

# CB

# Citizens' Band

Britain's Leading Communications Magazine

99p

## BRITISH WINNER?

The Panoramic  
CB Scanner



**PLUS  
OFFICIAL**  
CB Code of Practice leaflet  
**INSIDE**

## BUYER'S GUIDE

Every major rig and twig listed

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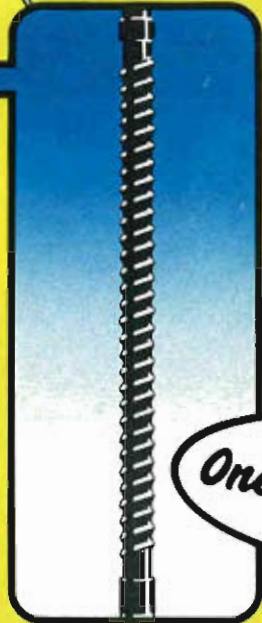
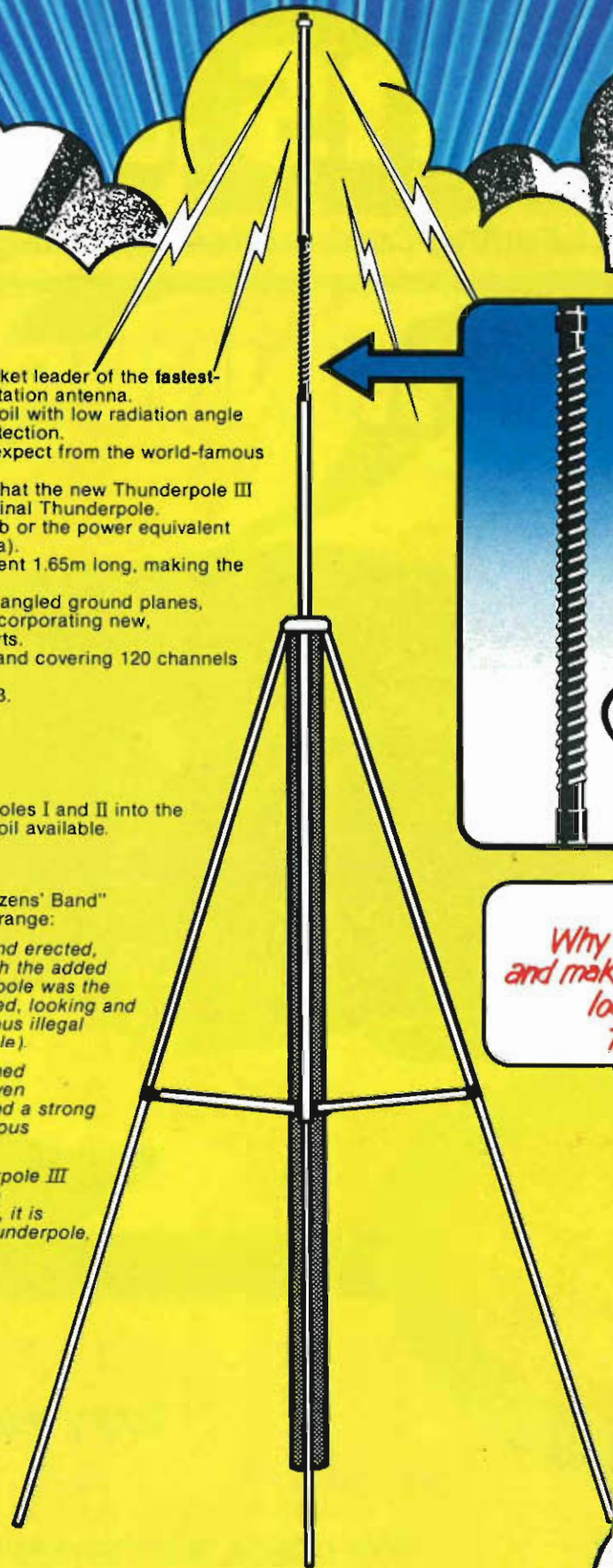
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COIL**

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the Rest!*

*"HI BREAKERS!  
Why don't you jump the skip  
and make the trip with the centre-  
loaded, helically wound  
THUNDERPOLE III"*





# CB Citizens' Band

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DECEMBER 1984 VOLUME 5 NUMBER 1



### Cover this month

The Panoramic CB scanner. Made in Britain by a small team of engineers in the West Country, the Panoramic scanner is reviewed this month by Chris Peterson.

Editor ..... Eamonn Percival  
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### NEVADA 934 MHz PERSONAL RADIO

#### BASE ANTENNA

##### MODEL PA7-E

The PA7-E is a strong and highly efficient (7.14 dbi) omnidirectional stacked 5/8 colinear Base antenna. Manufactured from the highest quality chromed brass and steel, with fibreglass whip. The cable connection is via 'N' type connector, with the feed point completely waterproofed. The PA7-E is supplied with a fully comprehensive mounting kit with 'N' connector and waterproofing tape supplied. No VSWR adjustment is needed with this antenna.

PRICE £59  
incl P&P



#### NEVADA SWR METER

This precise and extremely accurate meter has been especially designed for the UK 934 MHz range and features an illuminated scale and low-loss N-Type connector sockets. Twin meter SWR units have been popular for some time now, but this meter takes the process one step further to its logical conclusion - two needles on a single meter. Merely calibrate the forward power and the second needle is giving an automatic reflected reading. In addition to being an SWR meter, this unit measures power in two ranges; up to 10 watts and up to 50 watts, so it really is a must for any 934 MHz operator.

SPECIFICATION  
Freq: 934 MHz; Impedance: 50 Ohms  
Power: 10 W. Full scale, 50 W. Full scale

£89.95



#### NEVADA HRA-900 Mast Head Pre-amplifier

On 27 MHz the value of a preamp is debatable under certain conditions, but at the higher 934 MHz there is no argument. However, at this frequency the noise added by a preamp is of extreme importance, and this unit features an exceptionally low noise figure of 0.8 db and an impressive gain of 15 db. The exceptionally low noise figure is obtained by using the latest "state of the art" components and high quality low loss coaxial relays. Because of this low noise figure at 934 MHz the preamp can effectively double the range of received signals when placed at the masthead. The Mast Head Preamp, which is fully weatherproof, comes complete with remote on/off control unit and connecting cables for same, and is manufactured to the highest professional standards.

SPECIFICATIONS Gain: 15db min.;  
Nominal Noise Figure: 0.8db max.

£149.95

## NEVADA 934 Professional Series

### HIGH GAIN 12-ELEMENT LOOP YAGI BASE ANTENNA



##### MODEL TC-12L

The TC-12L is a state of the art 12 element loop yagi designed specifically for optimum performance at 934 MHz by one of the Country's leading microwave Engineers (pat pend). The TC-12L is manufactured from high quality materials to ensure good performance and also good weather handling. The cable entry point is via a high quality 'N' socket with unique matching line, this allows for correct 50 ohm matching and low VSWR. The TC-12L produces a tested genuine 18 dbi gain.

