

AM ON TEN

by Roger Spear, G4BXM

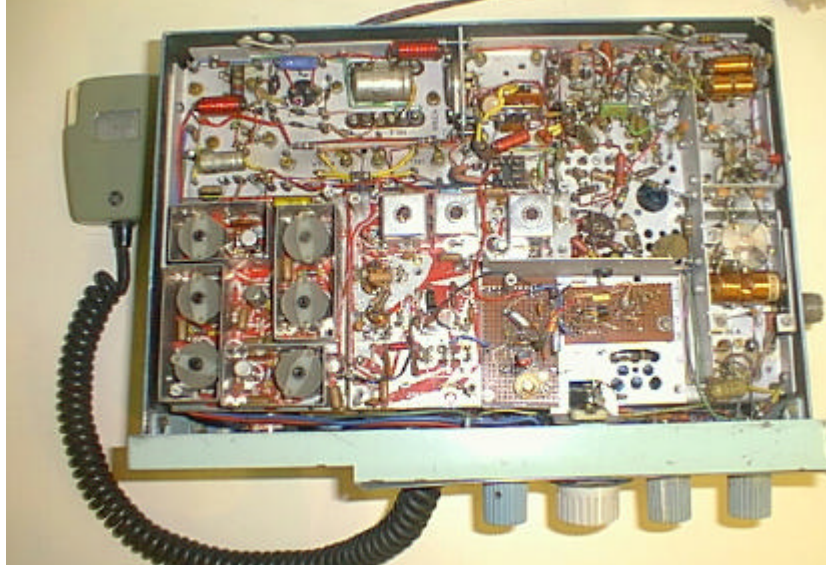
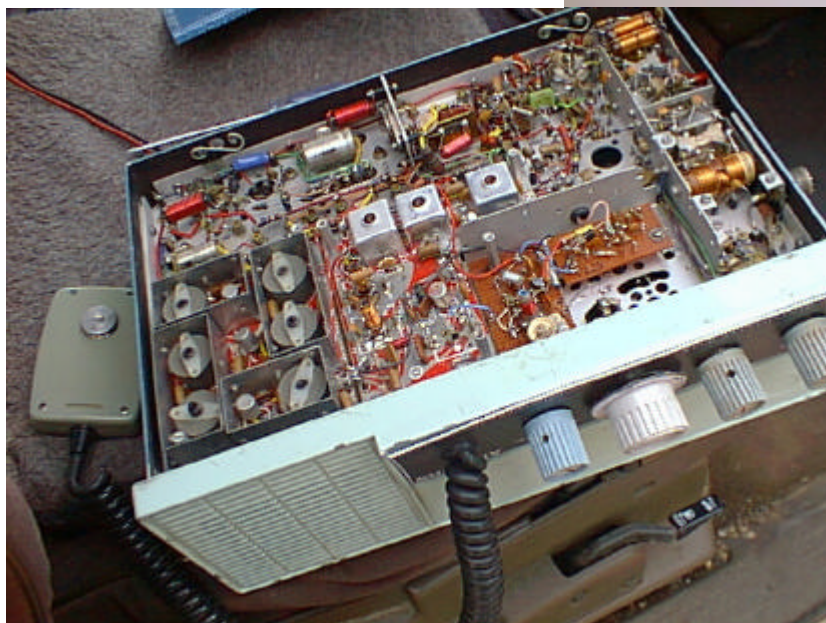
Now that things are happening on the HF bands, it's a good time for those of us (and that's probably most of VMARS) whose body clocks stopped at 1947, to indulge in some real Ham Radio, and enjoy the high quality AM on 29MHz, with all the W's coming in loud and clear on their Johnsons, Gonsetts and Heathkits, etc.

My "Minimitter" station (see section below) works well into the 80m doublet but most of the telephones in the area also receive my signals rather well. So some form of portable set up seemed to be the answer. Although the Alinco DX70 "Rice Box" puts out some very nice AM, where is the fun in that? Some form of "vintage" gear would be



The converted PYE CAMBRIDGE AM10 showing the added VFO dial

Two views (below) of the simple insides with added VFO board bottom right



better, and my attention turned to a pile of old **CAMBRIDGE AM10** transceivers, bought for 50p each, at Picketts Lock for spares. Luckily I had left a couple intact.

Hardly "real" vintage, but these sets were originally very popular in the early days of AM on 2M - crystal controlled Tx and "carefully tuning the band for a reply" on the station receiver. Some models were, in fact, made to cover 28 MHz, but I have never seen them on the surplus market, so a conversion from the Low Band set would be the best bet. A rewind of the RF coils was fairly easily achieved, as these sets are very simple to work on, the boards being very large and accessible.

With the addition of a simple 18MHz VFO, the receiver tuned nicely on 29.0 - 29.1MHz, and with a crystal for 29.03MHz, the (VALVE!) Tx section produced a nice little 9 watts at the aerial socket. To make it fully transceive, it was a simple matter to take a buffered output from the VFO to the original oscillator, tune that to 18MHz as an amplifier, and replace the 6BA6 tripler stage with a 6BE6 mixer (almost a direct replacement), self oscillating with a 10.7MHz crystal. The output now follows the receiver quite well (at least-near enough for AM!), and



many contacts have been made with this odd little set-up! I originally designed it to be used with a Quad Loop, but am actually getting some respectable contacts with my 4 foot mobile whip, and at least there are no Phones around!

As all of us in VMARS know, you don't have to spend a fortune to get on the air.

The 'Minimitter' Station

This comprises a "Minimitter De-Luxe" "Table topper" 150W transmitter (actually under the table). 2 x 807, modulated by 2 x 807 and the forerunner to the "Mercury 200" Tx (the same rig but in a new box).

The receiver is the "Minimitter MR44", a slightly later double conversion superhet, very unstable but OK for 10m AM, with the matching "Cats eye" speaker.

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