



FIRE-TRUCK

A subject for scale this month as Ian Peacock gets fired up about his choice from the Robbe model range of commercial vehicles.

DO YOU EVER get the feeling that there are times when one would have been much better keeping one's mouth firmly shut? Ever feel that last time you opened your mouth, you put your foot firmly in it?

Well — I know just what you mean — for a chance conversation with the editor, along the lines of "You only seem to feature racing cars and buggies! What about other road going vehicles?" was soon to put me firmly in my place!

Now, of course, the majority of model cars are racing or Off-Road types but there are the odd examples about of other types of wheeled vehicle. Just one such model kit has been

around for a year or two and that is the *Robbe* 'Flughafenfeuerwehr' or fire engine to those of us not fluent in 'Krautische.'

In point of fact the *Robbe* kit is actually a scale model of one of Germany's more famous airport fire tenders and carries a complement of working parts that is staggering to behold. At almost 2½ft. long and featuring an eight wheeled chassis (the front four steer!) this is no small model! Nor is it one for the faint hearted, for this is a 'builder's' model first and foremost and an operator's model second!

The kit itself is well presented and very complete, its packaging being well up to that

expected with full colour box artwork (depicts the *actual* model in use, not an artist's airbrushed impression).

It is upon opening the box that one is faced with the harsh reality that this is no 'one evening wonder.' Not only is this an enjoyable, if prolonged exercise, but it assumes certain skills and tools that may not be immediately apparent.

The entire bodyshell, for instance, is constructed from almost 250 individual pieces of plastic, most of which need to be accurately cut from the 'part cut' flat sheet. This construction is more akin to the scratchbuilt approach much favoured by our friends in plastic kit modelling

circles. Because the majority of parts are of 'mixed' plastics (ie ABS and Styrene) accurate cutting and shaping and judicious use of cyano adhesives is the best route to take. (Polystyrene cement is *not* satisfactory on this type of mixed plastic joint!).

Also somewhat off putting to all but the stout of heart is the 80 page instruction book and the two enormous plan sheets. *Robbe's* instructions books are, of course, multi-lingual and when one eventually finds the English version the dozen pages are nowhere near so awesome!

To begin at the beginning

Although time consuming, the assembly is never tedious nor is it terribly difficult. There is an exact and logical assembly route and there does not appear to be any need to deviate from this route.

The basic chassis and drive mechanism is the obvious starting point and as much of this chassis is a plastic assembly fitted round a folded aluminium crutch, one can expect to fill the first couple of hours just cutting out the parts! A degree of careful cutting is required and after

experimenting with a knife and an assortment of powered saws, a traditional fretsaw was found to be both simplest and the most convenient method.

All of the parts are numbered and the plain sheets appear to be die cut. In point of fact this die stamping goes only part way through the sheet, necessitating the final sawing. Once cut and sanded to size, the actual assembly of the basic chassis is pretty straightforward following the exploded views and the English text. Be warned however, the sketches and text are correct — follow them carefully or an upside down chassis will result. The dimpled marks for lining up the chassis cross

braces are on the *wrong* side of the chassis plate. These marks need transposing to the *correct* side before assembly.

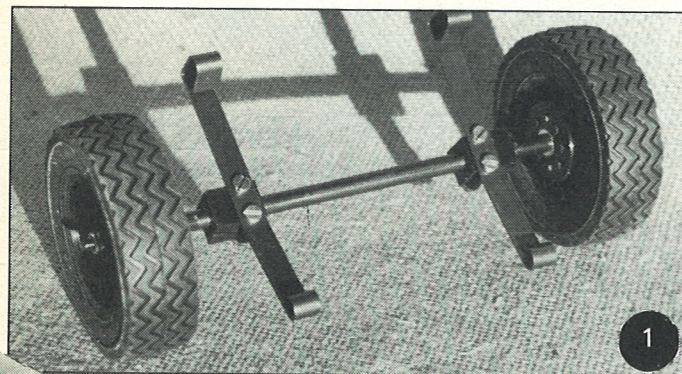
The main running gear is also straightforward, if a little unusual. The drive motor is a *Mabuchi* 550 utilising a geared reduction and prop shaft taken directly from a *Robbe* boat kit. Motor mounting requires some cutting, filing and drilling, according to dimensioned sketches on the drawing and requires a fair degree of accurate working.

