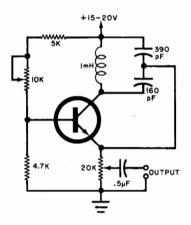
RECEIVING SSB

Q. I have a Heathkit SW-717 short-wave receiver that works very well, but I can't copy most ham voice stations. They all sound garbled. I was told that this is normal as they are using single sideband transmitters. Is there a circuit I can build that will enable me to understand what they're saying?—Harry Muller, Elkins Park, PA.

A. What you need is a beat frequency oscillator or bfo to re-insert the suppressed carrier of the SSB signals. The circuit shown will work with your receiver. Its output signal can be introduced at either the 455-kHz i-f strip or at the diode detector. In some cases, merely con-



necting a length of hookup wire to the output and positioning it close to the i-f circuitry will provide enough coupling. Otherwise, you can connect the other end of the wire to the anode of the detector. Adjust the 10,000-ohm potentiometer for maximum output and the 20,000-ohm potentiometer for greatest intelligibility. By the way, you will also be able to use this bfo for hearing Morse code signals.