

C5800

REVIEW

By Peter Metcalfe
G8DCZ

What's that I hear you say — 'another 2m multimode'! Yes STANDARD COMMUNICATIONS CORP. of Japan (where else) released their answer to the 25W 2m multimode market in England about four months ago, following on from their C8800 FM only model and accompanying the C58 portable version. Standard's attack on Yaesu/Trio/Icom has reputedly been delayed by "six months of field testing to get it right". With statements like this abounding I am sure that you will forgive a little scepticism. Have they got it right or is this just another standard (forgive the pun!) rig?

Documentation

The rig comes complete with a very comprehensive manual which has only a couple of strange translation quirks (eg. in the description of the SSB TX amplifier, reference is made to a "younger amplifier" — is this some new technique I haven't heard of?). The operating instructions, especially of the synthesiser functions, are well laid out and easy to follow. The circuit diagrams, board layout and instructions on how to take the rig apart are very good and there is a particularly nice section on TX and RX adjustments. The part of RF circuit operation is a little sketchy, but adequate for those with previous knowledge of common techniques. However, the five pages devoted to the PLL and digital side of things, while being very thorough, takes some reading.

Circuit

There is nothing very earth shat-



tering here; the now conventional final power module (M57727A), protected against high VSWR by an LC coupling circuit sensing reflected signals and hence shutting down drive to the unit. There is a double superhet plus quadrature detector on FM receive and a vari-cap tuned VCO on transmit. For SSB operation, Standard employ a technique similar to the Icom IC290 for generating the two sidebands; ie. only one crystal is used, rather than the more usual two, and the different frequencies are diode switched by adding or subtracting L and C tuned circuits. While I'm not too happy with this method of sideband generation, it seems to work fairly well, so don't knock it! The rest of the SSB side is fairly straightforward with single conversion on receive, a double balanced modulator, etc.

A CW side tone facility exists,

which should help with morse practice, and on the display side a bargraph type LED power/signal meter is employed. One surprising feature is the external meter socket on the rear panel which allows one to connect a conventional (100uA) moving coil meter to supplement the power/signal display. If, like me, you don't like LED meters, take note. The extensive use of LSI devices in the synthesiser and control section along with "a large capacity 4K micro-processor never before used in a mobile transceiver" provide enough functions to keep the digital freak going for months.

Visual Impressions

The first thing that strikes one about the 5800 is just how small it is (about 5½" by 8" by 2"). In fact it is barely bigger than the C58 portable