The rear drive axle features further reduction in the bevel drive and utilises a solid axle — i.e. no differential (probably an unnecessary luxury in this type

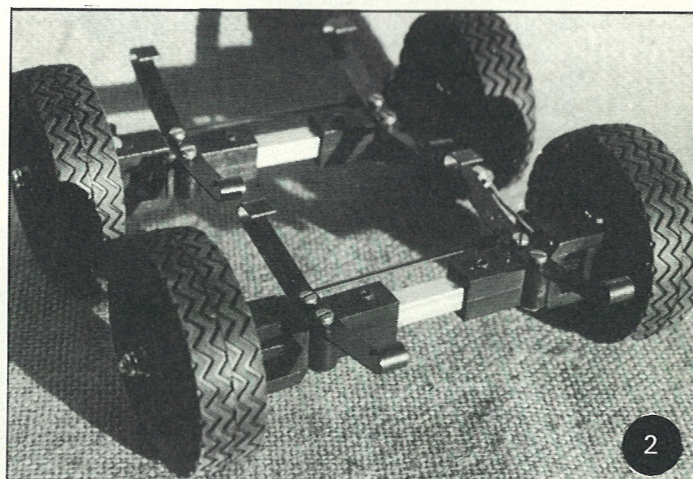
of vehicle). The secondary rear axle is not driven. Front axle beams are from hollow square section aluminium with moulded nylon end brackets. Both front axles are identical and follow standard practice in terms of steering geometry. All four axles are rigid.

The suspension seems a little crude by today's standards being a single leaf spring per each end of each axle. Despite this, the system works, and is more than adequate for the job. Wheels and tyres are very 'scale-like,' the hollow tyres being stuck to the one piece moulded wheel with 'super glue' (after the wheels are painted). All this is adequately dealt with

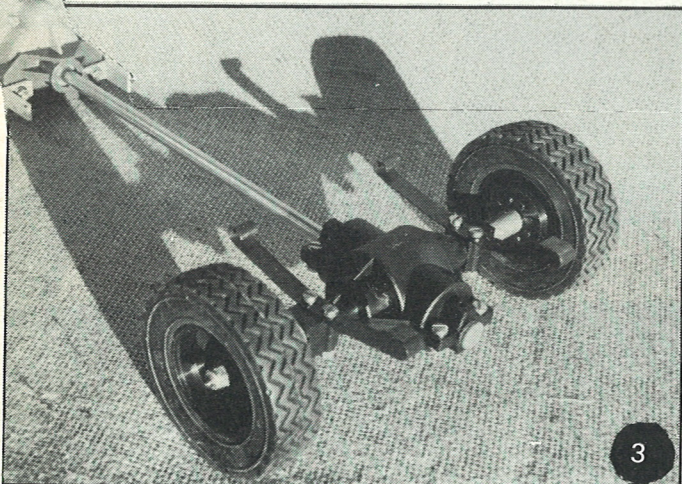
Track Test



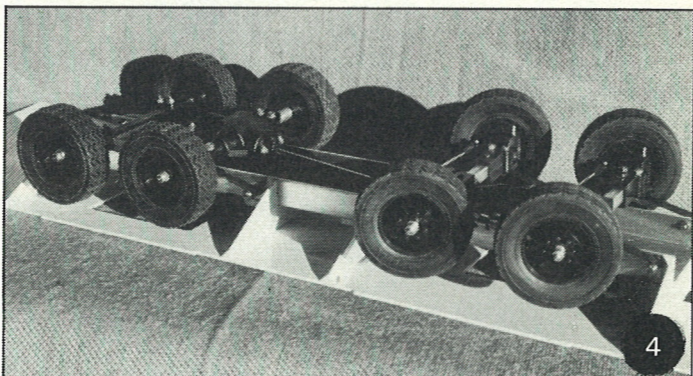
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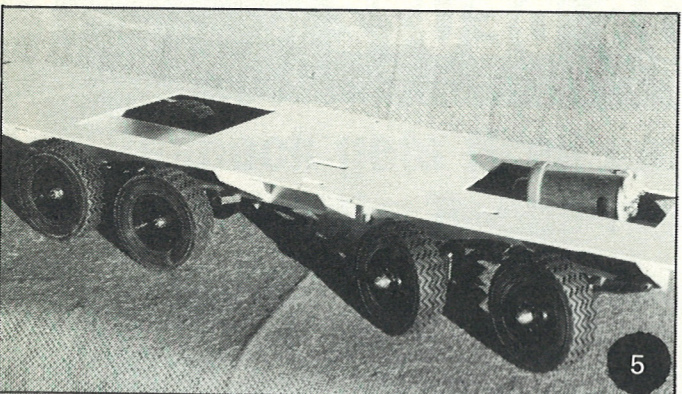
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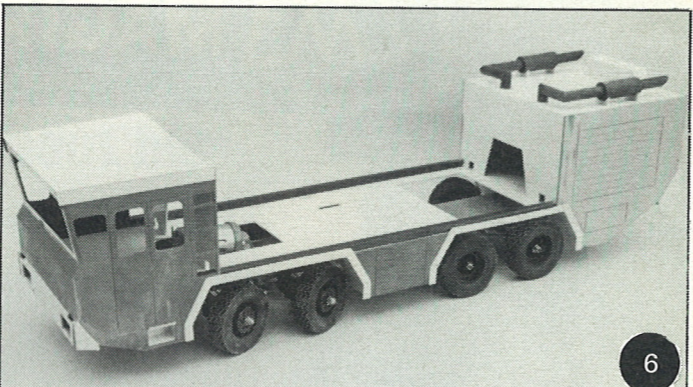
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in the instruction book.

