

Mosley's "El Toro"

Howard S. Pyle W70E 3434-74th Ave., S.E. Mercer Island, Wash.

They say "there is nothing new under the sun." Well, I found something which really opened my eyes; a three-band, trap-type, grounded quarter wave antenna using an unusual tuning method which, in effect, makes it an "automatic band-switching antenna."

Designed for the 20, 40 and 80 meter bands as well as a type for the novice 15, 40 and 80 meter domain, the whole assembly is only 58 feet long over-all and weighs but two pounds! Furthermore, it can be erected as a vertical, or as a combination vertical and horizontal and can be bent or "drooped" as necessary as much as 45 degrees to reach the ground termination! Or, it can be installed in a sloping position for it's entire length; truly a versatile antenna adaptable to almost any space or location!

Initial tuning is accomplished by a series of shorting bars and two capacity tuners. These can be adjusted to resonate in the middle of all three bands or right on your generally used frequency in each of the bands without further adjustment after erection. Tuning is sufficiently broad to provide high efficiency as well as extremely low SWR ratio at all other points in each band.

Such an antenna, known as "El Toro", is manufactured by Mosley Electronics, well and favorably known to most hams by reason of their excellent beam antennas, thousands of which are serving amateurs all over the world. This novel antenna is offered in three types; the NS-3 Novice Special, pre-tuned to the novice portion of the 15, 40 and 80 meter bands with a power handling capacity of 300 watts; the TW-3X Jr., for 20, 40 and 75/80 meter operation at 300 watts CW-SSB, 1000 watts to final amplifier and the TW-3X rated to handle the maximum legal limit of 1000 watts input to the amplifier, SSB-2000 watts PEP.

Any of these antennas can be either roof or ground mounted; slightly superior performance is realized with ground mounting; merely a good connection within a few inches of ground level is required and, in most cases, no radials are necessary. A driven ground rod or a convenient water pipe or conduit will generally prove to be an adequate ground. Roof top mounting will require a few radials except where mounted on a metal roof.

All antennas are supplied in kit form, with detailed assembly and erection instructions and with all of the "hard work" accomplished at the factory. The radiating portion comes completely assembled with all spreaders in place and all of the machine work done on the tuners. In spite of this, the complete antenna is shipped in a small, light weight carton only twenty inches long and about six inches square! Everything is supplied including end insulators; you need only assemble the kit which takes but a few minutes, solder the small shorting bars in place, connect the two tuners as shown in the instructions and hoist the complete antenna into the air. You need furnish nothing but a sufficient length of 52 ohm co-axial cable to reach the transmitter from the ground end of the antenna (actual length is not important although the shorter the co-ax feed-line, the less loss and better SWR), a short piece of nylon rope or clothesline . . . plastic clothesline will serve as well . . . with which to tie the end insulators to the antenna supports, and a good ground connection.

In effect, the antenna is a 450 ohm, openwire feed line which comprises the entire radiating portion. The writer has experimented with scores of antennas over a period of many years and has found the Mosley "El Toro" to be the equal of any of those which he has used. And, at the cost, unless your 'piggy-bank' is awfully low, it will pay you to buy the Mosley kit rather than try to duplicate it by 'home-brewing'.

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EL TORO

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Mosley "El Toro" antennas are trap type grounded quarter wave antennas using a unique method of tuning and a single 52 ohm coax line. The antenna is only 58' long and can be mounted to fit almost any location. No radials are needed if mounted at ground level. "El Toro" comes pretuned, in kit form and can be easily adjusted to resonate at any portion of the antennas rated bands.



3 models

Mosley "El Toro" antennas are available in three models, TW-3X - TW-3X Jr. - NS-3, each is designed to give outstanding performance. These versatile antennas were developed for the Ham with a limited budget, limited space and the traveler who works portable.

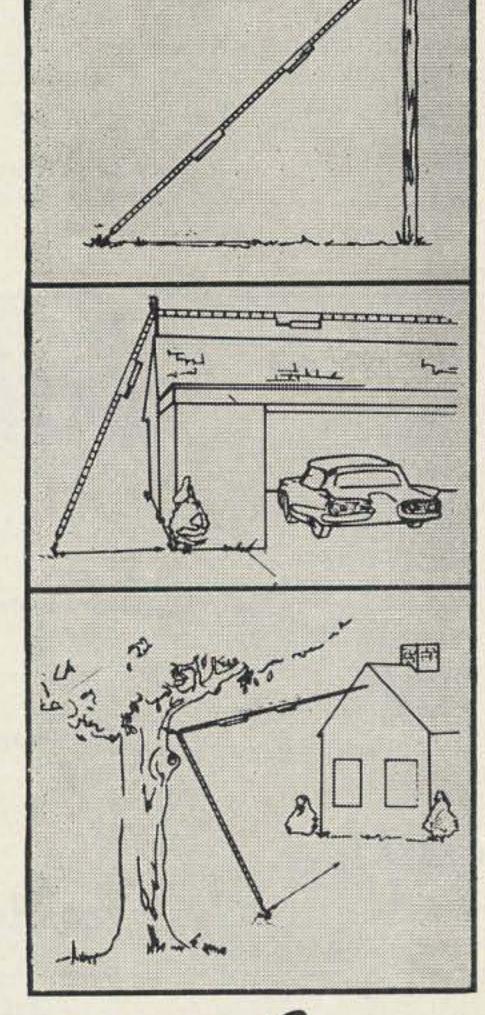
3 band operation

Mosley TW-3X and TW-3X Jr. operate on 20, 40 and 75/80 meters. Mosley NS-3 (Novice Special) is designed for operation on 15, 40 and 80 meters. The "El Toro" antennas feature pretured, compact design and excellent broadband characteristics.

2 power ratings

Mosley TW-3X has an AM rating of 1000 watts input to the final amplifier and a CW/SSB rating of 2000 watts P. E. P. Mosley TW-3X Jr. and NS-3 (Novice Special) have ratings of 300 watts on AM, 500 watts on CW and 1000 watts P. E. P. input to the final amplifier on SSB.

MODELS TW-3X - - - - - - \$ 19.95 MODELS TW-3X Jr. & NS-3 - - - \$ 14.95



MOSLEY Electronics Inc.

4610 North Lindbergh Blvd.

Bridgeton, Missouri, 63044