

420MHz (yes, 70cms started at 420MHz in those days!), and the dominant mode was AM. It was the very end of the era when normal practice had been to buy an exforces communications receiver such as an AR88 or HRO, and to build a simple all valve transmitter to use with it. SSB was just beginning to appear on the bands and was regarded with great suspicion by some of the older hands! It soon became apparent even to them that SSB was the mode that would mainly be used in future, and more and more amateurs put their old AM rigs to one side and began to use sideband. The greater complexity of SSB transmitters as compared to those for AM deterred many who would normally have built their own gear from doing so, and there was thus a great upsurge in the demand for commercially built equipment. It was this new market that KW Electronics tapped, first with the Viceroy transmitter, and then with the KW 2000 transceiver which, with its successors, was undoubtedly their most successful model. In its heyday it sold all over the world (including Japan) and was widely regarded as representing the state-of-the-art in amateur equipment. \*It was also

one of the first transceivers, as opposed to separate transmitters and receivers, to appear on the market and, with its successors the KW 2000A, B, and E, it remained in production until, in about the mid 70s, it was overtaken by more modern designs from Japan. However, many thousands were sold, and most of them are still around and still giving a good account of themselves on the air.

## Circuit description

The basic KW 2000 was an all valve transceiver covering the 1.8, 3.5, 7, 14, 21, and 28 MHz bands, and producing an output of 50 watts from a single 6146. Its appearance can be seen from Fig. 1, which actually shows the KW 2000A; however, the appearance of the KW 2000 was virtually identical. Despite being all valve it was not significantly larger than its modern counterparts, although, as can be seen, the power supply was separate from the transceiver, an alternative mobile power supply being available. The actual dimensions were 35x15x27 ins for the transceiver and 20x15x27 ins for the mains power supply, their weights being 7.25kg and 9kg respectively. The cases of both

units were of 'wrap around' construction, meaning that they formed complete removable sleeves around the chassis. After removing the four feet the cabinet could be slid away from the rig leaving both sides of the chassis exposed. In addition, a hinged flap was provided in the top of the transceiver case allowing valves and pilot lights to be replaced without the case being removed.

A block diagram of the transceiver is shown in Fig. 2. Starting at the top left, the signal from the microphone is amplified by a single valve VIA (½ 12AX7), and then fed via a complete follower V2A (½ 12AT7) to the balanced modulator which consists of two germanium diodes (OA79). In common with many rigs produced in the early days of SSB, the KW 2000 generates its SSB signal at a comparatively low

<sup>\*</sup> A rather frivolous indication of the esteem in which it was held is that, when Peter O'Donnell wanted to introduce an Amateur Radio interest into his "Modesty Blaise" cartoon strip, he showed Modesty and Willie using KW2000Bs to maintain contact between London and South America. It was obviously considered that no well-equipped amateur would use any other rig!