Crystal or Master Oscillator frequencies are chosen as shown below:-

(1). For master oscillator operation with an external oscillator From .54 Mcs. to 5.6 Mcs.

$$F_{MO} = F_{STG} + .455$$

From 5.6 Mcs. to 31.5 Mcs.

$$F_{MO} = F_{SIG} + 3.955$$

(2). For crystal operation:

From .54 Mcs. to 5.6 Mcs.

From 5.6 Mcs. to 16.0 Mcs.

From 16 Mcs. to 31.5 Mcs.

These equations will place the imaginary or real carrier in the exact center of the receiver I.F. passband.

Crystal used: CR-18/U