#### SPECIFICATIONS:

Gain: 18 dbi  
3 db Bandwidth: 20  
Front-Back: -25 db  
1st side lobes: -14 db  
Weight: 1.1 kg  
Overall Length: 63.5 inches

★ Designed by one of the UK's leading microwave engineers.

★ This antenna is more tolerant to nearby structures without distortion of radiation pattern.

★ Built-in coaxial low loss feed system. To 'N' socket. No wiring necessary.

★ Connection via a simple 'N' connector eliminates the need for complicated wiring and associated losses

PRICE £39.95  
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#### MOBILE ANTENNAS

##### MOBILE ANTENNA

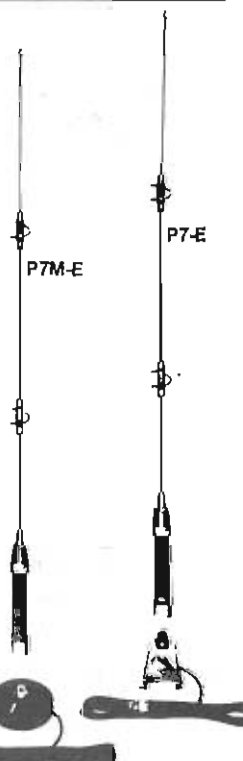
##### MODEL P714R-E

The P714R-E is a very strong gutter mounted antenna with tough fibreglass whip with sprung steel base section. The antenna produces a genuine 7.14 dbi gain. The antenna is supplied with good quality 'N' plug fitted. The gutter mounts a FOLD OVER type which means that the antenna whip may be lowered without removing from the base, for entry into garages etc.

#### ALL MOBILE ANTENNAS

£39.95

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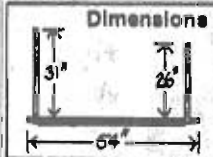


#### MODELS P7M-E & P7-E

These mobile antennas are available as gutter mount (P7-E) or magnetic mount (P7M-E) with detachable base. The P7 antennas have a unique 1/4 wave stub section so that they produce a uniform radiation pattern wherever they are mounted on the vehicle. Both antennas produce a genuine gain of (7.14 dbi). The P7 antennas are supplied with 'N' connector fitted, metal waterproofing screw cap to seal the gutter mount socket if the whip is to be removed. The gutter mount is of the FOLD OVER type which means that the antenna whip may be lowered without removing from the base, for entry into garages etc.

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- ★ Polarity Protection



25 watt RF Amplifier

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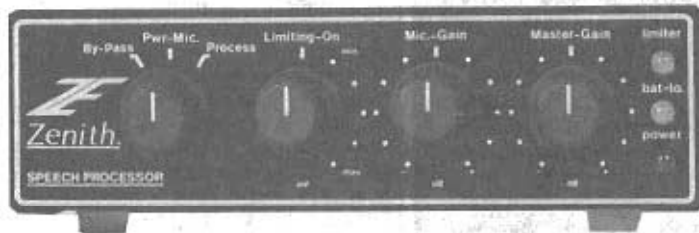


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Half Watt Model **£24.95**  
2 Watt Model **£29.95**

**ZENITH SPEECH PROCESSOR P-202**



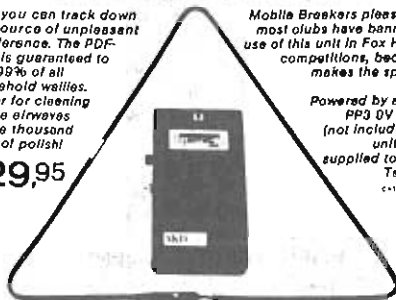
Designed and built in the UK, the Zenith Speech Processor will boost your "talk power" out of all recognition, increase your range, and improve the clarity of your speech. The P-202 works equally well in any mode - AM, FM or SSB - and is one of the most reliable products on the CB market today. Used with your existing microphone, it can be operated as a power microphone, speech processor, or simply switched out altogether. When ordering, please state the make and model of the rig with which you wish to use it, so that we may send it ready-wired for your transceiver.

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# UPDATE

**NEWS FROM THE WORLD OF CB**  
**NEWS FROM THE WORLD OF CB**  
**NEWS FROM THE WORLD OF CB**

## Editorial

Although we haven't made a big splash about it on our front cover, we are, nonetheless, proud of the fact that this particular issue of *Citizens' Band* marks our 4th birthday. Furthermore, it remains the only magazine in the UK for the CB enthusiast, the others having long since fallen by the wayside.

We were reporting on CB-related matters way back in December 1981 in pre-legalisation days, totally committed to, and campaigning for, a legal CB service in the UK. We will continue to cover developments in CB radio and peripheral communications, and look forward to a bright future.

Unfortunately, every silver lining is surrounded by a cloud, as the story about the bucketmouths elsewhere in these pages proves. Sadly, the wallies continue to plague CB, but the news that the RIS (Radio Interference Service) is soon to become part of the DTI (Department of Trade and Industry) gives us fresh hope. The RIS will be expanded after an 18-month study period, providing extra manpower to combat this problem.

As you will probably notice, there is a new name at the bottom of this column. This is the first issue of *Citizens' Band* I have worked on and, although hectic at times, it is also very enjoyable. Sue Sharp has, of course, helped enormously with her wealth of knowledge and expertise, and I shall endeavour to maintain the already high standard of the magazine.

I would like to thank Keith Townsend for his sterling work as Acting Editor for the last few months. Keith hasn't disappeared altogether — he will still be a regular contributor to the magazine, and we look forward to many more of his knowledgeable articles.

Finally, with the advent of the season of goodwill, we have included a Christmas gift guide this month. Obviously, the list isn't exhaustive — rather, it comprises a few newer items which are competitively priced and which may make suitable gifts for fellow breakers. On the same subject, *Citizens' Band* would like to take this opportunity to wish readers and supporters everywhere a merry Christmas and a happy New Year.

**Eamonn Percival**

## Them and Us — Or We?

Although it has been only a few months since the Department of Trade and Industry assumed responsibility for radio regulation, it has already demonstrated its very considerable ability to act in the interests of those services which it now controls. CB has already seen the benefit of revised licence conditions and a more liberal antenna specification, and the fact that both of these measures were originally urged upon the Home Office long before legalisation is a strong indication of the very real difference in official attitudes to our hobby. Meetings between RRD officials and members of the CB lobby, once held in an undisguised atmosphere of "them and us", have now become a useful exchange of opinions in a joint attempt to improve the service.

The most recent meeting, held in late October, gave the first opportunity for users' representatives to voice their concerns about in-band abuse directly to officers of the Radio Investigation Service, also recently acquired by the DTI. The RIS is in something of a state of flux at the moment, as it establishes new regional offices. It is also the subject of a ministerial review designed to identify its needs and priorities for the future but a British CB Council suggestion that it take steps to establish closer liaison with individual CB clubs in various areas throughout the country won the immediate support of officials, who are eager to forge closer links with user groups throughout the spectrum. We were reminded that over a hundred operators were

## CB Code of Practice

If it hasn't already fallen out and been trampled on the newsagent's floor, you should find a copy of the CB Code of Practice, published by the Department of Trade and Industry, inside the magazine this month.

