



THE MINIMITTER MOBILE AERIAL

REVIEWED BY
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THE Minimitter loaded whip aerial for mobile use, first shown at the R.S.G.B. Radio Hobbies Exhibition in November 1958, consists of a spring base with a bottom section of 1 in. diameter dural tube on which can be mounted interchangeable top sections for 1.8, 3.5 and 7 Mc/s. The base requires a $\frac{3}{8}$ in. diameter fixing hole in the vehicle body, the same diameter as that required for a standard Lucas reversing light, a point which may be useful when the vehicle is to be sold. The split aluminium casting (Fig. 1) can be locked so that the sections are in line or at any posi-

tion up to a right angle. When mounting the aerial in some positions on a modern car, e.g. the tops of the rear wings, it may be desirable to give additional strengthening by using a small plate of $\frac{1}{8}$ in. steel which can be clamped on to the inside of the body by the base section fixing nut.

The base spring is strong, but resilient, and will not take a "set." The length of the bottom section should be such that the loading coil is not below the level of the vehicle roof and therefore is supplied to individual requirements.

The manufacturer states that the loading coils, which are weatherproofed with silicone varnish, are designed to have medium "Q," so that operation is possible over a limited frequency range without retuning because in practice it is found that mobile operation is usually confined to around one spot in any area, with only small changes to avoid interference. The aerial is resonated by means of the capacity hat, the spokes of which are made of spring to avoid breakage on impact with the branches of trees. The position of the hat will vary with each vehicle, and in the first instance its optimum position can best be determined with the aid of a field-strength meter. Correct adjustment will greatly increase the strength of received signals.

The appearance of the aerial is neat and it does not look out of place on a modern car. When the equipment is not in use the top section (including the coil) can easily be removed leaving only the unobtrusive bottom section and spring base. The aerial is robustly made and even at high speeds will not be a danger to other road users or pedestrians. The equipment is complete with mounting and feed-through washers and is designed to be fed with 52 ohm cable.

Results on Top Band have been very satisfactory. During daylight, consistent mobile to mobile communication up to distances of 35 to 40 miles has been maintained, while after dark contacts with fixed stations up to 250 miles away have been made.

The aerial is manufactured by the Minimitter Co. Ltd., 37 Dollis Hill Avenue, London, N.W.2.

Maritime Mobile in Region II

EFFECTIVE January 30, 1959, United States amateurs now have additional maritime-mobile facilities. Amateur stations aboard ships may use any authorized amateur band from 7 Mc/s up to 148 Mc/s when on the high seas in Region II (North and South America). When they operate from international waters in Regions I and III, however, American maritime-mobiles can use only the 21 and 28 Mc/s bands as heretofore. Amateur stations on ship-board in domestic waters may use any amateur band. Identical privileges are available for aeronautical mobile stations but in both cases the permission of the Master of the ship or Captain of the aircraft is required. The installation must be separate from any radio equipment normally on board, and it must not cause interference to such equipment. The amateur station wiring must conform with safety regulations.

Military Valve Types

INFORMATION on valves with military type numbers (in series beginning CV, VT, etc.) may be obtained by sending a stamped addressed envelope to B. M. Johnson (G3LOX), 4 Orchard Drive, Chorley Wood, Herts.

Fig. 1. Identification of the various parts of the Minimitter mobile aerial.

