tie-bar between the w-irons on four-shoe braked versions and the buffers are a bit short. The w-irons are a pre-Nationalisation 'open' type, but I've left them as-is on my conversions as the effort to infill the gaps above the springs for the BR 'open type' isn't worth the very small visual improvement. I do carefully remove the 'bang plate' in the middle of the V-hanger, as vans did not have these and it is obvious if left. Some deft but gentle work with a scalpel will take this out to leave just the V-hanger. Some vans need a shorter brake lever, which is trickier, as cleanly removing the lever and guide on the right of the right axlebox is near impossible. I'm not entirely happy with any of my attempts, so this might be one of those necessary compromises….



It is worth remembering that the Lima 7-plank open used the same chassis as the 12t van, so buy those when you see them as the chassis can also be used under scratchbuilt bodies (Lowfits, Conflats, Medfits, Highfits, etc.) or to replace broken/damaged van chassis.

For wheels, I use 10.5mm disc wheels on 24.5mm axles from a variety of sources – salvaged from 4mm RTR (the Cavalex Warflat, OxfordRail Warwell, etc), Chinese-made generic wheels sourced via eBay, Alan Gibson Lowmac (available on a 24.5mm axle to special order).

As I use Kadee couplings, I remove the Lima coupling bosses flush with the underside. I also remove the vacuum cylinder at the same time. On many of my wagons, I remove the rather stumpy Lima buffers (especially if one or more is damaged) and replace with 3D-printed alternatives, often using a Silhouette-cut 10-thou baseplate. I mount Kadee #242 draft boxes direct to the floor, centred between the buffers. Kadee #153 scale-head short-shank 'whiskered' couplers are my preferred choice, only fitting the longer #158 where longer buffers require their use.

On four-shoe braked vans (and other wagons using the Lima chassis), I've adapted Lorenzo's clever method to bring the brake gear in line with the wheels, reinforced by microstrip. A final touch on these is to carefully cut off the strap across the bottom of each w-iron and replace with a 41mm tiebar of 1mm square strip running between each w-iron on either side. Vacuum cylinders are from the various 4mm plastic kit sources.

Where clasp brakes are needed, I've adapted 4mm kit brake gear from the likes of Parkside/Peco.

On the LNER van, I replicated their unique off-set three V-hanger eight-shoe clasp VB gear using microstrip and 4mm components. Luckily this has the outer end of the brake lever and guide in the same place as the Lima chassis, reducing the amount of carving required.

I generally add some weight to each wagon – most of my vans have 20g of self-adhesive car wheel balance weights secured in the body (before the roof is fixed in place).

Roofs and rainstrips

The Lima roof can be used 'as-is' or sanded back to a smooth surface and alternative rainstrips added from 10-thou strip. Rainstrips could be curved to various radii or straight lengths in either a single strip or split into three (one long, two short) – check photos, as they vary even on the same build lot and over time as roof coverings got replaced.

Van rainstrips

Paint, weathering and decals

As I model 1970(ish), most of my vans are finished in various shades of BR freight bauxite. Humbrol 133 is a pretty good starting point, but I've also used 'bauxite' from the Railmatch and Phoenix ranges, along with some 'close enough' browns from the Vallejo range. As vans didn't get cleaned or repainted often, there should be plenty of tonal variation and weathering – unless you are modelling a train of brand new wagons being delivered, they should not all look the same colour!

Decals are from a variety of sources, HMRS, Model Master and Fox 4mm, though RailTec have some correct van decal sheets in their H0 range: H0 6312-4 and H0 6411-3/21-24.

Some completed vans

BR planked, ply and Vanwide vans

BR insulated and Fruit vans

BR planked and ply shocvans

SR planked and ply, GW vans

LNER and LMS vans

References

Barrowmore Model Railway Group – scanned copies of BR Diagram books, including number ranges

http://www.barrowmoremrg.co.uk/Prototype.html

Paul Bartlett's rolling stock photographs – the best source of images. Thousands of wagon photos including plenty of van options

https://paulbartlett.zenfolio.com/paulbartlettsrailwaywagons

IGG.org.uk – a good overview of wagonry, loads, traffic flows, etc. Although N-gauge-centric, there is lots of useful info applicable to wagons generally.

https://igg.org.uk/rail/index.htm#stock

RailTec decals

https://www.railtec-models.com/catalog.php?type=5&gauge=HO

Lorenzo's Lima brakegear improvements

https://chippedblade.wordpress.com/revisiting-the-venerable-lima-7-planks-open-wagon/

British H0 – Where to Start?

A suggestion from Frothnut

Working out how to model something in British H0 is a bit of a conundrum! Accordingly, having been dabbling in it since 1993, if I were to be starting modelling in British H0 today, I would, as they say, "Go back to basics". In my opinion, unless you want to do an awful lot of scratch-building and kit-bashing, the simplest way to proceed is to model the Southern Region of British Railways in the period from 1966 to 1972. During this period, you can operate all of the commercially-produced items that are, in relative terms, commonly available; albeit, only on the pre-owned market. Here's the reasoning:

• The Bulleid coaches produced by Fleischmann were native to the Southern Region.