It seems that this leaflet can be hard to get hold of from the places that it should be seen — main post offices — so the DTI and *Citizens' Band Magazine* have joined forces to make

sure that all our readers get to see a copy.

If you already have one or have read it, why not pass it on to a fellow CBER who may not have? The Code has some important points to make and the channels would be a lot better if all CBERs followed its recommendations. Better still, pass it on to someone who is new to CB and may not be aware of its traditions and the behaviour from which CB can benefit.



successfully prosecuted for in-band abuse during the first half of this year and assured that this trend would continue, as the RIS accepted our view that this was the single most important problem within CB today. Perhaps a little surprisingly, the RRD seemed to welcome our own campaign to take offenders off the air.

One area of considerable concern was the apparent inconsistency of licence enforcement. It seems to us that a bucketmouth's chances of being prosecuted are far greater in some areas than in others, and the RRD were asked whether a more uniform enforcement policy could be worked out. What is abundantly clear is that many breakers believe that they have been neglected and that, in the present situation, they do not receive value for money. The RIS now has an unprecedented opportunity to improve its standing in the community and we have every reason to believe that the political will to do so now exists. What matters in the long run is that intentions are turned into deeds. Re-organising a service such as the RIS is no easy job but the work put into re-organisation will all be wasted if the general public, of which genuine breakers form a very significant part, does not benefit as a result.

Although the main topic of the meeting concerned the role of the RIS, it was by no means the only subject under discussion. Both Natcolcibar and the British CB Council are concerned that little has yet been done to restrict the availability of burners, despite their obvious effects on the CB service. It seems that to draw up any form of regulation which could be really effective against this problem would require a

great deal more work than has been carried out to date, in order to ensure that it did not inadvertently prevent the legitimate use of power amplification in areas such as medicine and industry. On such a complex matter, the authorities felt that more detailed legal advice was required and gave an assurance that this was a matter with which they would deal as soon as more immediate questions had been answered fully.

One of the most common subjects for discussion in CB circles these days is the impending introduction of the new CEPT proposal for a unified European system and the Government again confirmed its commitment to introduce the new frequencies with the minimum delay. Using the old FCC frequencies between 26.965MHz and 27.405MHz, the new service, which is expected to remove once and for all the difficulties now faced by those wishing to take their rigs overseas, will be similar to our present system in that transmissions will be restricted to FM with a power limit of 4 watts. Some European countries, including Holland and Germany, are expected to introduce this system in the New Year, though Britain is likely to lag slightly behind because of the need to relocate services which currently occupy that sector of the band. This question of relocation is now under great consideration, and Britain is expected to lead the rest of the field in introducing the new frequencies. No decision has yet been made about the long-term future of existing frequencies, though there is considerable optimism that some, if not all of that band may be retained permanently, to give the extra channels which are so urgently

needed. In any event, there is no danger of their being withdrawn in the short term, since to do so would cause serious inconvenience to existing users. Another consideration which the RRD would have to bear in mind in this respect is the fact that the sheer volume of currently legal equipment available would make its withdrawal from service extremely difficult and perhaps even breed a new brand of piracy.

RRD officials expressed satisfaction at the recent growth in the use of 934MHz and spoke of attempts throughout Europe to standardise this service. Many European administrations are now examining the possibilities at UHF and the title "Personal Radio Service" appears to feature prominently in their thinking. With this in mind, Britain is giving some thought to the possibility of issuing separate licences for 934MHz and accompanying them with modified licence regulations, though any decision is still quite some way off. Natcolcibar took the view that the title "citizens' band" should not have been applied to a UHF service from the outset, since only 27MHz could legitimately be called CB. The British CB Council tended to agree that a new title should be found for the 934MHz facility, though this view owed more to the need to protect the generally higher standard of operation at this frequency than to any dispute over the actual title.

In general the tenor of the meeting was such as to breed considerable encouragement for the future of CB radio and we shall keep you informed as matters develop further.

Keith Townsend

## Grey Beard's Gleanings

Hello there. This month I have taken the liberty of airing a subject that is close to all our hearts — *wallies!* Mike-keyers, bucketmouths, DJs and the legions of moronic, monosyllabic grunTERS, whistlers and wailers are just some of this unfortunately increasing breed of sub-humans. To say nothing of the electronic organ and/or effects experts!

All too frequently, the easy answer is to enlist the aid of a small linear amplifier (burner) to continue on the 'Grim 40'. This, unfortunately, is only going to get you a temporary respite as the wallies will inevitably increase their output power as well. Couple this with the growing resentment of your acts by your neighbourhood CB-ers, since you inevitably "bleed-over" into adjacent channels!

The problem must be tackled firmly by the Government, using the resources funded by our licence fees. What we must have is a better service (i.e. Euro-frequencies, more channels, a stronger code of practice with enforceable conditions especially O9 as the emergencies-only channel, 14 as the Calling channel for all H/base and local chattering nets, and 19 as used in the USA for mobiles and traffic information). Personally, I would welcome the outlawing of all illegal H/base antennae, thereby reducing the radiated power of ALL CB signals! It would also encourage antenna designers to spend more time and money on achieving the elusive optimum 'twig'.

Those of you who depend to a greater or lesser extent on CB for your entertainment, safety and

*continued*

social life, should write to me outlining your needs and problems, even to naming known wallies that particularly harass you. This way, *Citizens' Band* can begin to co-ordinate a 'clean-up' campaign which will benefit all users.

How do you cope with

the small control knobs on most rigs? "Romeo Whiskey Tango" of Hull is suffering with this problem on his Audiofine 345. Can anyone in Hull locate some alternative knobs for RWT, please?

Keep the letters coming in as I answer all those

which enclose an SAE. I even send one of my QSL cards. Problems, solutions, news, views and advice are all welcome — as is any comment that you wish to make about the column (even criticism!). 73s from this end.

The Grey Beard

**Mail Order Warning**  
 Bremi (UK) Ltd have asked us to point out that potential customers wishing to buy branded products — for example, Bremi, which is a registered trade name — should only order goods from their appointed dealers. In this case, they are advised to check with Bremi first.



**What the Papers Say**  
 The image of CB radio was tarnished further recently, when headlines like these appeared in local newspapers in the Midlands area. A group of Birmingham bucketmouths are threatening the CB40 Blind, Handicapped and Disabled Network by becoming abusive when politely asked to get off the air — so much so, in fact,

that some members have already stopped using the service.  
 The founder of the network, Mrs Margaret Ashton, reports that she has had to go round to comfort some of the more elderly members, who become extremely upset by the torrent of abuse.  
 To make matters worse, another story appeared a week later about a blind 12-year-old boy who has been

forced to give up his CB radio link with the outside world.  
 The Sunday Mercury was obviously as sickened as we are to hear of incidents like this and even carried a comment in their Editorial column, urging Whitehall to take action.  
 Mr Anthony Beaumont Dark, MP for Selly Oak, has urged CB users to form "vigilante groups of the airwaves" in an attempt to

stamp out cases like this. While we applaud Mr Beaumont Dark's sentiments, we would not condone his suggestion as a solution.  
 A Kidderminster paper also reported that a 17-year-old was fined a total of £157 for playing music over the air recently. When 'ran to ground', his music was found to be blocking transmission over a two-mile radius.



