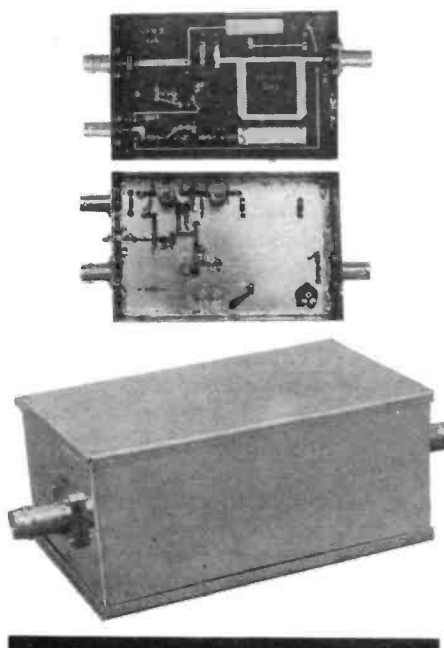


whether they are spare or you've left them out! I'm afraid my promise not to complain, about extra components, is short lived — doesn't stop me complaining about other things. As suggested in the assembly instructions, I am reading them in conjunction with the circuit and layout diagrams. The "Bestückungsplan (Leiterbahnseite, Atzseite)", whatever that might mean, shows a 27pF chip capacitor. I look in one of the little packets and what do I find? One definite 2.7pF, and one which could be 2.7, or it could be 27pF. Is it a dot, or is it a piece of dirt. I decide to put in the one which could be 27pF. Fine, so read on in the instructions. "The base lead of T4 is bent up at 90° such that it can make contact with the vertically mounted leadless coupling capacitor (2.7pF)." Yes, you've guessed it, they were both 2.7pF in the packet. The "Bestückungsplan ... " is wrong, not 27pF. One 2.7pF to go on the PCB, and one spare. (What did I say about spare capacitors?) The circuit shows a 15pF, the "Bestückungsplan" shows 15pF, between the Drain of T1 and the crystal, but they supply an 18pF — ah well, lets use it! There's another spare capacitor but no value on it — looks the same as the 1n used.

Commented earlier about consistency on this board — no, not another slot, but one hole to drill for one end of the 1uF Tant. capacitor that's shown as 2uF on the "Bestückungsplan", and 1uF on the



circuit! Oh no, is this some secret plan to drive G3TLB mad? Just one RF choke left and its a 0.47uH. What do I need? A 0.22uH. Ah well, put it in and see if it works. Note — unfortunately I'm not clever like the editor, he would know immediately whether the change in inductance (must find out what that means) would make any difference. Last thing to do, put it all the 1n miniature plate ceramic caps, but have one left over — Checks PCB against "Bestückungsplan (Volkaschierte Seite)" and have put in all those shown. Checks board and have one spare hole. Checks circuit and yes, thats where the last 1n cap goes — at the junction of the

100 ohm resistor and 0.22uH choke in the supply to T4 collector. It's not shown on the layout diagram although the pad is shown. Lovely, the boards finished, but whats this? Two ruddy resistors left over — one 150Ω and one 68Ω. Check circuit and they are nowhere to be seen. Looks at original German instructions and there we are — "... den Emitter-Festwiderstand zu variieren. (68,150 Ohm) Der Wert dieses Widerstandes ..." etc. Must find out what that means! They are not consistent. On the other three units they supplied a solder tag to solder to the outside of the case for the negative supply, on this unit they haven't.

In the pictures of the unit in the German instructions they show the +ve connection feedthru' in the case beside the crystal, not over the +ve pad on the PCB, where in fact it is actually located.

Components left over as previously stated — 2 resistors, 2 capacitors.

General comments

When Mr. Ogden, your 'Hon. Ed.', said to me "Here Keith, how do you fancy building some kits?", he didn't mention anything about having to take a crash course in Technical German. At least we have all become used to Japanese/English with the instructions to our 'Black Boxes'.

I can't understand why they have perfectly good, well translated instructions to two units, and poorly translated ones to the others.

The original German literature supplied looks well presented, and good quality components are used.

For all my moans, it was a real pleasure to build these kits and make use of that thing called a 'Soldering Iron'.

Plans are in hand to construct a 'Cavity Wavemeter' and 'Simple forward power indicator' from information given in the Test Equipment section of the RSGB VHF/UHF Handbook. These items are necessary for setting up the units. (Piper Communications, the kits' distributor in the UK, tells us that new instructions — in the Queen's English — have now been prepared. — Ed.)

The next report in this series covers operational and laboratory test reports.