• The BR Mk1 coaches produced by Lima were ubiquitous on BR.

• Lima's Class 33 (in service 1960 to present - just like me!) is the signature Southern Region diesel-electric locomotive.

• The Class 12 (in service 1949-1971) - another Bulleid design and resident of the Southern Region - can be fashioned from Roco's NS 500/600 'Bakkie', as it shares virtually the same bodyshell (the main distinction, if you're troubled by such things, are the distinctive Bulleid BFB wheels which can be represented by means of thin styrene overlays).

• The Class 42 'Warship' diesel-hydraulic (in service 1958-1972), famously produced by Fleischmann, regularly operated on Southern Region both on Waterloo-Exeter trains and local services along that route. It also regularly operated freight trains from the Western Region to the Southern Region. In 1967, the Class 42 was also deployed on a passenger turn to Bournemouth.

• The period from 1966 to 1972 allows many different BR liveries to run alongside each other - that's green, maroon, and blue-grey passenger vehicles covered, for example.

• The Class 33 and Class 42 regularly operated with both the Bulleid coaches and the standard BR Mk1 coaches.

• The Mk2s produced by Lima depict the Mk2b variant which only appeared regularly on the Western Region. Of course, the Class 42s were native to that region but, unfortunately, could not operate with Mk2bs due to lack of a train air brake on the locomotive. However, there were a few of the earlier variants of the BR Mk2 coach, on the Southern Region, that had vacuum brakes and these were hauled by Warships, when formed in rakes comprising Bulleid, Mk1, and early Mk2s (in green livery) in use on the Waterloo-Exeter route. So, if you're not too fussy about counting rivets, as the saying goes, you could operate all three together. The very clever and versatile Class 33 could operate with any rolling stock, as it had both vacuum and air brakes. The Class 33 had electric heat; so, it could operate with Southern Region, electric heat fitted, Mk1s, Mk2s, and also UIC stock, such as that used on the 'Night Ferry' train. The Class 33s were also used on coaching stock without electric heating during the warmer months.

• The covered vans and brake vans, produced by Lima, also saw service on the Southern Region during the period under consideration.

• The Southern Region saw a lot of ferry wagons and, of course, Wagon-Lits which reached the UK via train ferries. A good selection of the freight vehicles have been produced by Roco,

Modellbahn Union, ACME Treni, Electrotren, Liliput to name just a few. Even the CIWL Type F Wagon-Lits used on the 'Night Ferry' have been produced by Jouef and LS Models.

So, when you put that lot together, it makes a lot of sense to model within this framework in British H0. Of course, if you wanted to model an earlier period, you could consider a layout formulated around the Southern Region in the first half of the 1960s; utilizing the Lima Class 33, Roco shunter, and, even, the ex-USATC S100 0-6-0T (produced by, amongst others, Rivarossi and REE Modeles), a number of which were employed by the SR/BR on shunting duties.

By the way, another theme that works well in British H0 (well, almost British, anyway) is WWII, via the employment of the USATC S100, S160, and, again, the Roco shunter. The accompanying USATC rolling stock has been produced, variously, by Tillig, Sachsenmodelle, Klein Modellbahn, and Roco. In addition, the Lima RCH 7-plank wagon and GW Toad are appropriate for this period.

Anyway, that's my two penn'orth on the subject.

As others have said, there is a lot of very useful information on the British H0 website here: http://www.british-ho.com/

The journal *Satellite 1:87* is a cornucopia of information and all of the issues since 1994 can be found here:

https://groups.io/g/British1-87ScaleSociety/files/Satellite%201:87%20-%20Society%20journals

The Editor's Lament

This is my last *Satellite* as editor. Old age (I'm 77 this month), infirmity (cancer a few years back - now gone - together with a stroke), but most of all arthritis in my hands which makes use of a keyboard tricky at best, error strewn at worst, have made the last couple of issues a major travail as well as making actual modelling almost impossible. Fortunately, the answer came last month when Alan Monk agreed to become Editor. As you can see from this issue alone, he's an experienced and keen modeller in H0 and I know you will all support him, as you have supported me over the past several years. He can be contacted directly on alanmonk@gmail.com and all magazine contributions and correspondence should go to him from now on.

I'm not disappearing completely, of course. I have a couple of pieces for *Satellite* in draft or my head and I hope to be able to continue contributing in years to come. But it's time to hand over the reins of this august journal. Good luck!