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## Mobile Base

Mr. E. Tacey (Shogun) of West Thurrock wants the last ounce of performance from his mobile station...

**Q** Would there be any performance advantage in fitting a Saturn base antenna to my van instead of a normal mobile antenna? How do you think the police might react to such a sight? Finally, do you have any opinion as to the performance of the Super Modulator 2 centre-loaded whip, which appears to be quite popular?

**A** The Saturn was designed for base station use and, although it would perform without any problem in a mobile environment it is most unlikely to offer any improvement in performance over a good mobile antenna. Since the body of your van provides a ground plane, there is little to be gained from the use of a complete base antenna and I reckon you might have legal, as well as technical problems.

You would be far better off to go for the Modulator 2. Centre-loaded antennae have a distinct advantage over the original base-loaded type because they offer a lower angle of radiation, ensuring that the majority of your signal is directed where you want it to go, rather than up into the sky where it is completely wasted.

S.A.

## Microphone Mix-up

Mr. G.W. Sedgley of Worcester wants to use a noise cancelling mike with his rig and needs a bit of help in figuring out the correct connections...

**Q** I recently bought a Realistic 21-1175 noise-cancelling mike to use with my Barracuda rig, but now find that the wiring connections are incompatible. Please can you advise me of the necessary conversion?

**A** You should have little difficulty in altering the connections in your rig so that they match up with the microphone. In the 21-1175, the white lead is audio, the red goes to the PTT button, black is for the speaker whilst the blue and the braid both go to the negative terminal. You will need an ohm meter to check the present connections in the rig against those of the mike and, once you have identified the function of each terminal, you need only change those necessary to ensure that your circuits are complete.

S.A.



Down in Devon, an SSB merchant plagues the airwaves...

## The Sound of Silence

Down in Devon, Mrs. Luxton is getting some very strange signal readings and wonders why...

**Q** We have a local breaker using SSB and find that we can hear his voice on most channels. Even when we cannot hear him, we know if he is on air because our rig registers a strong signal on all channels, even though nothing can be heard. A friend who lives about four miles away tells us that when he is in QSO he can hear the SSB signal clearly whenever another FM station comes on channel. Please can you explain what is happening?

**A** The phenomenon which you describe, Mrs. Luxton, is simple overload. Your neighbour's SSB signal is so strong that your receiver has no defence against it, though I suspect that, for this to occur over the 500 yard distance which you mention, he must be using very high power, since overload of this nature would only occur where the two aerials were sited a few yards apart if both stations were using legal power levels.

From your friend's comments, I suspect that the SSB rig is not working exactly as it should. In a true SSB signal, the carrier is not transmitted and this should render the signal unintelligible to an FM rig. What appears to be happening is that a significant amount of carrier is going out with the SSB signal and although it might not be sufficient on its own to be heard on FM, the presence of another FM signal, with full carrier, is more than enough to resolve the signal.

S.A.

## Three Wheels on his Wagon

Mr. E.H. Woolvin, in Halesowen, is

having some difficulty fitting a rig into his Reliant Rialto...

**Q** Can you please tell me how to fit CB into a Reliant Rialto? I have tried without success, since the SWR reading is extremely high and the receiver noise intolerable.

**A** Fitting CB, or any other radio to a car with a fibreglass body presents special problems because the body contains no effective RF shielding, neither does it provide the earth contact necessary to complete the electrical circuit. You should first exchange the power supply lead which came with the rig for a length of screened lead, which should be wired direct to the car's battery and not through its fuse box. Mount the aerial as far from the engine as possible and run an earth lead from its base to a suitable point on the chassis, using the shortest possible route in order to minimise the risk that the earth wire will act as an unwanted aerial.

The body of the rig should also be earthed in a similar manner, though it will pay you to experiment here, since it is not unknown for this lead to cause more interference than it cures.

As a final precaution, the underside of the bonnet and the bulkhead should be lined with a metallic substance such as kitchen tinfoil, which should also be earthed to the chassis, in order to shield the rig from the various electro-magnetic fields around the engine.

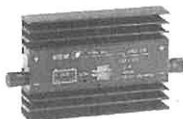
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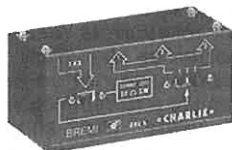
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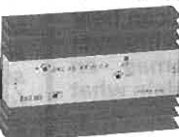
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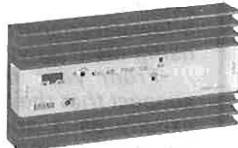
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 Input voltage: 12 - 15 V d.c. - Max current: 7 A - Input power: 0.25 W R.F. - Output power: maximum 75 W AM - Frequency: 26 - 30 MHz - Operation: AM - FM - SSB - Input SWR: better than 1.2, externally adjustable - Dimensions: 160 x 79 x 40 mm - Weight: 0.30 Kg  
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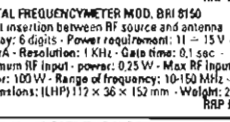
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 Input voltage: 12 - 15 V d.c. - Max current: 2 - 2.5 A - Input power: 0.25 W R.F. - Output power: maximum 25 W AM - Frequency: 26 - 30 MHz - Operation: AM - FM - SSB - Input SWR: better than 1.3, externally adjustable - Dimensions: 120 x 50 x 40 mm - Weight: 0.2 Kg  
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 RRP £35.85

