

Paul Franson WA1CCH

A 6 meter transceiver for the fine Heath SB-Line

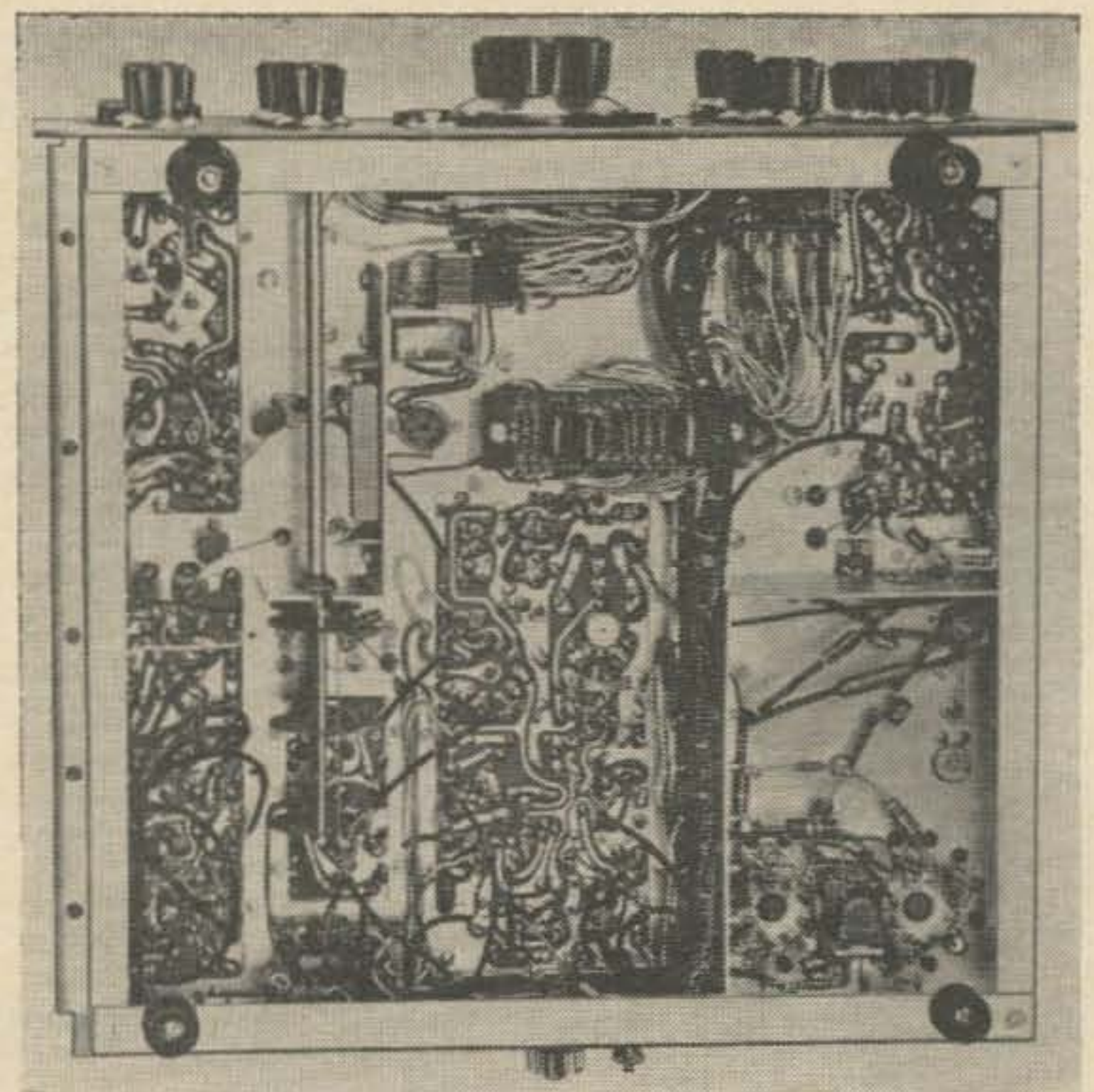
73 Tests the Heath SB-110

Has 6 meter sideband arrived? Yes, it has. Anyone with interest in the band—and anyone who listens to it—can't help noticing that the gentle quack-quack is becoming more and more prominent. Half a dozen firms are making 6 meter SSB transmitters and transceivers now, and more are expected very soon. The reasons for this growth are obvious. The Technician license class now contains the second largest number of hams. Most of the active Techs are on six, making it one of the most popular ragchewing and mobile bands. As the band becomes more heavily populated, interest grows in better equipment to make more satisfactory contacts possible and the increased activity makes manufacturing SSB—and transceive operation—have proved themselves overwhelmingly on the major HF bands. Now Heath has provided excellent SSB equipment for 6 in kit form.

The Heath SSB-110 is a mighty attractive piece of gear. It matches the other members of the well-proven Heath SB line in appearance and performance. Briefly, it offers: exceptional receiver sensitivity, stability, selectivity and resistance to overload with an excellent ALC controlled SSB-CW transmitter which delivers about 100 watts PEP with minimum distortion and unwanted mixing products. Both the receiver and transmitter sections are well designed, solidly and reliably built (If you follow Heath's excellent instruc-

tions) and convenient to use.

The SSB-110 arrived in a large box one morning. Since I am the most curious person since Lot, I immediately opened it up. Ignoring Heath's instructions to check the parts list carefully (I should have. Nothing was missing, but there were these two dial pulleys, one with a 1/4 inch shaft and the other with 9/32 . . .) I noted the incredible number of parts. All were of excellent quality. No junk, of course. The most sobering part of the quick



