



Smith On Screen

Software house Number One Systems have published Z-Match, a program which puts Smith chart techniques on the BBC-B and IBM PC and compatible micros.

Smith charts were invented in 1939 by P.H. Smith and are used — or under-used — by RF engineers to find fast solutions to problems requiring analysis of transmission lines or complex L/C networks. The basic Smith chart itself is based on two sets of circular graphs representing the resistance/impedance of a system and its reactance.

Z-Match covers calculation and conversion of impedance and admittance, parallel and series network equivalents, wavelength, distance, characteristic impedance (Z_0), dielectric constants, reflection coefficients, standing wave ratios and Q values. The program's name signifies the Smith chart's efficiency in solving matching problems.

Z-Match costs £65 for the BBC-B and £130 for the PC, and includes a manual with working examples. Further details on Z-Match and its uses from Roger Wareham, Technical Director, Number One Systems Ltd., Harding Way, Somersham Rd., St. Ives, Huntingdon, Cambs PE17 4WR. Tel. 0480 61778.

HRT ran a two-part article called *Secrets of the Smith Chart* in the issues of November and December 1983.

Ian's Book

A new book by Ian Poole, *An Introduction to Amateur Radio*, has just been published. This is a guide to the hobby and can also be used to help prepare for the RAE.

The book covers the whole range of topics likely to be needed.

It deals with the more practical sides of operating in chapters on the HF and VHF/UHF bands as well as covering call signs, codes and jargon.

The more theoretical topics are covered in chapters on types of transmission, receivers, transmitters and aerials.

Finally there is a chapter about getting started. Here details of setting up a station are covered together with useful ideas about preparing for the licence.

Priced £3.50, it is published by B. Babani (publishing) Ltd, The Grampians, Shepherds Bush Road, London W6 7NF.

Keys For Christmas

Gordon Crowhurst of G4ZPY Paddle Keys is revving up his Special Christmas Offer. Now is the time to plan if you want to offer your nearest and dearest Morse key enthusiast a hand-built Morse key for Christmas.

Orders can be placed now with a non-refundable deposit of £5 for Pump (straight) keys, £10 for Paddles and £20 for gold plated keys. £5 discount applies to orders placed during October.

Gordon is also offering gold plated keys on chrome plated bases, £65 the pump key and £110 the Twin Paddle key — cheaper than the fully gold plated keys. And new this month: silver plated Pump key for £60, silver plated Twin Paddle key, £96.

For more information and prices, contact Gordon Crowhurst G4ZPY, 41 Mill Dam Lane, Burscough, Ormskirk, Lancs L40 7TG. Tel. 0704 894299.

Loughton Rout Red Tape

Loughton and District Amateur Radio Society and the RSGB (Membership Services Department) have been providing each other with the kind of fun which calls for long letters with underlining and sub-paragraphs.

You know the sort of letter: the sort you swear you are never going to write again, until something 'crops up' which demands point, rhetoric and swift answers to important questions.

It began when Chairman Jack Atkinson applied for a special event station call sign GB2LRS, as usual, for its field week 8/9 July. In reply, he received a letter from Tim Charles in the Membership Services Department declining the application and quoting two sets of terms and conditions issued to the RSGB by the DTI in March '89. The gist of these points is that SES call signs should only be issued for events of "special significance" to the public at large, and accessible to them, to avoid issuing special call signs to groups who simply want to "increase the number of call signs at their disposal".

Loughton are a well-established Radio Society, and this went down like a lead brick in a barrel of tadpoles. Especially as their previous event call sign has been issued since the March directive.

Jack G3OPA objected particularly to the RSGB statement that it "acts solely as an agent of the DTI" in these matters, and quoted the Memorandum and Articles to suggest that this was not at all its duty. He also wanted to know why, if it was going to restrict Special Event call signs, the DTI did not vary the club's own licence to allow simultaneous operation on all bands and third party messages.

Jack was also concerned, as others have been, about a recent letter from the DTI stating that an A licence holder must be elected to the committee if the club as to hold an A licence. His investigations apparently culminated in an admission from the DTI that this was not intended.

In reply, Tim G4EZA pointed out that the RSGB is indeed an agent of the DTI in a number of specific administrative respects, and that as of 1 January 1989 (at the same time as the new licence conditions) ANY amateur station can operate simultaneously on as many bands as it wishes — removing the need for an SES call sign for this purpose. He proposed to submit the application to the DTI now that it had been made clear that the station was open to the public, but warned that the "special significance" clause might prove a stumbling block.

This looks like sense on the face of it, but is it? Where is an outdoor radio station likely to attract public attention: in the middle of town on an ordinary market day, or in the middle of a crowded county fair with dozens of other attractions? This is a serious question. Answers on a postcard, please.

Jack G3OPA replied with thanks and said that nobody had noticed the change allowing simultaneous operation, especially as the SES application forms still state simultaneous operation as a benefit. He was also a little concerned to read that a club/SES station must be operated "under the direct supervision of the licensee", possibly a tricky operation in a large marquee (or two).

Tim replied that everyone seemed to have overlooked the bit about simultaneous operation, including whoever designed the new SES application form. And we thought they were still using the old ones. He also pointed out that, although nobody could be in two places at once, the person who signs the declaration on the application is responsible for ensuring that the station is run correctly, and must work out how best to achieve that without cloning. This does mean that a class A station must have a class A supervisor — or supervisors, since other members can be allocated this role if their names and addresses are lodged with the DTI.

The RSGB are working with the DTI towards allocating a special prefix for club stations with enhanced facilities including third party messages.

The happy ending is that GB2LRS was granted its application and no doubt a splendid time was had by all. The moral is that when paperwork gets in a tangle, someone has misread something somewhere, and not necessarily where you might think.