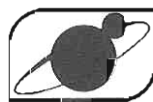


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**SWR METER/FREQUENCY METER MOD. BRG 22**  
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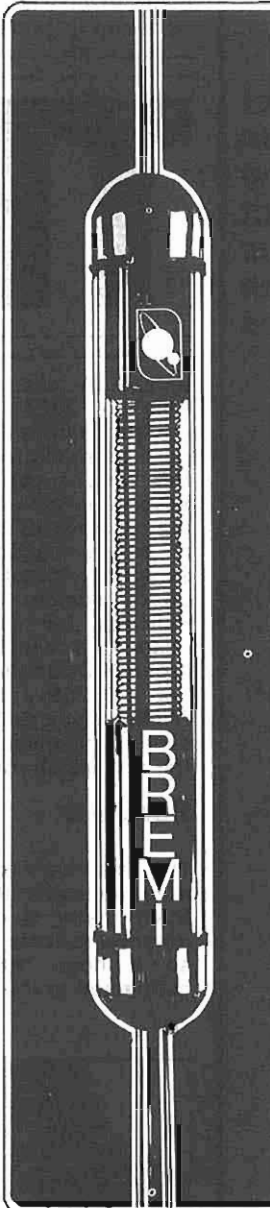
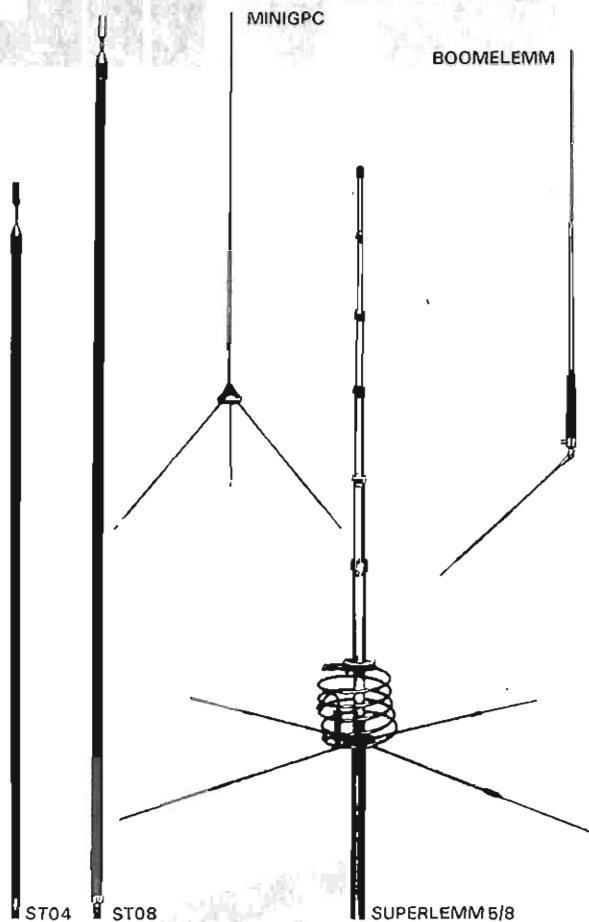
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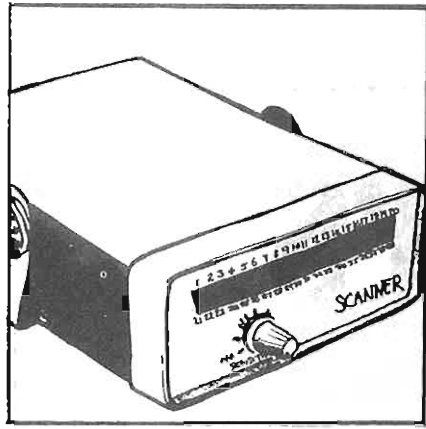
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...with the sound of signals. Chris Peterson takes a look at a new British product designed to find free or busy channels in seconds

**T**o the uninitiated, the principle of a receiver that doesn't actually receive anything may appear rather pointless. The CB Panoramic Scanner is not intended to be a receiver in its own right. It is an accessory, in much the same way as an SWR meter, in that it is intended to augment an existing CB rig. It is connected to the antenna lead between an existing rig and the antenna and gives an instantaneous display of which channels are in use. In addition, it provides a muteable audio alarm if a transmission is detected on channel 9.

The Panoramic Scanner appears to be based on a standard Maxon chassis as found in Midland and similar rigs.

antenna. When the power is switched on the scanner will scan through all 40 UK 27 MHz channels and will indicate the presence of a signal by lighting the appropriate LED. The display is latched, so that each LED remains in the appropriate state until the next time that channel is sampled.

The sampling rate is not terrifically fast. The scanner takes some six seconds to complete a scan of all 40 channels. This is limited by the rate at which the synthesizer settles after switching from one channel to the next. With the sensitivity control fully advanced, all the LEDs will light up due to background noise. Initially, some juggling of this control is necessary to achieve a representative display. Once set, however, it should not need

# THE HILL

Indeed, the case is the same size as a Midland 2001. The most striking difference from the standard rig is the purpose-made front panel. Instead of the various controls and indicators associated with a standard rig, there are two rows of 20 LED indicators and a single sensitivity control. The sensitivity control is combined with an on/off switch. There is a red LED indicator for each channel except channel 9 which is indicated by a green LED. On the rear panel there are two SO-259 antenna connectors, a Midland type power connector and a switch. The switch enables or disables the audible channel 9 alarm.

## Patched

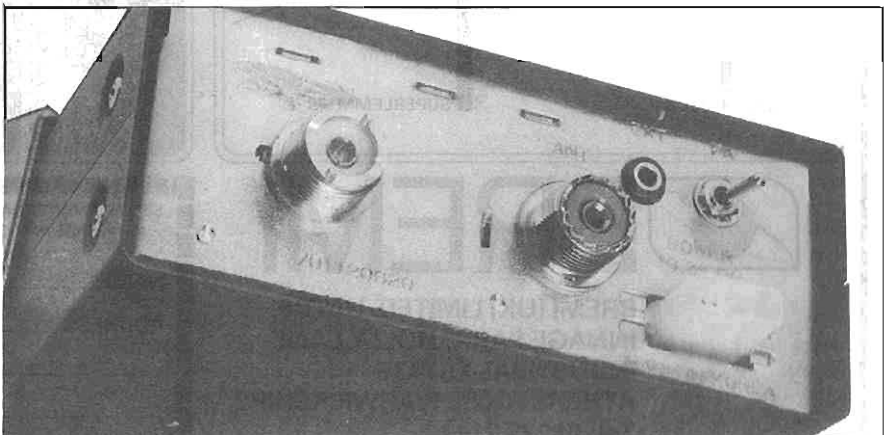
The scanner is patched into the antenna lead in the same way that an SWR meter is connected. The two antenna sockets are interchangeable, so it does not matter which is connected to the rig and which to the

further adjustment.

The alarm circuit generates quite a loud beep when a signal is detected on channel 9, and this can be muted if desired. The alarm is not latched and will cancel itself when the signal on channel 9 ceases.

## Prototype

The scanning circuitry is built on a tidy glass-fibre printed board using low powered Schottky TTL ICs (of which more anon!). The installation was a little untidy on our sample; in particular one transistor and its associated components are hung in mid-air supported solely by their legs! The purpose of this transistor appears to be to stop the scanning process whilst transmitting, and hardly surprisingly, this feature proved to be a little erratic in operation! The review sample was a prototype, so some allowances have to be made when carrying out the tests. Nevertheless, there were a number of faults on this





sample that limited its usefulness. Perhaps some of Twong's 'Grumblings' have escaped their allotted page!

Most seriously, although probably the easiest to correct was that channels 10 to 19 and 20 to 29 were transposed. That is to say a transmission on channel 15 was indicated on 25 and vice versa. Almost certainly this was due to a couple of wires being crossed in the wiring loom and easily corrected, but it did rather defeat the object of the scanner.

Slightly more subtle was the limited sensitivity of the receiver. The best result we could achieve was around 3.5 uV P.D. across 50 ohms. This is about 20 dB worse than would be expected from a standard receiver, although it is probably adequate in

practice. Almost certainly this is due to RF noise being generated by the TTL ICs used in the scanning circuitry. These are notorious for generating RF noise, and are operating unscreened in close proximity to the receiver. Perhaps CMOS ICs would have been a better choice.

It would appear that the circuitry is intended to stop scanning during transmissions. In practice, this appeared to be rather hit-and-miss. Sometimes it would stop, sometimes it didn't, causing misleading displays due to the overload placed on the receiver. Neither was the display completely free from spurious responses. For example, a moderately strong signal on channel 40 would also indicate on channel 6.