Ken Clark

April 2025

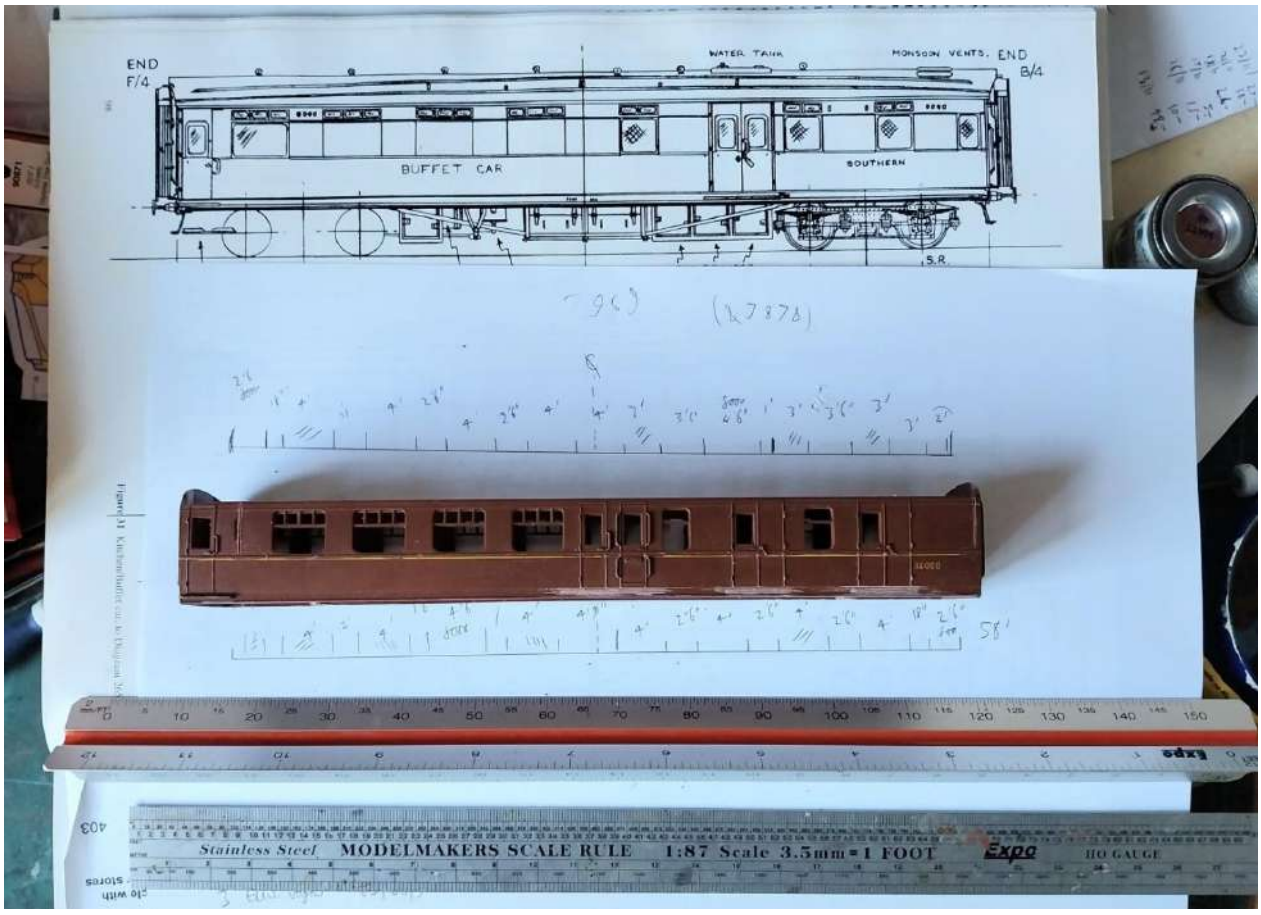
Maunsell stock in H0 - part 2

By Martin Petch

In the previous issue of *Satellite*, I demonstrated how to make a Maunsell restaurant car out of a Jouef/Playcraft Mark 1.

The second vehicle I attempted is the accompanying buffet car. On page 99 of Mike King's tome 'Southern Coaches', we read that the two such vehicles were numbered 7878 and 7969. The diagram on page 98 shows the arrangement, with a few detail differences.

