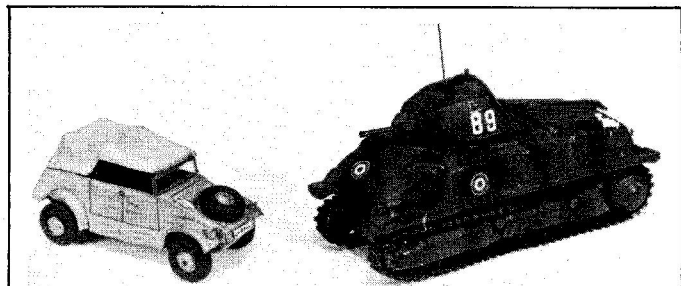


Pulling thin strip sheet plastic under a ruler to curve it.

Some larger vacform biplanes need rib tapes to improve the moulded rib stations of their wings. One way is to lay 5 thou. tapes — strips of plastic — over the correct positions. For ease of gluing they should be given a curved airfoil shape — here's how to do it.

There are no short cuts to success, it's back to trial and error until you achieve a fit. By way of advice I would suggest that a plunge in hot water makes the plastic easier to cut; open canopies are less critical of fit than closed and cloudy, or scratched, canopies are often improved by a coat of clear varnish.

Smaller, transparent parts are rarely, if ever, worth the effort; shaped items like landing lights and tip lights are best made from sprue while cabin windows and the like are easier if added later from white PVA. The adhesive to be used on the kit's clear parts are often the subject of debate; many favour the various 'Superglues' despite the fact they offer no 'second chance'; others make use of liquid glues such as 'PlasWeld' though I find they take too long to cure on tricky joins. I prefer white PVA since it holds the part quickly but still allows some movement and, if you make a complete hash of it, you can always wash it off and start again.



Proving that not all vacforms are necessarily aircraft. The Kubelwagen is a long-defunct vacform while Raretank's Somua is similarly out of production. The German Airmodel company currently produces a range of AFV vacforms to 1/35th scale.

Right, an incredible G201 Guppy built by Max Bell. This amazing model has its origins in a RAREplanes KC-97 kit but has been heavily converted with extended fuselage, Orion engine nacelles and increased wing area. Some modellers find vacforms easier to modify than injection-moulded versions and here is proof how effective such conversions can be.



Acknowledgements

These special vacform features could not have been written without the co-operation of vacform manufacturers the world over. To all those listed on pages 424 and 425 we extend our grateful thanks for providing us with all the necessary information to complete this 'supplement'.

Thanks too, to Joe Chubbock for providing the sketches that accompany his article and to Stan Catchpool for providing the other sketches on vacform building. We also gratefully acknowledge the generosity of Gordon Stevens (Mr. RAREplanes) for providing photographs of his models, built by customers, which feature throughout these features.

If you are now convinced that vacforms are for you turn to page 430, where Dave Williams describes the building of a Forma-Plane Hastings, and pick up further hints and tips. Then go out and try one of those vacforms!

Small parts and accessories

More and more kits are supplying these larger items in the form of metal or injection-moulded parts — often crude but better than vacform. There are few more soul-destroying tasks than sanding sprue or sheet into the correct aerofoil shape for struts or trying to make four matching four-bladed props from vacform parts. Whenever possible use the invaluable streamline strut moulding or **Plastruct** parts for all tricky section work. If you don't have a spares box start one for props and wheels if for nothing else. To props, add spinners since they invariably suffer universally from thin plastic when vacformed.

In general, vacforming is not suited to the creation of small parts. Some designers persist, however, and provide formings for 1/72nd joysticks, pitot tubes and steps — all useless and a decent drawing would be of far greater value. All small parts, including u/c legs and fittings, will need to be fabricated from sprue, wire, Plastruct items or the fruits of the spares box. On occasion, complex u/c legs are provided by the kits, in general they are unusable but some (eg **RAREplanes**' and **Nova's** Vulcans) are quite acceptable. The varying sections of u/c legs with their sleeves and collars can present a major challenge but my general watchword is to use a single, strong, central piece and to wrap tape, or slide sections of tube, around these. It is possible to turn legs from sprue using a makeshift lathe. The 'lathe' comprises a mini-electric drill held in a vice; sprue is inserted into the chuck and chisels, modelling knives and even sandpaper are applied to the spinning sprue to create the desired shape.

Conclusions

I have, perhaps, emphasised the problems and pitfalls to an extent which may deter the reader. If so I have failed in my aim which is to encourage him, or her, to try this form of modelling and to reap the satisfaction that is to be gained from making a model from basically uncompromising material. All the problems I have highlighted are surmountable, it just takes time and care. When you have managed to build a reasonable model or two, not only have they given you satisfaction but you may well find, as I did, that you have much more confidence in your skills and are game to try major modifications to conventional kits which you would never have considered before.

Finally, the old advice about learning to walk before trying to run. If you choose a Gotha as your first vacform you will almost certainly fail (my first was a biplane flying boat and I didn't try again for years). If, on the other hand, you try a small monoplane, success, while not guaranteed, is a lot more likely. □