

17mpg RTTY mobile *Mick Bone 2E1IEW*

Some years ago I rebuilt a FFR Landrover and was pleased with the finished article but felt that it was just another green Landrover. Having been the occasional SWL I decided that radio was the way to go rather than end up with say a recce vehicle with all the various kit from the Boer war to the present. After researching what would have been fitted at that time(1967) I decided to go for the C11/R210/C42 setup as this appeared to be the most common used in mobile army comms.



The Radio installation in Mick's Landrover. The T100 teleprinter can be seen on the extreme left.

This photograph first appeared in the January 2004 issue of LAND ROVER enthusiast magazine and is reproduced with permission. Original photograph by Paul Bussey

For anyone who is new to the world of ex-military radio take your time in sourcing what you require as it will pay dividends in the long run, I spent about nine months trying to find both the C11 and the C42 as complete stations but was offered everything from junk to overpriced non working sets. Also try not to fall into the trap of buying say the tx/rx from one source, atu from another etc. as it could well work out on the expensive side and don't forget all those trays, fittings etc. - this is from personal experience, others may beg to differ.

Once it was all located it was a straightforward job to fit into the vehicle apart from re-aligning a few plugs to tidy up the cable runs, it was then displayed for a couple of seasons. It was whilst at the military Mecca known as Beltring that I stumbled across a Radio Telegraph Adapter installation kit with paperwork which upon browsing stated that it could be used with C11/R210 and ssb model, C13, C42 and C45. The kit consists of the RTA unit, applique unit, a couple of 12pt cables and two bnc interconnects, from what I can see the applique unit is to enable remote operation (>5 miles) via D10 cable to allow 2 or 4 wire working.

With the C11/R210 the following modes of transmission are available: narrow band frequency modulated vf telegraphy, simultaneous nbfm vf telegraphy and am speech ,nbfm speech for inter working with C13 , and cfs telegraphy.

The unit operates on 24v from either the C11 rotary psu or from SUR No.30 via the J1 box, there is also a panel socket to allow direct connection to a battery or a 4way junction box although a patching plug must be fitted here if using the radio or mains psu.

Now for what I thought would be the easy part, obtaining the Siemens T100r teleprinter as specified in the RTA paperwork, after about six months advertising and trawling web sites I had the offer of three, one in Australia, one in Chicago and the one that was offered for free from Belfast. Eventually it arrived and was a T100a but without the tape reader or tape punch. Little did I realise that it was a double current machine

until this was pointed out to me by Mike Stott who kindly made a double current converter and, lo and behold, it was receiving but was awkward to set up because not only did you have to accurately tune the rx but also set the output level on the converter: the RTA unit has two strip neons to show when you have the correct mark and space but I found it easier to use these as a rough guide and then listen for the rx magnet in the teleprinter chattering or the printer to start printing and then fine tune the R210 until it prints something intelligible, for this I

have been using the German shipping forecast as you have a choice of frequencies and it is transmitted at 50 baud. I have recently acquired a T100r with tape reader and punch plus a 75baud gear set which is the printer specified for the RTA unit although it states the T100r is the replacement for the Creed 7b, whether this would work with the RTA unit I know not.

To obtain the 240v to power the printer a Thorn inverter is used, these are readily available from the likes of Johnson's but a word of warning, they weigh 25Kgs! So if weight or space is a problem you could use one of the commercially available units also be aware they use Clansman style mounting's.

Mounting the printer, RTA unit, inverter is via a square section framework that is bolted to the nearside wheel arch, the individual units are then affixed to this using the normal rubber shockmounts. This had to be fabricated from the line drawings in the installation book as I suppose they all went in the skip, the applique unit sits on top of the RTA unit on a fabricated frame.

At the moment the setup has not been used for transmitting as I still have to erect some type of aerial in the garden and it will not go back in the vehicle until the show season starts. Setting up does not appear to be too much of a problem and once this has been done the C11 is controlled by a tx/rx switch on the RTA unit, to revert to say am speech all that has to be done is to switch the RTA to standby.

I have enjoyed the search for the various components and the relevant paperwork and still chuckle when mum explains to little Johnny "oh look a typewriter".

If any members are seeking technical information on the T100, I have both a complete civilian manual and the EMER - Ed.