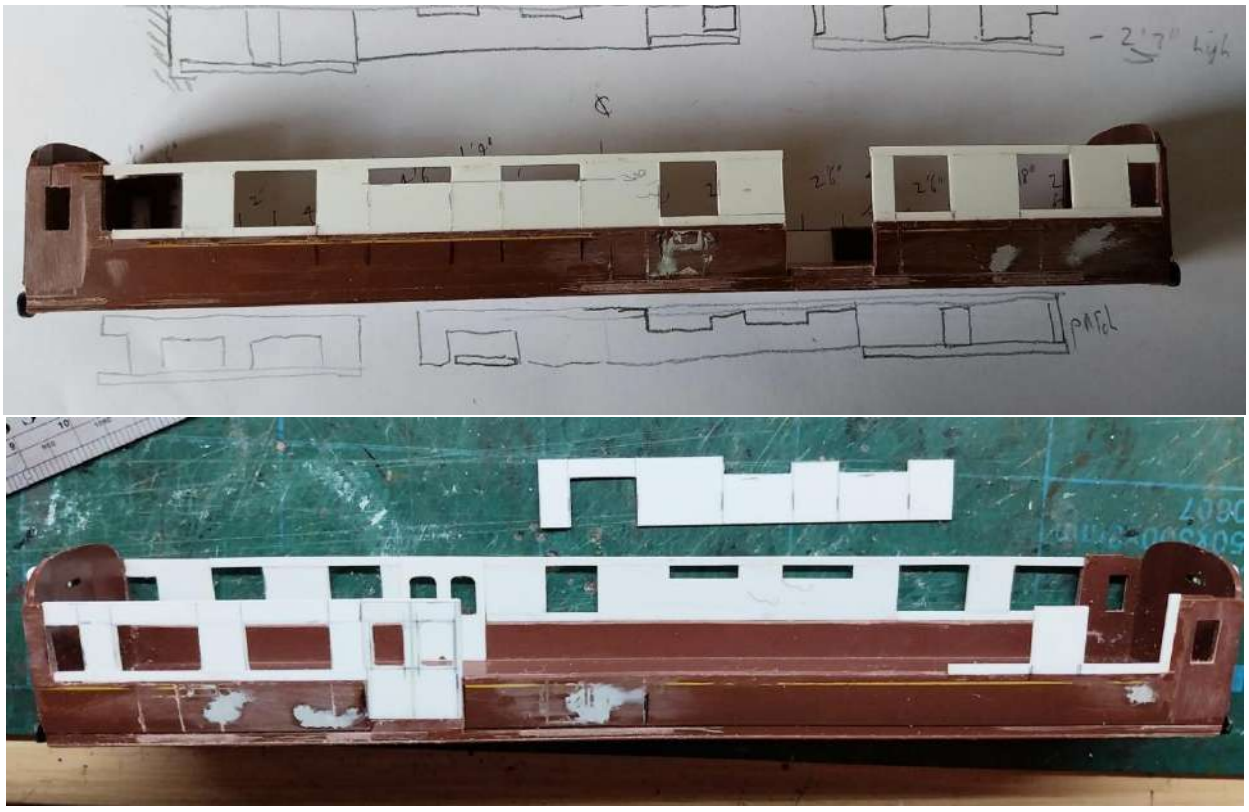
These vehicles look rather strange, with an assortment of windows with or without quarterlights, or just the quarterlights above blank areas.



The cut down Playcraft coach showing my method of measuring the sides

Start by dismantling the coach and giving the bits a clean in warm water with detergent; these models are now 50+ years old and may have got very dusty. Remove the steps on the ends and on the sills, and once again proceed to cut out the side window detail down to waist level. At the end with no doors, go right to the end corner; at the other, leave a scale 3ft 6in (I measure everything in scale feet and inches with a 1:87 ruler). File the door area flat, and thus form the inset with the curving side panels.

These coaches had a set of double doors part-way down. I drew out the width of all doors, windows and panels on paper, transcribing them from the 00 scale diagram in the book. I then cut out the door section from the panelling, measuring 15ft 6in to 20ft from one end (the doors are opposite each other).



Assembly of the kit of parts for the sides

Start by making the doors using 30 thou plasticard and fitting them, ensuring they are vertical. I then made up the new sides out of 30 thou, in a complex set of parts which I had sketched out beforehand. They are a combination of top and bottom strips 6in deep, and panels 2ft 9in or 2ft 3in deep. The jigsaw puzzle went together surprisingly quickly once I got started. The upper sides taper inwards and should line up with the top of the double doors.

The quarterlights are to a different design, in thirds, and the verticals seem to protrude. I used 30 thou square strip for the transoms, and 15 x 60 thou strip for the verticals.

Once again, file the roof detail off and add vents, rainstrips and a water tank. I shortened the underframe truss bars to a single length and added basic detail behind. This assembly was glued under the floor after a thin white metal weight had been added (sorry, I omitted this detail from the first article).

The interior is mainly corridor at one end, with a small seating area at the other. I had some spare bits of varnished veneer from my 1:32 tram modelling, and used this to form the panelling, and the narrow tables. The eight stools are large plastic rodding. The buffet counter is only visible at an oblique angle and is hidden by a couple of standing passengers.

The glazing once again has to be carefully cut so as not to reach the top of the sides, else it will foul the channel under the roof.

My next attempt will be to recreate the Open Thirds as seen on the Swanage Railway.

More Parcels Stock??

