

# MAGAZINE REVIEW

By Tony Bailey G3WPO

We start this month's magazine reviews with VHF Communications, a quarterly A5 format publication which has been on the market for some time (Subscriptions only) and originates from Germany. The English language version appears to have been the subject of some dispute with the UK agents this year, and the Spring issue has only just arrived. The magazine is aimed specifically at the VHF/UHF/SHF enthusiast, and is written in a precise to-the-point technical style, many of the articles having been translated from German (apparently not always by an Englishman).

For anyone engaged in constructional work at these frequencies, it is a must, with all back issues available if required. One sad change that has occurred over the years is the omission of pcb track masters, although the layouts are always given. The pcbs used to reproduced without fail at one time, but suddenly started being omitted. As the publishers also supply kits for the modules, one presumes this was an attempt to protect this part of the revenue — getting the pcbs from West Germany tends to be a bit expensive though.

The Spring edition has a couple of articles on Coherent Telegraphy methods, including part one of a practical article on suitable equipment. For those unfamiliar with this concept, it was covered some 5 years ago in QST, involving the use of very stable transmitters and receivers (within a few Hz), and receive bandwidths of the order of 10Hz (yes Hertz). Some complex control circuitry is used, a typical chain being mixer, integrator, sample-and-hold, mixer and timing and control. Two identical channels of the above are required, using phase mixing techniques to provide a constant recovered signal.

This may all sound complex, but when you consider that the benefit over a standard CW transmission received on a 500Hz filter is around a measured 24dB, which equates to the same received accuracy for a 25W normal CW signal, versus a 0.1W CCW (Coherent CW) signal, it looks worthwhile.

Other articles cover a wideband driver for shortwave bands (intended for driving a previously published transverter) and having a 3rd order intercept point of 48dBm, a computer derived 6 element Yagi (2M), Part 2 of a METEOSAT type receive converter, 24GHz Gunn Oscillator, VHF/UHF noise generator, a treatise on Pitfalls in Noise Figure Measurement, and some mods to improve the dynamic range of the TS700. As you can see, a varied coverage for the enthusiast.

The September and October issues of QST are to hand. The earlier issue covers a Step Attenuator, an unusual "Microprocessor Controlled LC Meter that sends Code", (the former looks interesting) and an analysis of the Half-Delta Loop antenna, amongst others. Going back to the CATV remarks made last month, a battle looks like developing between the FCC/ARRL/National Cable Television Association over the ARRL's petition to make CATV abandon Amateur Frequencies.

In the October issue we find the start of a solar array design for amateur use, a mobile automatic antenna tuner (roller coaster inductor required), details of how to Shunt-feed towers, and a cheap Iambic Keyer paddle (made from Perspex type material). Lurking in the Hints & Kinks section is a useful tip for HW-101 owners on how to improve the carrier suppression. Also noted is the fact that Al Slater, G3FXB, has once again gone away with the ARRL 1982 International DX contest trophy for Europe.

Practical Wireless offers some antenna hints for 2M DF'ing, more information on radio interference suppression, including practical details on an HF low-pass filter, and an add-on squelch unit for receivers lacking this facility.

Wireless World sometimes has something of interest to us — the November issue sees the start of a series on a 2 metre MPU transceiver. It offers SSB and FM (wot, no CW?) facilities, scanning and up to 9 memory channels. Details this month on the circuit only.

The main topic in the November

issue of Ham Radio is what is stated to be a major story — the first new rig from Heath for 8 years, in the shape of the SS-9000 transceiver. There nearly was an SS-8000 a few years ago but the WARC bands appeared on the scene just as it was completed so Heath had to re-design it!

And what a rig! Without going into details it is a 9 band transceiver, 2 digital displays, plus all the other goodies we have come to expect in rigs like the FT-ONE, PLUS a built in RS-232 interface, to which any computer, terminal, or modem can be connected. All of the transceivers facilities are controllable from the added keyboard (except on/off) AND the VDU will display the status of all functions, memories etc. With a bit of programming on the external computer it should even be possible to have the rig SEARCH for that DX-pedition and let you know when it finds it (and the band they are on!). And, of course, that pie-in-the-sky of the rig producing QSL cards, and the Log, is nearly here... Maybe it is all getting out of hand?

Slight snag, the price tag in the USA when the SS-9000's start appearing will be \$2495 — we will leave you to work out how near this figure in ££'s it will be. And in ready-built form only — they were very sensible in not letting this one loose as a kit!

Radio Communications' November issue offers RSGB members a directional loop receiving system, together with in-depth technical reviews of the Yaesu FT-480R and Icom IC290E 2M multimode transceivers. Also a "Triambic Keyer" — aimed at getting over the problem of terminating a string of dots accurately with the ordinary Iambic keyer. It uses 3 pushbuttons rather than a paddle, with two of them controlling the dots — certainly novel, although it may take some mastering to use properly.

December R&EW offers a 6 metre transverter — mainly the design of an experimental power amplifier, the remainder of the circuit coming from previously published modules in the magazine. ●