



OF THE MANY schemes used to peak the audio output of a receiver for increased CW selectivity, one which usually gets overlooked is the simple expedient of tuning the headphones.

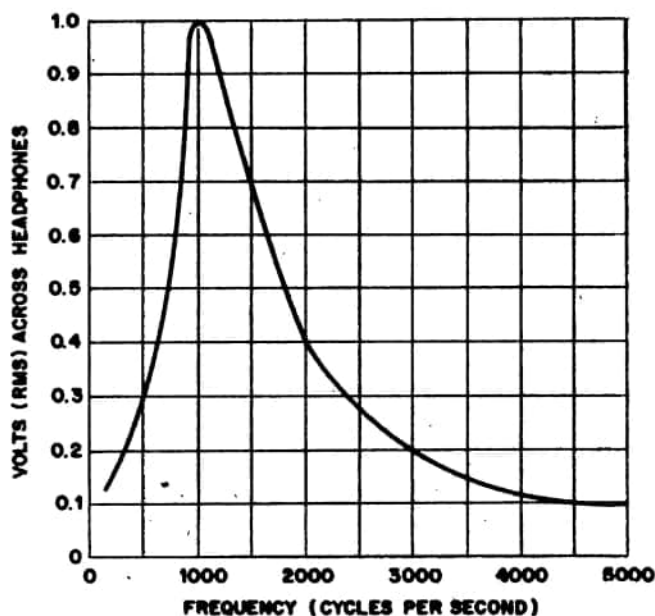
Since magnetic headphones have inductance, it's easy to tune them with a parallel capacitor. The secret is to include a series resistor (R1) to decouple the output of the receiver. The higher the value of R1, the sharper the resonant peak; lower resistance flattens it.

My Trimm 2,000-ohm headphones were tuned to 1,000 cycles with a .008 mf capacitor (a .005 mf and a .003 mf, 5% or 10% mica, connected in parallel).

This value was determined experimentally with a capacitor decade box adjusted to give the 1,000-cycle peak response shown in the graph. The lower the capacitance, the higher the frequency of the peak and vice versa.

This peaking circuit works best with receivers having the usual capacitor or transformer-coupled headphone output. In receivers where the headphones are plugged directly in series with a tube plate, resistor R1 will reduce the plate voltage considerably. In that case, connect a 2,000-ohm, ½-watt resistor across the headphone jack in the receiver.

—Rufus Turner, K6AI



Graph at left indicates the degree of frequency peaking that may be obtained by proper selection of capacitor C1. BFO control should be adjusted to peak the CW signal at the same frequency.

Components R1 and C1 may be installed in phone plug shell. R1 isolates the receiver's low impedance output. C1 becomes part of an L/C peaking circuit; the phone inductance supplies L.

