

## ■ Antennas

# Tuning the TH3-JR Antenna

*Alex Stuart VK2ALX\**

I first sought advice concerning the tuning of my TH3-JR antenna from Hy Gain USA in about 1987. I was promptly sent a 16 page Beam Antenna Trouble Shooting Guide. I have had very recent correspondence, August/September 1993, and discussion with Telex which appears to have incorporated Hy Gain.

### Trap Resonant Frequencies TH3-JR

Resonant frequencies of traps from my own GDO tests are :-

10 m Director	27.6 MHz
10 m Driven Element	26.6 MHz
10 m Reflector	27.2 MHz
15 m Driven Element	20.6 MHz
15 m Director/Reflector	20.3 MHz

These frequencies are higher by some megahertz, compared with the

frequencies listed in the Hy Gain Guide. A number of amateurs have also found the trap frequencies considerably higher than the Guide figures. Telex has now advised that "the readings you took with your GDO are normal and the traps do not require adjustment" and further "we will change the guidelines to reflect accurate readings."

### Physical Dimensions of the TH3-JR

Telex has advised that in regard to the beam's dimensions "the distance should be 72 inches from the outside of the boom for the reflector and director. The driven element will be more like 72 5/8 inches due to the insulator."

"The 'C' dimension should be 34 1/2 inches for phone and CW. I know

it looks odd but the overall dimensions for the driven element (excluding traps) work out to be 129.75 inches for phone and 134 inches for CW.”

## Comments

The long standing problem of the TH3-JR antenna trap frequencies

now seems to be sorted out along with the inside or outside of the boom dimension matter previously discussed in *Amateur Radio*. Telex’s proposed revision of the Guide will hopefully detail the recommended trap frequencies.

*\*10 Wanganella Street Balgowlah Heights NSW 2093*