POSSIBLE CONVERSION OF HQ-110 and HQ-170 RECEIVERS FOR RECEPTION OF WWV AT 2.5 MEGOCYCLES.

As the result of receiving a few requests as to the possibility of converting the Hammarlund HQ-110 and HQ-170 ham band receivers in order to provide for the reception of WWV as a frequency standard and time signal source, we are pleased to supply the following information.

In order to convert the receiver for the reception of WWV, the 160 meter amateur band must be dispensed with and the following changes and procedure employed to accomplish the desired results.

General Information

The following procedure will undoubtedly call for a signal generator, as a suitable source of 2.5 mc signal. We cannot recommend that this modification be attempted without suitable knowledge or equipment. In addition it would be an excellent idea to predetermine whether or not the 2.5 mc signal of WWV is capable of being received in your particular locality. Possibly the best means of determining this is to check with one of your brother hams who has a general coverage receiver capable of tuning to 2.5 mcs. If this signal cannot be heard on his receiver in your locality, during the daytime or nightime, it can be assumed that propagation conditions are not favorable for this frequency.

The following conversion is the only one possible, is very simple, but does result in the sacrificing of the 160 meter band. Unfortunately, the reception of the 5 mc WWV signal would call for a major revision beyond the scope of the average individual. This modification, it is understood in no way implies any responsibility on the part of the Hammarlund Manufacturing Co.

HQ-110

Refer to page 19 of your HQ-110 manual. Remove capacitor C48. After removing the capacitor, set the dial at 1.9 mc, the antenna trimmer at the 1/2 mesh or vertical position.

Tune transformer T20 top oscillator slug in the counterclockwise direction until the 2.5 mc signal source is heard, then turn the slug of transformer T16 to the maximum counterclockwise position minimum L, then peak capacitor C53 for maximum signal. Transformer T7 should then be adjusted in a counterclockwise direction for maximum signal.

HQ-170

Refer to the schematic diagram on page 25 of your HQ-170 manual. Remove capacitor C61 from the oscillator rack. This is 25 mmf. Tune transformer T23, top oscillator slug adjustment by rotating the slug counterclockwise, until the 2.5 mc signal source is heard. Turn the slug of T19 top to the maximum counterclockwise or minimum L position, then peak capacitor C53 for maximum signal. Then peak T12 slug for maximum signal.