By Alan Monk

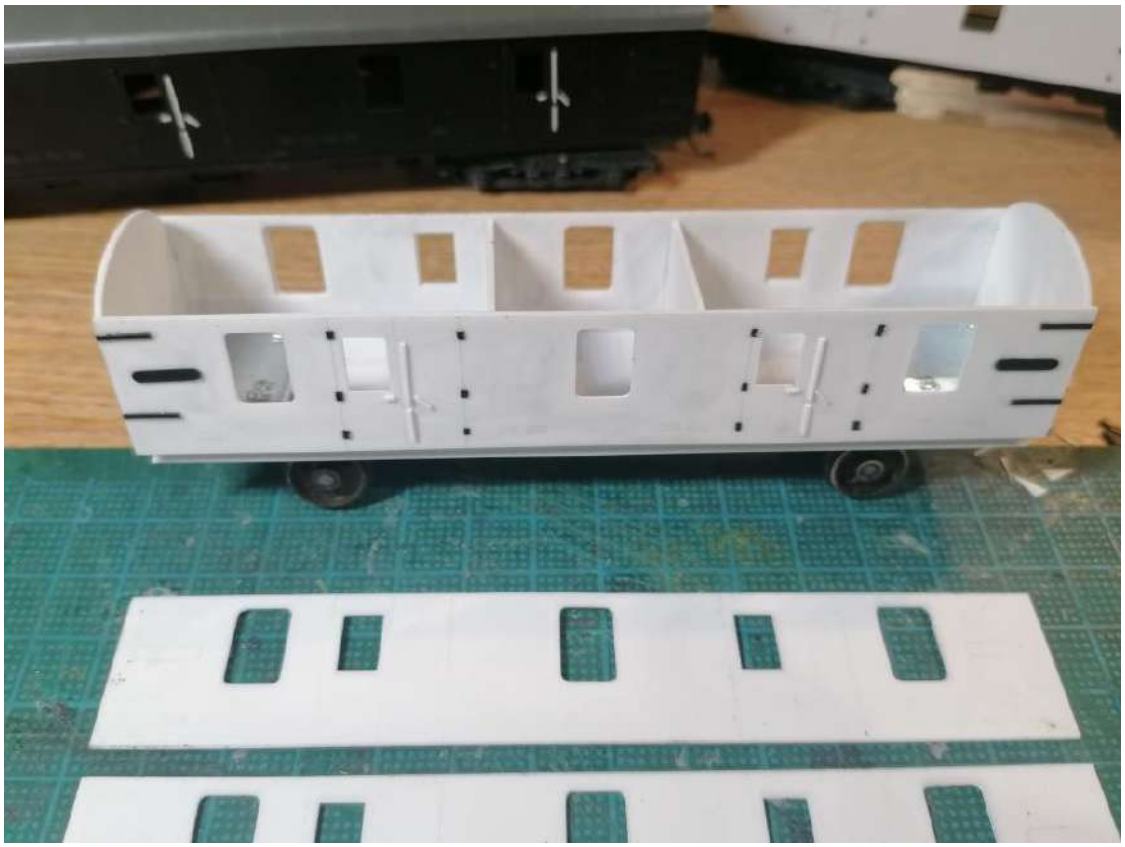
Following on from the simple BR Mk1 BG and ex-SR PMV builds (see *Satellites* #76 and #78), I fancied making more NPCCS (Non Passenger Carrying Coaching Stock) for use on Dounreay, especially the quirky designs that lasted until the cull of non-standard designs in the late 1970s.

For the era I model (late-60s / early-70s), BR still had a wide variety of NPCCS, including many pre-Nationalisation types, which could be found anywhere on BR metals. There's plenty of photographic evidence of ex-GW vans in Scotland, LMS and LNER vehicles in Cornwall and Kent, and SR vans in Newcastle, Carlisle and beyond, so there's really no excuse not to have some on any pre-1980 layout!

I began with some research, using books and articles by the likes of David Larkin, and Paul Bartlett's ever-useful photo website. This gave me a selection of vehicles that would be fairly easy to bash from RTR or scratchbuild in plasticard. I ended up with a rather sizeable list....