All in all, our results were disappointing. This is a shame, because the idea is a good one. A station equipped with a working scanner would have no need to ask his (or her) contacts to "hang on a minute while I find a free channel". The scanner should give an instant indication of all free and busy channels. Similarly, channel 9 monitors could sneak out and put the kettle on without risking missing an emergency call, secure in the knowledge that the alarm would alert them to a transmission on channel 9. However, the scanner needs to be consistent and reliable to fulfil its proper function, and this particular sample needs a little more development in that direction yet.

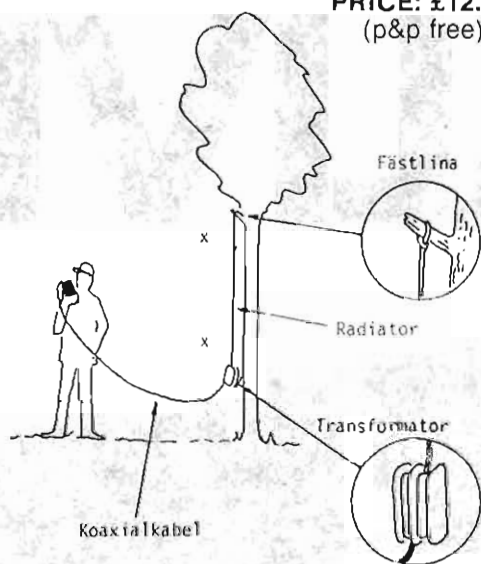
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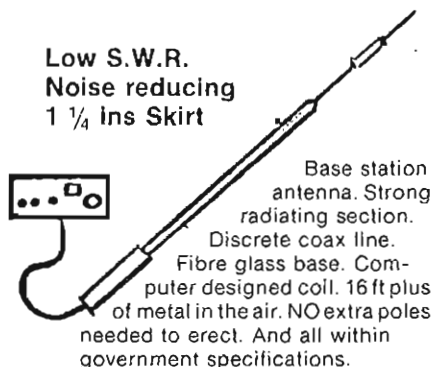
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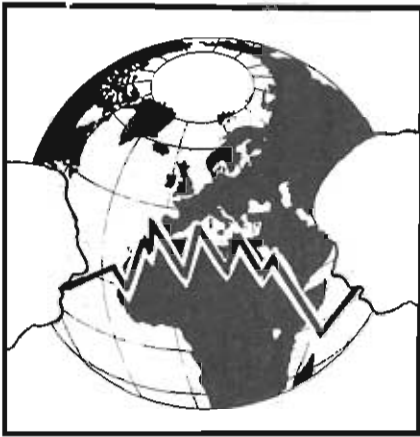
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# THE DXers

**This month Andy R Giles has been reading a book that is a must for every broadcast band DX enthusiast. The World Radio and TV Handbook has been on sale for more than thirty years and is now established as the best source of information on foreign radio stations.**

I am one of nature's customers, I am forever buying things. My attic and cupboards are full of cardboard boxes containing assorted radio, photographic, fishing and other hobby paraphernalia. I love gadgets and toys but after I have played with them for a while, I find that the novelty soon wears off. As I am loathe to ever sell anything that I own, it usually gets stored away, often accompanied by the phrase - "That'll come in useful some day."

There are, however, two pieces of radio equipment that I use almost every day and would not dream of consigning to the attic. The first is my scanner. As regular readers will know by now, I am a scanner freak and I'm sure I would get withdrawal symptoms if I didn't listen for at least half an hour each day. The other radio that is used almost as much is my Trio R-1000 HF communications receiver, although when I first bought it I thought it would be another candidate for a cardboard box. There is nothing wrong with the radio itself, the trouble was I didn't know what to listen to. Like most HF receivers it covers from about 0.5 MHz through to 30 MHz, and twiddling around aimlessly soon became boring. Naturally I listened to the CB channels but that was a bit pointless as I couldn't answer back when I heard something interesting. Eventually I became so bored that I took to looking in Radio Times for the frequencies of Radios 1, 2, 3 and 4 so, for a period of several months I used a multi-hundred pound high technology communications receiver for background music, a job that my £5 tranny could have done just as well.

Fortunately, just as the cardboard box was beckoning, I had what turned out to be a brilliant idea. While idly flicking through the Radio Times I noticed that they give the frequencies for the BBC local radio stations. It occurred to me that some of them should be here in central London so I started to work my way through the list. My antenna was nothing special, just a length of wire thrown up into the tree at the end of my garden with the other end plugged straight into the back of the radio. It was not until much later that I learned the importance of having a decent antenna tuning unit, but even with that primitive setup, an amazing number of stations came pounding in. From that day on I became a confirmed broadcast band DXer. There is something really satisfying about looking up the frequency of a specific

station, tuning to it and then finding that it really is there.

## Frequency List

The engineering information people at the IBA were very helpful and they provided me with a frequency list for the independent local radio stations which meant that I was soon tuning into dozens of stations from all over Britain. Interesting though these were, they would not have been enough to keep the set out of the attic and it was another fortunate accident that sustained my enthusiasm.

Hanging around radio shops and boring the shopkeeper is another of my pastimes and it was during one of these sessions that I met another broadcast band enthusiast. A large percentage of shortwave listeners do not like this side of the hobby, they prefer to listen in on amateur radio nets, so meeting a like minded soul was a real pleasure. He had been in the hobby for many years and if I could remember his name, I would have said thank you to him in this article because he told me about a book that makes broadcast band listening especially interesting. The World Radio and TV Handbook is, as its name suggests, a handbook of all the radio and TV stations in the world. Naturally it is very thick. The current issue contains over 600 pages and so much information that it takes quite a time to figure out how to find the relevant page. To help idiots like me, the authors start the book with a chapter entitled 'How to use the World Radio and TV Handbook' and this section is repeated in four different languages because this book is sold all over the world.

The first paragraph explains that the first section of the book contains instructive information on broadcasting and broadcasting organisations. It then goes on to say that the next section of the book contains detailed information of the radio and television stations in every country of the world, including the names and addresses of the organisations, the leading officials, the locations of the transmitters (and their frequencies, power and call signs). Programme information is also given, including times, frequencies and target area of the broadcasts in each language. Then the frequency listing is explained. This is a massive list that allows the listener to look up the frequency that he is listening to in order to identify the station.

There then follows a detailed

# BIBLE

explanation of Shortwave Stations, International Shortwave Stations, Frequency Changes, Domestic Shortwave Stations, Long and Medium-wave Stations, FM Stations, Frequency and Wavelength Beams, Programme Times, Time Conversion, Programme Schedules and Identification of Stations.

## Unknown Stations

The next paragraph is especially interesting to newcomers because it explains how to identify unknown stations, a common difficulty. This is followed by paragraphs on Interference, Reception from Hard-to-Hear Countries, Verification by QSL Card, Electric Currents and Television.

