



If it were not for the "DANGER" sign warning you to keep your fingers out of the valve PA compartment, you could be forgiven for thinking that the FT102 is all transistor. It is clear from our tests that the set outperforms nearly all competing solid state gear. Thermionic emission is far from dead

G5RV, together with an HQ-1, and a Transmatch type ATU. There was infrequent need for the RF amplifier to be in circuit, as adequate sensitivity was obtained at all times, on 28MHz, with little evidence of cross modulation or other nasties. There are a number of spurs — with a double conversion system and many oscillators this is not surprising. Ten were found across the tuning range, constant in frequency on each band, but varying in strength. None

were strong enough to move the S-Meter, or particularly troublesome, and generally only noticeable on 28MHz when the band was quite.

Audio output was more than adequate, with an effective AGC system, no 'pumping' observed, although very slight peak distortion was apparent at even moderate volume levels.

Both the AM and FM facilities were fitted, although the former was not used on transmit. AM receive on

broadcast stations gave perfectly acceptable quality, and although the width facility is disabled on AM, the shift can still be used to good effect. Likewise the FM Discriminator is efficient with an effective 'soft' squelch. Both the activities just below 28MHz, and those on 2M using a converter were monitored without any problem.

Turning to transmit, no problems were found in loading the rig into any of the antenna systems, although the SWR needed to be kept low for optimum results. A few people related stories of FT-102's being returned due to parasitics on some of the new bands, but no such problems were encountered. DC power output approaching 200W was possible, but generally around 100W p.e.p. output was used as recommended by the handbook. The microphone eventually supplied was a Yaesu MH-1B8.

Complimentary reports were received on SSB from many stations, with most activity directed at the States on 15 and 10 metres. The processor appeared optimum set at an indicated 10dB, with higher levels causing some degradation of quality. The reviewer is not a fan of VOX, but this appeared to work satisfactorily, with quiet operation of the change over relays. The anti-vox setting caused a few problems, as there did not seem, to be a point at which this could be set so that it functioned correctly, while allowing actuation again if a strong signal had appeared during the receive period.

The monitor facility was used but the reproduced audio was very poor, sounding as though the mixer had incorrect injection levels.

On cw, the lack of specific CW filters did not provide particularly startling results, but the selectivity is probably adequate for run-of-the-mill contacts, without too much competition around. The Audio Peak Filter helped a lot without too much ringing. Anyone contemplating serious SW work would need one of the optional filters which should have better selectivity characteristics than that perceived listening to the narrowed bandwidth of the SSB filter. On transmit, no adverse reports were received, the usual semi-break-in system via the VOX being provided, with sidetone via the monitor function.

As with nearly all transceivers

DYNAMIC RANGE AS CALCULATED FROM TEST 7 1.9MHz	73dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 3.7MHz	71dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 7.05MHz	74dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 10.1MHz	76dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 14.2MHz	77dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 18.1MHz	75dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 21.2MHz	73dB
DYNAMIC RANGE AS CALCULATED FROM TEST 7 24.5MHz	56dB

Note: Test 7 at 28.5MHz not possible