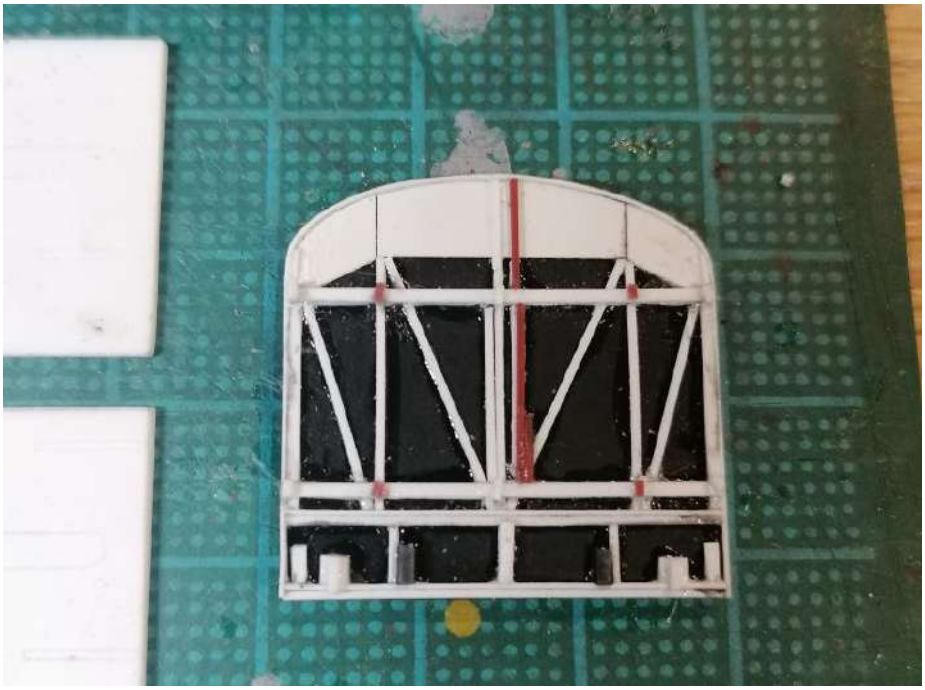
Mk1 GUV and CCT

I'd already drafted the sides for Silhouette cutting, so was half-way there! The sides for these are three layers of 10 thou / 0.25mm plasticard, laminated together. The inner two layers have larger window openings to give a flush-glazed effect. As with the Mk1 coach sides, the outer layer includes door seams, louvres, hinge and chalk board locators. These details, along with door handles and grab rails are then added from 0.5mm square strip.



GUV/CCT under build

As the GUV and CCT shared a common end design and I desired multiples of both, it seemed logical to make one good end and use that as a master to cast identical copies in resin. Over 70 pieces of microstrip in a space 28mm x 27mm and 2 hours later, I had a suitable master.



CT/GUV end master

Both GUV and CCT have a 60 thou / 1.5mm plasticard floor and end / middle bulkheads to form a basic shell. The resin cast ends are attached to the end plates and then the laminated sides attached. This gives a consistent and strong bodyshell.

The GUV body is then attached to a Lima Mk1 chassis, shortened by the length of one battery box (the one without the voltage regulator on the opposite side) and the halves rejoined. A Lima roof is suitably shortened (cut back to the first rib at both ends, square across) and narrowed by removing the rain strips either side. My home-brew scale length BR1 bogies are fitted.

42ft CCT under construction

For the CCT, first I marked up the centreline down the underside of the floor, followed by the axle positions - 23ft 6in is the wheelbase, 82.25mm in H0. Solebars are added from Evergreen #264 3.2mm channel spaced 24mm apart, then 12mm disc wheelsets in MJT #2290 internal bearing units are fitted square across the chassis. I've cast up some w-iron/spring/axlebox units to suit this and other four-wheel or six-wheel types. I've also mastered the short CCT battery boxes and cast up copies. The CCT roof is a cut-down Lima on the prototype, but I will look to cast that in resin to try and minimise use of scarce Lima parts.

Footboards complete both, but check those references as many GUVs and some CCTs lost the footboards from the early-1970s due to damage from BRUTE trolleys being wheeled across them. I ended up making three CCTs and two GUVs (and have another set of sides for each cut and laminated).

Completed GUV and CCT

LMS 50ft Full Brake

These bogie vans were long-lived, with a few hundred lasting beyond the 1978 cull into the mid-80s. This one came about courtesy of Mr Alexander offering up a knackered Rivarossi LMS coach - the middle 10ft of which was somewhat distorted, warped and rather awry. The outer ends and chassis all seemed OK, so chopping out the middle 10ft from body and chassis gave a useable 50ft length core onto which Silhouette-cut sides could be affixed. For my era, I retained the gangway connections, but most had these removed and plated over by the mid-70s.

Completed LMS 50ft brake

LMS Stove R

These quirky six-wheelers hung on in reducing numbers through the 1970s, but popped up in all sorts of unusual places. Another Rivarossi cut & shut with Silhouette-cut sides, this one on a chassis similar to the CCT above, but with a dummy middle axle, with flanges filed back to clear the railhead. The Rivarossi underframe has been shortened for a 42ft CCT, which will have a Silhoutte-cut body and scratchbuilt ends.

Stove R under construction

LNER Thompson BZ

The other six-wheeler, these also just survived until 1978, when the last handful were withdrawn. A 3D print, courtesy of Scale Model Innovations from one of Jonny Duffett 'Ironmink's designs. Body in one piece, separate chassis. Chassis much as the CCT/Stove R above with MJT internal bearing units and the dummy middle axle.