If all that sounds too confusing, let me quote a couple of examples of how I would use this book. If, for instance, I



wanted to listen to Swiss Radio (well someone has to), I would turn to page 124 where there is the heading Switzerland. There it tells me that the usual languages are German, Swiss, German dialects, French, Italian and Romansch. This is followed by a detailed description of the Swiss Broadcasting Corporation, including lists of the frequencies that are used for the German, French and Italian networks and the times that they transmit. I could then tune into one of these frequencies in the hope of picking up one of their transmissions. If that failed, I could then read the next section where there are details of their foreign services where the transmissions are beamed towards the rest of

the world. For instance, between 18:15 and 18:45 they transmit a programme in English on 12035KHz, should I want to listen to it. To help me identify it, there is even a snatch of their theme tune drawn in musical notation, along with the interesting little note that it is played on a music box. There are also details of the broadcasts that the United Nations transmit from Geneva. Anyone wanting to listen to Switzerland should have no trouble finding it with that mass of information. The same is true of every other country in the world.

On the other hand, if I were idly twiddling around the bands and I heard a signal on, say, 6175KHz, I could then look up that frequency in the appropriate section of the book. There I would find listed: - RFI, France - USSR - AIR LucKnow, India - Maharlika Bc. Sce., Phillipines - KNLS Anchor Point, Alaska - La Voz de la Selva, Columbia - Matouri, French Guinea - R. Corporation, Peru - R. Nacional, Venezuela. The output powers of the transmitters are also listed and this, along with the language they were speaking, would help me to narrow down the list of possibilities. I could then look up those stations in the main section of the book and eventually I should be able to positively identify it. This is half the fun of broadcast band DXing - stumbling across interesting stations by accident and then logging them so that they can be found whenever you want to listen to them again.

If this kind of listening appeals to you, the World Radio and TV Handbook is a must even though it costs £10.95. It is an international publication that is handled in this country by Billboard Limited of 7 Carnaby Street, London W1V 1PG and it is available in almost every amateur radio shop.

## RCMA Newsletter

For those of you who are more interested in the VHF and UHF bands, here's news of a club that may be worth looking into. The Radio Communications Monitoring Association is based in America where the laws relating to the publishing of frequencies are far more relaxed than over here. This means that they can publish a regular newsletter that lists hundreds of frequencies for all sorts of services. I have just been given a few back issues of this magazine and I am impressed. The one that I am looking at now is A5 size (half the size of this magazine) but it is quite thick with 78 pages. The first few pages are devoted to mentions of forthcoming club meetings and readers letters and then there is the Aircraft section which lists assorted frequencies for a dozen or so American airports. This is followed by Beginner's Corner in which Bob Quinlan offers tips for beginners to the hobby.

The next section is headed Business, Etc. with the sub-heading: - business, forest products, petroleum industry, special industrial, manufacturers, news media (behind-the-scenes radio,

TV and newspaper), motion picture industry, security (private patrol, detective agencies, campus security and police, amusement park and stadium security, shopping centre and mall security, plant/business/ hotel security, etc), General Mobile Radio Service (GMRS), mobile phone/RCC and paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private and municipal water, power, electric, gas, telephone, etc), and all school and college related frequencies.

Interestingly, some of the frequencies listed are down around 30MHz and could possibly be heard in this country when conditions are right. The same is obviously true of the frequencies listed in the next section under the heading Below 30MHz.

The very large network of repeaters belongs to the British Columbia Ministry of Forests is listed in the next chapter under the heading Canada as well as assorted frequencies for various Canadian fire departments. Federal Government and Military frequencies are listed next and this is followed by the International section in which members from outside the USA send in their frequency lists. Then there is a chapter on Low Band Skip, then the Marketplace in which members can offer for sale their equipment. That is followed by an article on Monitoring and the Law, the New Members List and the Photo Department which, this month, features the helicopter used in the film "Blue Thunder."

The next section, Public Safety, is the largest in the book and is split into seven smaller sections covering various parts of the States. Hundreds of frequencies for law enforcement agencies, fire departments, garbage trucks and so on are listed by geographical area.

The rest of the chapters are headed Railroads, Reports of Meetings and Officers, Space Communications, Special Feature, Technical Topics, Thought Waves and VHF Marine.

This is a truly wonderful magazine spoil only by the fact that it is American! If only it were possible to publish a British version, but unfortunately the law does not allow it. Nevertheless, there is still plenty of information in this newsletter which could be of interest to British listeners, especially the frequencies down around 30MHz. Also, the International section does sometimes contain frequencies that have been sent in by British members and although the law in this country does not allow us to listen to them, they are nice to know. I only have a few old issues of the RCMA Newsletter so the information on subscriptions may be a little out of date. The latest figure that I have for one year's European membership is twenty dollars in American funds, but if you want to join, it would probably be a good idea to write to them first to see if the cost is still the same. Their address is - Radio Communications Monitoring Association, P.O. Box 4563, Anaheim, CA 72803, America.

# AUTOSCAN 5000

'The technical performance is unimpeachable...  
...the designers have got it right.'  
CB Magazine JUNE 1983

CB MAGAZINE VOTES THE AUTOSCAN 5000

# TOP RIG OF THE YEAR

★NEW crystal filter version now available



- Bleed-over virtually eliminated for most situations – 80dB (typical 100dB) adjacent carrier rejection
- Crystal clear modulation
- Instant return to breaking channel
- Beautifully styled
- British designed and tested in British conditions
- Guaranteed for 12 months

Mic control automatically searches for busy or free channel

### What CB Magazine said in April...

All in all, we have to say that this is the best rig we have tested to date.

At no time during testing was there the slightest evidence of swamping, blocking, cross-modulation, bleed-over in spite of 4 giant twigs within a 200 yard radius.

The transmitted audio quality was excellent, crystal clear with real punch to it making any sort of power or processor mike totally unnecessary.

Inside, you will find the kind of construction normally found in computers and professional equipment. A marked contrast to imported rigs.

The performance has been a revelation compared to anything we have seen before, and what's more it's BRITISH!

### ... and in June.

The technical performance is unimpeachable, with an exceptionally high degree of immunity to bleed-over.

The designers of the Maggie Autoscan 5000 have got it right and during our tests we could detect no signs of desensing, bleed-over or any other misbehaviour despite severe provocation.

### From the mailbag

J.W. from Sheffield  
"... I must congratulate you on your Maggie. I did not think it possible to obtain anything of this standard. It has cut out bleed-over which here in Sheffield is one big problem..."

S.A.M. from Suffolk  
"... My son brought an Autoscan 5000 for me to try... Breakers came in from all over the place and remarked on the 100% clear modulation. How soon can you let me have one?..."

Send now for FREE colour brochure.  
or TELEPHONE 0264 58442

 **Maggie Electronics Ltd.**  
P.O. Box 35, Andover, Hants SP10 2LG



# TWONG

JOHN RICHARDSON

NO ONE HAS HEARD FROM OUR HERO, THE GODLING TWONG! IT SO QUIET! IT SO PEACEFUL! IT SO BORING!



SO WHERE HE AT? HAS HE GONE DOWN A BOOZER? HAS HE RUN OFF WITH LADY DI? HAS HE GONE PEE-PEE? WELL, HAS HE? .. EH? EH?

