The diagrams that follow are self-explanatory. A copper or brass disc, 23cm diameter, is soldered to the outer lip of a 95mm i.d. copper or brass tube (or suitable soup can! ...editor). The tube forms a waveguide feed for the 2.3GHz amateur band while the disc becomes the reflector for a pair of 1296MHz dipoles. The rear of the copper tube is, of course, blanked off. A 29mm long probe made from 6mm brass rod or tube is soldered over the end of an N socket centre conductor and the resultant assembly is fixed to the 2.3GHz feed horn so that the probe is 55mm from the horn’s back plate and in the horizontal polarised position as shown in the first diagram. That is the 2.3GHz (13cm) section of the dual feed completed.

The 1296MHz feed consists of a pair of stacked dipoles, each made as shown in the second diagram on the next page. They are mounted so that they are in front of the 2.3GHz feed-horn and critically spaced from the circular reflector or ground plane.