Stove R and Thompson BZ together

LNER Extra-Long CCT

About half-a-dozen lasted to 1978 of the 130 or so built. Scratchbuilt in Evergreen #4067 Car Siding, Evergreen channel solebars and MJT internal bearing units. I got the first one wrong due to a mis-scanned drawing, but the second build turned out right. Just need to sort the roof, which may follow the SR PMVs in having lots of longitudinal strips of plasticard, covered in tissue paper.

LNER CCT under construction

Yet to come

That's all the built or part-built ones. Also planned are:

- **LMS 42ft CCT** Two of these flat-sided bogie vans lasted in service to 1976. The Rivarossi underframe/bogies left over from the Stove R has been shortened for a 42ft CCT, which will have a Silhoutte-cut body and scratchbuilt ends.
- **LNER 61ft Full Brake** A few survivors listed in the 1974 and 1976 Coaching stock books. Either the Thompson steel-sided or perhaps the wartime Matchboard-sided version look fairly straightforward, though I'd need to make/master some Gresley bogies. I'm definitely shying away from the earlier Gresley Teak vans. Whilst technically possible to do all the beading on the Silhouette, doing so might finish my eyesight off!
- **SR Van B** Lasted in quantity well into the 1980s. This will use Fleischmann Bulleid bogies under a scratchbuilt body, a longer version of the PMVs I've already done (and bringing us neatly full circle). The uneven/mixed planking makes use of Evergreen Car Siding. A pain though, so I'm looking to score all the planking via the Silhouette. We'll see how that goes…. Mind, I have found what appears to be a ply-sided van B, though dated around 1978.

And I'm still pondering a suitable van of GW origin. The Fruit D should be easily doable as a scratchbuild, but something bogied would be cool…. Collet or Hawksworth full brake? Siphon G? There's a cracking photo on Flickr of a Hawksworth BG at Kyle of Lockalsh in 1968, lined maroon and with a prominent 'Paddington Parcels Service Only' branding!

Now, with all this parcels stock built, building or planned, and Dounreay only being a tiny wee layout, a dozen or more NPCCS will be overkill, right?

Right. So I've started on my second HO layout, Poison Street Parcels, based loosely on the parcels bays at Oxford and Worcester Shrub Hill and a hint of Wolverhampton Low Level in 4ft x 1ft self-contained, with a Roco NS600 Anglicised as a Class 11 shuffling nothing but NPCCS

about. The ply baseboard is already built, so I'll crack on with this over the winter, my various exhibition outings permitting.

Poison Street Parcels depot, baseboard built, track laid in place to check clearances, etc.

CCT/GUV 'Kits'

I am planning to offer 'kits' of the Mk1 GUV and CCT parts in due course, once I've refined the process/design and written instructions - I'll announce via the groups.io and *Satellite* when ready. GUV will include sides, ends and scale-length BR1 bogie sideframes. You'll need to source the Lima Mk1 (any type). The CCT will be sides, ends, roof, axleboxes, battery boxes. In both cases wheels, couplings, microstrip and various plasticard/microstrip elements will be up to the buyer to obtain. Cost likely to be £5 ish, plus postage.

Road Vehicles in 1:87 scale

By Richard Sweetman

Well, I have to say that in all the years I have been collecting 1:87 road vehicles I have never seen so many proposals coming to fruition in one year.

It would be, I suspect, too much to show a picture of every model, but I have drawn up a list, which I set out here with as many photos as I can fit in.

BREKINA

- Rover SD1 (in red, metallic blue, gold, and Met Police versions).

- Aston Martin DB5 (new colours).

- Triumph Spitfire (green, black or yellow).

- John Player sets.

  - Set 1: two liveried race cars, Ford transit and promotional people.
  - Set 2: Volvo articulated lorry (in team colours).
- Ford Escort Mk II RS 2000 (white and red).

- Ford Orion (1984) proposed, only seen artist's impression.
- Jaguar XJ-S.
- Bedford TK (new liveries).

Busch

- Ford Transit Custom, Met Police Diplomatic Protection Group.

- Mercedes Vito in British Transport Police livery.

- Ford Kuga, British Police.

- Nissan Navara, British Police.

- Land Rover Defender 90 in various liveries.

- Parcel vans in various liveries.

HERPA

- BMW 3er in City of London Police livery.

What gives me most pleasure on this list is the Herpa effort in bringing out the City of London Police BMW 3 series. My pleasure is that I asked them to consider it, I sent them relevant reference photos and it is now in the catalogue. I love it when a plan comes together.

BR 16 ton Steel Mineral Wagons in H0

By Alan Monk

The trio of BR 16 ton steel mineral wagons shown here are 3D prints to H0 scale. Designed by 2mm modeller Ian Morgan (who went by the username Siop y Wageni on Shapeways) and are/were available to print by order from Pre-Grouping Railways. Ken had arranged for the unit price of £10 each (plus postage) when first released a few years ago. Enquire direct for the latest price and availability. The 3D model comes complete with chassis.

https://pregroupingrailways.com/

This particular design is for the MoT/BR diagram 1/102 welded body, no top flap, pressed end and side doors, bottom doors and independent hand brakes. Around 22,500 were built between 1946 and 1948, lasting well into the 1970s.

