CQ Reviews:

The Cor-Mac 2 Meter Quad

Lee Aurick, W2QEX
Technical Editor, CQ

The combination of light weight, extreme portability, and recognizable gain in an antenna, even at 2 meters, is calculated to be of great interest to v.h.f. buffs, as well as Field Day enthusiasts.

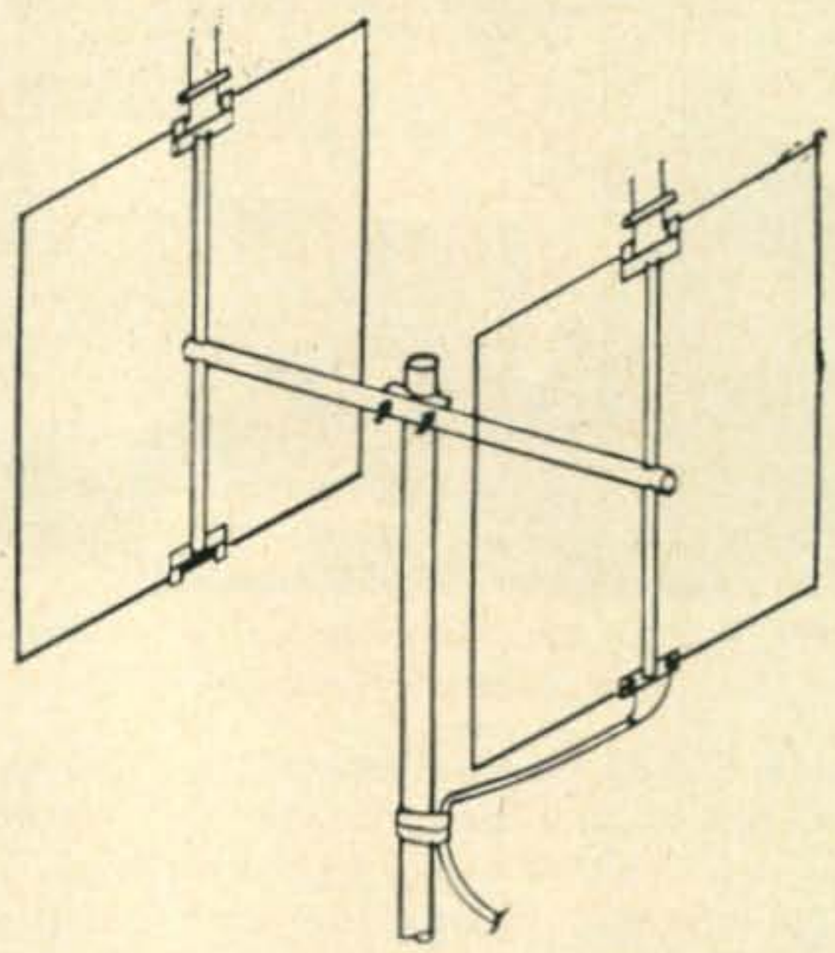
The new Cor-Mac quad for 2 meters, about to be announced, combines all of these features with a few that are inherently its own.

The antenna consists of a stub tuned driven element and a stub tuned reflector both made of hard drawn aluminum wire. The elements are spaced a quarter wave apart on a tubular aluminum boom. The vertical uprights supporting each element are positioned in slotted holes at each end of the boom, and secured by a nut and bolt that contracts the slot and firmly clamps the upright. When necessary to stow the quad away as on FD and other portable occasions, the antenna may be folded nearly flat.

The quad is designed in the standard configuration for this type of antenna, with stubs at the top of each "loop". Each element comprises a full wavelength total, with the vertical and horizontal members each a quarter wavelength long. The driven element is 20 and three-quarter inches on each side and the reflector is 22 inches on each side.

A month of using this little quad has produced some suprising results. Gain appears to be approximately 5 to 6 db over a reference dipole, and though signal reports are usually down as compared with a much larger array, every station worked with the large array has also been able to copy satisfactorily signals from the quad. This includes several stations more than 100 miles distant, and with very modest power input on this end.

Perhaps the reason for the exceptional performance of this antenna is to be found in the low angle of radiation usually attributed to quad antennas. To further enhance this characteristic, the manufacturer advises that he is now planning to offer stacking kits.



While the front-to-back ratio does not appear to be as great as with a Yagi antenna, the low radiation angle does recommend consideration. In fact, under some circumstances, reports as much as 2 S-units better have been received with the quad.

The antenna is conveniently fed with 70 ohm coax, and though our test conditions provided 50 ohm feed, the v.s.w.r. was measured at 1.2 to 1.

This little bantam antenna weighs only 1¼ pounds and is manufactured by the J. C. MacElroy Co., Inc., 74 Trinity Place, New York 6, New York. ■

Mars Bulletins

Air Force Mars Eastern Technical Net

Sundays 2–4 P.M. EST 3295, 7540, 15715kc

April 2nd — No broadcast today.

April 9th — **Theory Of Speech Communications.** Captain John D. Griffiths, USAF, Rome Air Development Center.

April 16th — **Modern Techniques In Speech Communications.** Captain John D. Griffiths, USAF, Rome Air Development Center.

April 23rd — **Basic Electronics For The Radio Amateur.** Phillip E. Hatfield, General Electric Company.

April 30th — **Custom Building via Home Construction.** Edward A. Neal, General Electric Company.

May 7th — **Telemetry; Its Purpose, Its Function.** Warren Bonney, Tele-Dynamics Division, American Bosch-Arma Corp.