There are no ball races in the kit, and there is probably no reason to think them necessary. All wheels rotate on nylon bushes except for the driven axle which rides in quite large size phosphor-bronze bushes.

Because all four front wheels steer, some care should be taken in obtaining correct relative alignment, particularly when fitting up the track rods and the adjustable steering links.

To this point a whole week of evenings (say one-two hours per evening!) had been consumed — including a dummy run at fitting each piece — and it was time to move on to the basic super structure.

The bodyshell

As with the chassis construction, much of the super-structure assembly time is taken up by the careful sawing and sanding of each part. The enthusiast will take considerable time over this area for there is room to add much detail to this body work. The vast majority of body parts are cut from white and red plastic with some black tubes provided for the roof mounted exhaust systems. This means that with great care taken in cutting and fitting the parts, little, if any painting is required. However, the high gloss plastic doesn't look quite right and the serious modeller, will, of course paint it

all.

Study of the box art, together with the excellent general arrangement drawing shows that there are several areas where the modellers' craft can be used to improve the model. For instance the doors to the cab and particularly the shuttered doors on the side of the pump house can simply be painted on or lined in with strips of narrow black tape. Much greater effect can be obtained by carefully scribing the door outline, or even cutting them out and sticking them back in place.

I found that a dummy run with fitting up the major parts of the super structure with *Sellotape* to be extremely helpful in

determining those areas that could benefit from such additions. Please note that this should not be misconstrued as criticism of this *Robbe* kit. Far from it, for built as supplied, the model is a good cut above average. It's just that as the 'scale modeller' within comes to the surface, one does tend to add pieces here and there.

Once again, stick carefully to the order given in the instructions and no difficulty should be encountered. This is a large model yet the amount of gadgetry that is needed inside to make the most of all of its possibilities is equally large. Consider for instance that there are three (yes three!) 7.2V x 1.2Ah Ni-Cad packs to power it

1: One of the axle assemblies fitted with leaf springs to give suspension movement when fitted to the chassis.

2: The front four wheels all steer and as such need care and attention when fitting with track rods to ensure correct alignment.

3: The driven pair of wheels fitted with gearbox (no differential) with a prop shaft connection to the Mabuchi 550 drive motor.

