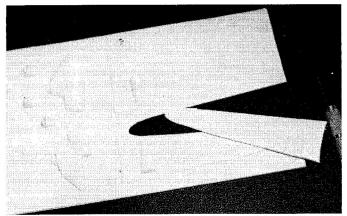
harder. At this stage, patience and preparation are the watchwords.

The nature of vacforming will mean that the wall thickness of the formed parts will not be consistent. The thin places, which are the result of trying to stretch too little material too far, will present you with many of your worst problems. Often small parts, like seats or spinners, will be broken or crumpled; you will have to decide whether your spares box will offer replacements or if a repair, or scratchbuilt alternative, will be necessary. At least damaged parts are immediately obvious, a more difficult problem is that of thin areas in major items. These may not be noticed until you find your sandpaper going through the surface at the first touch and then quite often you have a very difficult problem to deal with. The simple solution is to hold the sheets up to a bright light before you cut anything out and to treat all those areas where the light shows through brightly. Some thin spots you will probably decide to ignore but some will need urgent attention. The thinness of the plastic precludes the use of solvent-based fillers since they will eat through the material on contact. I favour **Milliput** for the job since it adheres well and is not too prone to crumble. Fill from the inside and ensure that the filler extends right into the thin section. If you are filling a place like a wing root, which will subsequently be sanded, it is as well to back up the filler with scrap sheet plastic whenever possible. This is to prevent the filler from breaking away inside when you start sanding the exterior.

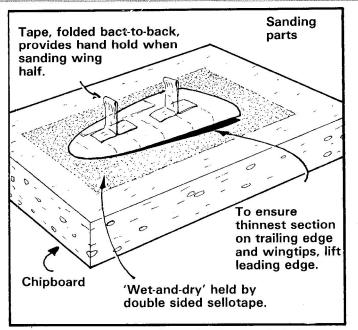


Removal of parts from a vacform sheet, in this case a RAREplanes' DH 87 Rapide biplane. Note how the wing has been scored around its edges with a knife then the part cracked out — well that's one method...

**Cutting and Sanding** 

This is really the secret of the whole technique; once you master the cutting out and sanding of the major parts you have half the battle won. Now you wouldn't think that the apparently simple business of removing the parts from the sheet could lead to much controversy, would you? In fact I know stauch advocates of *three* or *four* different methods, each of whom is convinced the others are either reckless or set on making life hard for themselves. Often it is possible to snap the parts away from the sheet simply by bending the scrap sheet away from the part. A slightly safer variation of this method is to cut, or score, round each part prior to snapping away the excess.

The safety-first method is to remove the piece *plus a margin of ¼ ins or so* all round. This way the part is safe enough but it does mean that you are going to have to remove a whole lot more plastic during the sanding



phase. Advocates of this method argue that the spare plastic does serve as a useful guide during sanding since a sliver of spare plastic peels away when sanding has gone far enough.

Being essentially lazy! like to cut the part as near to the finished article as possible. To do this! cut along the bottom edge of each major part at a very shallow angle with a very sharp knife. This takes practice and is hard on knife blades; it is more effective on deeply-drawn parts, like fuselage halves, than it is on wings but, given care and practice, it saves a lot of sanding.

So there we have three methods; there are more. As ever, the best solution is likely to be a combination. My cutting method is useless for small parts for instance, on the other hand why anyone should want to do more sanding than is absolutely necessary is a mystery to me.

You may have gathered that sanding is something of an obsession with me — frankly I loathe it but it is the *key* to vacform modelling and cannot be avoided. Each moulded part has to be rubbed on sandpaper, or wet 'n' dry paper, until all the excess plastic has been removed and a flat surface has been prepared for glueing. Sounds easy enough; use double-sided tape to stick your paper flat on a piece of glass or perspex and rub away. Problem: it is not easy to get a decent grip on the parts, especially the small ones; not too difficult to overcome, make up handles of looped adhesive tape and paper to give a grip. While on the subject you might ask yourself why you spend time sanding such items as flat wheel doors (and probably your finger tips) when it is easier to use the kit part as a template and to cut a new one from sheet. Next problem: dust, be prepared to look like a snowman. Here there are two choices, use wet

RAREplanes EC-121 'Constellation'; a really superb piece of modelling by David 'Boh' Bokanski of the USA. If ever a picture laid the vacform 'ghost', then this is it. Brillant example of vacforming at its best.