snoop was the bag after bag of solder I uncovered which made the job look fearsome, so I stuffed all that I could back in the box (how do they get it all in there?) and went back to work.

That night I attacked the construction. I won't claim that it was a two hour job, but it wasn't hard or unpleasant. Most of the parts went on five printed circuit boards and the whole assembly was so well-planned that there wasn't a hitch in construction. They even have things figured out so that the procedure is self checking. I found my little stupidities very quickly so that the final check disclosed no uncorrected errors. There weren't any real tight spots either, though wiring the relay with 18 contacts was rather challenging. Heath furnished two wiring cables that took some of the fun out of the construction—thank goodness.

All in all, it took about 35 hours of evenings and weekends to build. I have built quite a few kits, and suspect that someone with less experience would take a little longer (and probably do a neater job). Incidentally, even a rank beginner could probably do a good job on the construction if he followed instructions carefully and took his time.

When the assembly was finished, I checked the recommended resistances to make sure that the first test wouldn't be the last. Everything was fine, so I built the matching HP-23 supply. It took about an hour and a half.

It didn't blow up. In fact it couldn't since a few vital resistors weren't connected until later. It just made a pleasant receiver noise. Next I aligned and tested everything. Here again, the instructions are completely lucid and foolproof, but not assistant-editor proof. I didn't read the instructions properly at a few places and had to backtrack. You need a VTVM, dummy load (like a Heath Cantenna) and a receiver that will tune WWV (or even a BC station on a multiple of 100 kc) for the alignment. Heath furnishes the alignment tools.

My home location couldn't be worse if it were underground, so I drove up to Wayne's place on Mt. Monadnock (known as 73 Mountain to some) to connect the transceiver to a good antenna.

