

Hallicrafters SR-400



The Hallicrafters SR-400 arrived the other day for an evaluation test. This is the first piece of gear that has turned up with my name on it, even temporarily, in about three years, so I got right at the rig to see what Hallicrafters had come up with and what improvements had come about since my last new transceiver.

Once you have become used to a one kHz per division dial I don't think you ever are comfortable until you get back to one. (I may write kHz, but until I pass into the great DX'pedition in the sky I shall think kilocycles.) The 400 has just such a dial and it is light as a feather. It also resets with absolutely no backlash. With a little practice I found I could set my dial to within 100 Hz (cycles) as easily as I can set some other transceivers to a kHz.

One knob on the front panel that I viewed with great relief was for the noise blanker. I don't know about you, but when I put my tower up I managed to find the worst possible place for it. My twenty meter beam virtually hangs over route 101, the major truck route east-west for this whole area. I'm right at the top of a medium sized hill so I get a good long shot over a quarter mile of road where the trucks are struggling to get up some speed after stopping at the one and only traffic light in Peterborough. The ignition noise often is staggering. So I just pulled the blanker knob and removed all those trucks from my speaker. Halleluja!

They have another little contraption built into this transceiver that is very handy. This is the RIT, the receiver incremental tuning control. On phone this means that you don't have to follow someone down the band if his transceiver doesn't really transceive. And you don't have to move your transmitting frequency every time someone calls you a little off the channel. You just move your receiver off a kHz or two and leave the rig where it was. This is great for nets on 80 meters where half of the fellows never seem to be able to hit the net frequency exactly.

The RIT can certainly be useful when you are working phone DX and you want to move off the channel just a little to work around a pileup. This is absolutely basic for CW DXing.

The 400 would seem to be ideally suited to the CW operator. Not only does it have the RIT arrangement for small QSY, but it has a 200 Hz filter position with an adjustable notch. That isn't enough for you? It has automatic break-in for CW and you can adjust the delay so you can have almost instantaneous break-in. What about monitoring your own signal? It has sidetone built in. Frankly, if Hallicrafters forgot anything in this package, I can't think what it is.

The 100 kHz calibration oscillator is built in and not, as on other transceivers, an accessory.

I found the rig simple to tune. It did take me a little time to get it on the air

because I wanted to test it through my Henry 2K linear and this required a couple of soldered connections to the power plug on the 400. I finally found a soldering gun out in the back of the barn storage area. Every last inch of solder had been lifted so I had to go downtown for that. And the mike used an Amphenol connector which I couldn't find around. Evans sent one down the next day and I was in voice.

My first contact was with Bert, ZL4IA, who said that not only was I by far the loudest signal on the band, but that the audio sounded excellent, every bit as good as AM. KR6JK was next, and Dave said that my signal was by far the loudest on the band and the audio terrific. I worked about thirty other countries during the evening and in no case was I able to get anything but excellent reports. I tried turning up the mike gain to the top and giving the Amplified Automatic Level Control a workout. In the midwest, where my signals were booming in about 50 over nine, the reports were that my signal was about 3 kHz wide on the lower side and about 10 kHz on the higher side. That seemed to me to be remarkably good considering that I had everything wide open and the meters were going almost off scale.

In all, Hallicrafters has turned out a beauty of a transceiver. It is one which will do everything the hardened phone man could ask. It doesn't go all to pieces when a whalloping signal is just off frequency. It is nice and stable. When you calibrate it you know that you can depend on the dial telling you exactly where you really are in the band.

If you like your CW, as many of us do, you may have been frustrated at the short shrift that many of the present day transceivers give this half of amateur radio. The SR-400 obviously has been designed by a CW man for CW men. With all those frequencies opening up to the Extra Class licensees this coming fall I'll bet that a lot of you will be wishing your transceiver had some of the abilities of the 400.

Phone men will want the associated HA-20 remote VFO unit. This permits split frequency operation over a wider range than the RIT function, letting you work DX stations down around 14,100 while transmitting above 14,200. Most of the time I don't personally feel that this type of operation is in the best interests of the other

fellows trying to use the band, but I recognize that it happens and when it does you don't want to have to swing your transceiver down to copy the DX station and then back up to the U.S. band to talk back to him. You'll do this about once before you call your distributor and get the HA-20.

... W2NSD/1

Technical Specifications

Tuning Ranges:

Full frequency coverage of the amateur bands in eight ranges from 3.5-30 MHz.

Types of Emission:

SSB—selectable USB/LSB with suppressed carrier either manual, or voice control.

CW—Keyed RF carrier either manual or break-in.

Dial Calibration:

One kHz increments, 500 kHz tuning range.

Frequency Stability:

Less than 250 Hz drift in first hour, after a fifteen minute warm-up, and less than 100 Hz per hour thereafter.

Power Supply Requirements:

Model PS-500-AC for 105-125V 50/60 cycle AC base station operation, or PS-500A-AC for 117-234V 50/60 cycle AC base station operation.

Model PS-500-DC for 12 VDC mobile operation.

Transmitter

Power Output:

SSB—200 watts PEP

CW—200 watts.

Distortion Products:

30 db signal to distortion ratio.

Unwanted Sideband Rejection:

50 db below desired output.

Carrier Suppression:

60 db below PEP output.

Receiver

Crystal Lattice Filter:

Six pole, symmetrical passband. Center frequency = 1651.4 kHz. B/W = 2.1 kHz (3db) B/W = 4.2 kHz (50 db).

Sharp CW filter, 200 Hz @ 6 db.

Notch rejection, up to 30 db.

Antenna Input:

50 ohms nominal.

