

## 8.5 Inch Newtonian Reflector



The telescope was home made using a plastic tube, with the base made from  $\frac{3}{4}$  plywood. As can be seen from the photograph the tube, stand and base can quickly be disassembled for easy transport to a dark site.

The mirror is 8.5" f6 giving a focal length of 52". The mirror is mounted on a  $\frac{3}{4}$ " ply cell which can be removed and replaced without losing collimation. The diagonal is 2" mounted on a 4 vane spider.

A feature of the scope is the ability to rotate in the central box ensuring comfortable viewing positions at all times. The finder is made from the eyepiece and objective from an old pair of 10 x 50 binoculars and gives an inverted image as the telescope does. The cross hairs were grown on the head of John's granddaughter, and fitted by John. The telescope runs on PTFE bearings and is very sturdy, if a little heavy to carry.

Eyepieces are of various makes, including Televue, Celestron and others comprising the following:

7mm

10mm

19mm

32mm

2.5 x Barlow

These give usable magnifications from 40x with the 32mm to 315x with the 10mm and 2.5x Barlow. (315x is only practical in good seeing conditions). The telescope has now seen 9 years service without the need to re-aluminise then optics. Photography is normally limited to the brighter objects (Moon & planets) but can be used to "piggy back a camera for long exposures when used with the home made driven "English cradle" mounting.