With a little modification to brake gear and doors, they could also serve as the very common rebodied BR 1/108 minerals, 1970-1985.

The print takes 24.5mm pin-point axles with 10.5mm diameter wheels as it comes, carefully inserted between the w-irons. I've fitted my trio with Kadee #153s in #242 draft boxes.

LOCOMOTIVES OF THE HARROW S.M.E.

Miniature Railway Division—No. 21

By REGINALD PERRIN

3½-MM. scale model locomotives, when incorporating boilers of small dimensions, obviously present the problem of accommodation of the motive-power unit which entails the adoption of one of three schemes. The difficulty may be overcome by constructing a motor of abnormally small size to be located inside the boiler casing; or by fixing the unit inside the tender and driving tender wheels direct; or, lastly, by compromising, and installing the motor in the tender and driving the locomotive wheels through a flexible transmission.

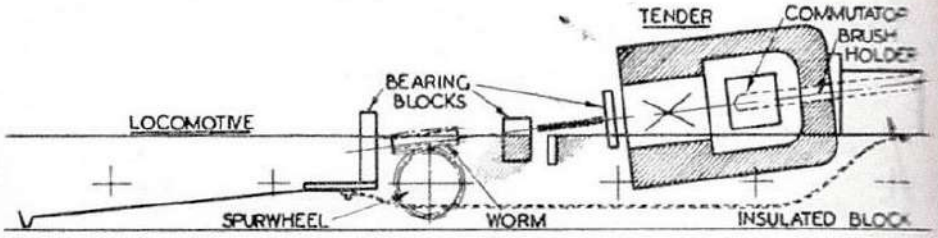
The locomotive illustrated, built by Mr. J. Hooke, to 3½-mm. scale, incorporates the third system, the general layout of which is shown in the sketch.

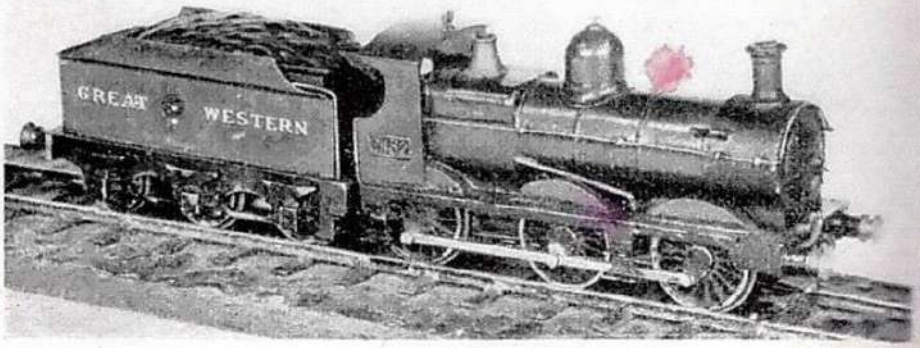
The whole has been constructed by the builder, and is noteworthy for the large diameter commutator and sturdy brush-holders which undoubtedly contribute to satisfactory operation.

Only one traction current collector is fitted, at the front of the locomotive, current being fed to the motor in the tender by insulated flexible wire, and, owing to the proximity of the wide brush-gear to the somewhat narrow tender, the body of the latter is lined with paxolin.

For easy access to the working parts the superstructure of both engine and tender may be detached easily from the main frames.

Most of the major external details are fitted, including dummy screw couplings, and the general finish is good, although it seems that a somewhat heavy paint has been applied to the body; the lettering and crest, however, are well reproduced.





Back Page Information

The new editor can be contacted at **alanmonk@gmail.com** He is constantly seeking contributions to the next magazine, especially information of items available to modellers in our scale, descriptions of your layout and/or photographs of your models.

The British H0 website, full of information on what is available in our scale, can be found here:

www.british-ho.com

Membership of the Society is **free** and members can access our Forum here:

https://groups.io/g/British1-87ScaleSociety

There is much of value, collected over the years, in the Files section of the Forum here:

https://groups.io/g/British1-87ScaleSociety/files

It's also worth looking in the Photos section where there are illustrations of many H0 models made by members over the years.

Finally, **back issues of *Satellite 1:87***, all 81 of them, are full of information and interest. They can be read (and printed off) here:

https://groups.io/g/British1-87ScaleSociety/files/Satellite%201:87%20-%20Society%20journals

One very useful article in the Files section is a long piece written back in the Nineties by Phil Burkett listing almost everything available in 3.5mm at that time. It desperately needs updating (volunteers?) but until then it's a mine of information:

https://groups.io/g/British1-87ScaleSociety/files/Introduction%20to%20British%20HO/Everything%20you%20wanted%20to%20know%20-%20Phil%20Burkett.rtf

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