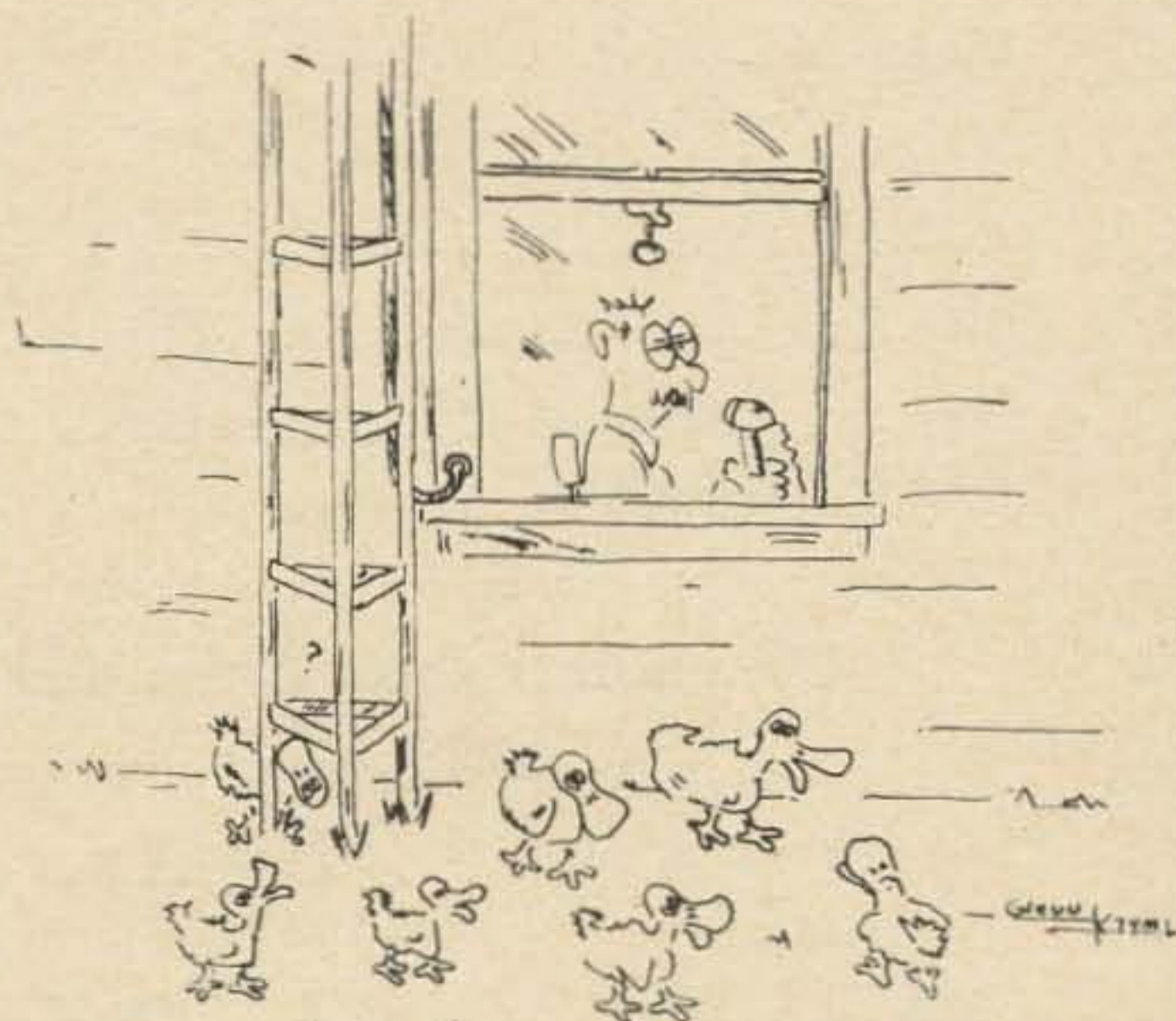
To tell you the truth, it didn't work too well at first, I couldn't hear a single station. But things improved remarkably after some slight adjustments . . . like connecting it to the antenna instead of a dead end cable going behind the bed.

Performance was outstanding. I compared the receiver to a couple of well known 6 me-



ter transceivers and it beat them flat. The tuning is sooooo smooth and slow. It really dug out the weak ones while ignoring the FM station that usually comes in so well on 6 up there. I tuned around a bit and decided that the maiden contact would have to be with an SSB station in Connecticut, about 150 miles away. He came back instantly and reported everything was fine. In fact, he was using an SB-110, too, and I can verify that it puts out a fine signal. Closer stations also said that the signal was perfect. I think that Heath has done an excellent job on this transceiver. I suspect we're going to be hearing lots of them on the air.

. . . . WAICCH
PS. About that solder, I only used a small part of it. Turned out the job wasn't so bad after all



QRZ . . . QRZ . . . QRZ the sideband station . . . you're all over the band, OM. Copy you all over the band . . . QRZ . . . QRZ . . .