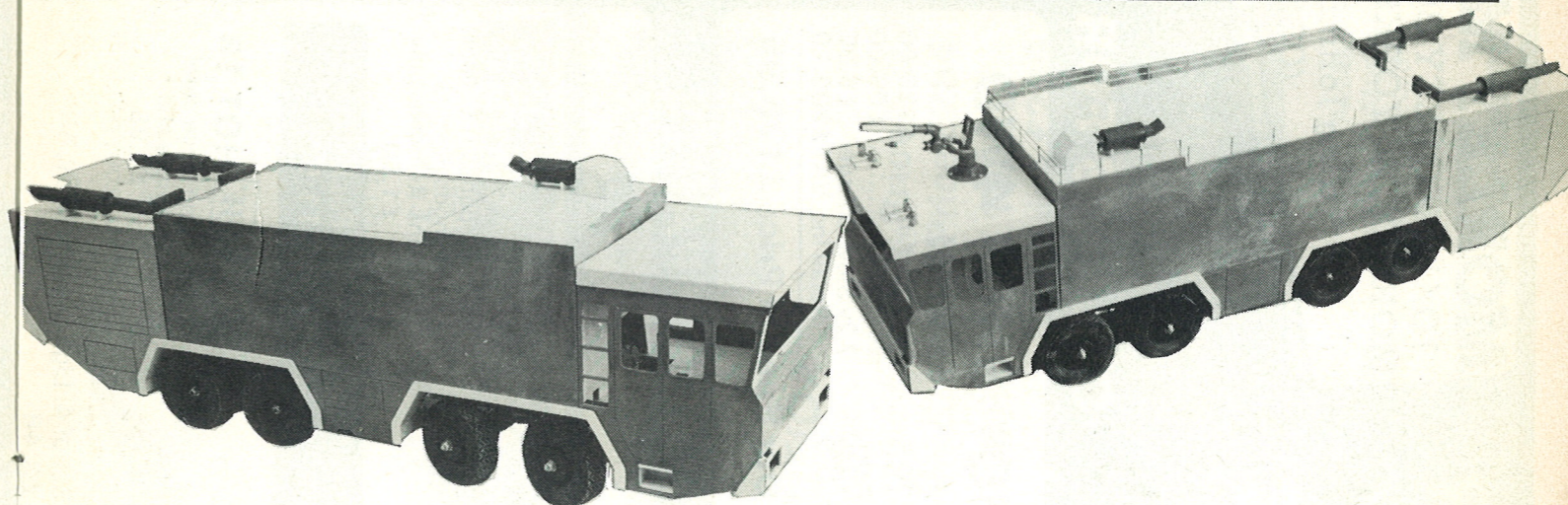
4: Steering and driven axle assemblies fitted to the chassis.

5: The basic rolling chassis awaits its bodyshell.

6: The beginnings of the bodyshell fitted to the chassis.

Below: two views of the unpainted vehicle showing the completed shell and additional decoration. Water Cannon, Siren and Exhaust.

Right: an idea of scale. The Robbe 'Fire Truck' with fireman and full-size example.



all. Plus another *Mabuchi* 540 to operate the pump, the water reservoir etc., etc. and it becomes apparent that even at this scale, the total R/C installation is still requiring a shoe horn to get it all in.

The assembly of this super structure is a mind blowing job. It consumes hours of painstaking effort, yet this effort is amply rewarded as the structure becomes complete. Don't attempt to short cut the system anywhere, or one will walk straight into trouble at the later stages. Remember also, that the main strength of the vehicle is in the accurate construction of this super structure.

This fire tender is NOT like

the average racing car or off-roader! The bodyshell is NOT simply a cosmetic add-on goodie. The structure of the entire vehicle is, like on the full size, reliant upon the bodyshell. So don't try to skip this area. After all, as was stated in the opening paragraph — this is a 'builder's' model — so make the most out of the enjoyment that comes from tackling such a project. A project that, I might add, seemed somewhat formidable when first started but, after a week or three tackling each part in turn, proved to be relatively plain sailing.

Radio installation

Needless to say, all the radio

shown on the plan sheets is *Robbe*! In the UK this translates into *Futaba*. I elected to use an ancient but reliable set of six channel 'M' series (on 27MHz of course!) but any brand will do. Using *Futaba* in this manner was a good move for I was able to obtain all of the standard *Robbe* options and just plug them in! Any speed controller will do, whether electro-mechanical or electronic, and two functions are sufficient to get the fire tender rolling. However at this stage, having expended a good few hours on the project, there was no way that I was ever going to be satisfied at that.

Having got the basic wagon rolling (on all of its eight

wheels!) I hiked off to Huddersfield, clutching my pocket money in my hot little fist to visit Bob Ashby of *Cougarcraft* (the UK distributor for *Robbe*). Ferreting around the shelves of Bob's huge warehouse, I was able to obtain the necessary parts to complete the kit in the manner that is intended.

However that is a different story!

Next month, (God and Lewis Eckett willing!) I'll delve into the problems of adding all the detail, both mechanical and electronic (and hydraulic — the power from the water cannon is something else!) and describe the running of the model in all its glory.