NO HE HASN'T!



HE ANSWERED A SUMMONS FROM THE GODFATHER, ZEUS!

S'THERE!



SO, OUR HERO HURTLER UP TO HEAVEN, 'COS HE'S OBEIENT 'COS HE'S BRAVE. 'COS HE'S GODLY.



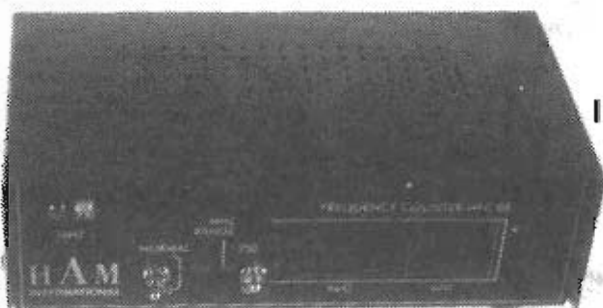


Would you really prefer an electric drill?

**D.N.T. 3 Channel Hand held C.B.  
2 Watts Output.  
Code Call Key. Squelch.**

Superheterodyne Receiver. Charge Jack. 13 section Telescopic Antenna. Sturdy Cabinet for rugged use. Optional rechargeable N1. Cad. Battery and charger available.

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HFC 0.4  
FREQUENCY  
COUNTER**

Professional Quality Mains Frequency Counter. This Frequency counter has both a 0 to 50 MHz and a 100 to 250 MHz Scale. The 5-digit read-out can be increased to 6 digits by using the 10 Multiplier switch. This counter can be connected in-line or by using a B.N.C. Connector.

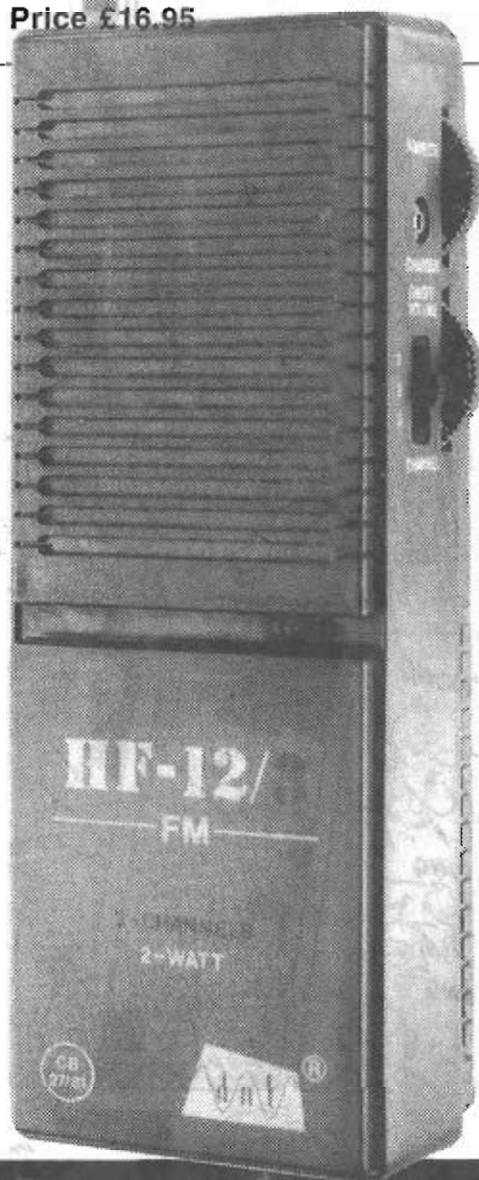
**DIALS Special Xmas Price £99.50**

**KATSUMI  
M. C. 902  
Speech  
Processor**



The Katsumi 902 is the most sophisticated Speech Processor available. It enables the user to modulate the carrier of the Emitter in the most ideal way thus increasing the AM/FM Modulation Level to 40% and the S.S.B. Mode up to 100%. The Katsumi can be used with all kinds of transceivers and is a must for any D.X. Communication Fan.

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**Early Christmas greetings from Dave as he works through his club and QSLers address list.**

# COMMUNICATION THE QSL WAY

I know it's a little early but I'd like to be the first to wish all readers of this column (and the mag, as well) a very Merry and safe Christmas and all success in the New Year.

A boo-boo in the September issue, not by me I hasten to add, was where a part paragraph referring to QSL piracy was mis-placed so as to upset a few clubs, mainly the Whisky Hotel of London, which is a 100% reputable club. Membership costs £1 plus SASE with 5 signed & dated QSL cards. In exchange you receive your WH no., ID card, certificate, club cards, stickers, view card, swop cards & invites. A couple of changes of address now. One is the Grey Moors DX Club of Gwent. Due to someone tampering with and pilfering their mail and P O Box (NOT a postman, but an ex-member), the club has changed from a P O Box ad. to 4 Park View, Waunlwyd, Ebbw Vale. Legal action has been taken! The other change is of Pizza Man and Pizza Lady who are now at 11A The Broadway, Preston Road, Wembley, Middlesex and they would appreciate hearing from you.

Just to clear the decks a little, I'll go straight into some names and ads: from Co. Durham comes Steve (Mystic Minstrel) with a self designed card. From Essex, Don Grant (Lion Heart) roars in, a few personal Currie Cards in from June (Twinkle Toes) of Annan, John Cole (Firefly) of Sussex, Chris Palmer (WDX 01) of Wales, a set of personalised Curries in from Peter Law (Big Daddy) with the news that he is now the regional QSL manager for the Great British QSLDX Club. Peter is now responsible for the distribution of QSL cards sent via the club's P O Box to all members. A couple of Ensign cards just in, one from Joyce (Sherry Brandy) of Leeds and the other from Marc (Condor) of Wiltshire. From Redditch a note and cards asking for a mention from Ken (Forrester). Thanks Ken, glad to read that you enjoy the mag!

Membership of the GBQDC is

available for £6 plus a SASE with 2 first class stamps and 10 personal cards. In exchange you can expect a bumper bundle including 40 club cards, certificate, mounted stamp, exchange cards & invites etc etc. A couple of people have written in this month to recommend a club which they are members of. First is the St. Toreador of Spain and is recommended by Ian (no ad sent). For £2 you get a stamp, view cards, diploma, a few club cards and some exchange cards. Also, Juan collects any used postage stamps and will exchange these for Spanish view cards.

The other is from Alan (Red Monkey) who is the UK rep. for the Colour Postcard Express of Germany and that is the club he recommends. For £5 you can expect a colour certificate, ID card, No, stamp, roster, club cards, postcards, info etc. etc.

News in from Guernsey now, with a few more details of the Whiskey Delta X-Ray DX Group. For £5 and 5 cards you can hope for your WDS No, ID card, certificate, club cards, stamp, roster, newsletter, club rules, exchange cards and invites etc.

An American QSL Club that I am very happy to recommend, as I know it to be 100% reputable is the Cheese Eaters of Virginia. For \$5 (US) and 10 QSL cards you will receive a very good package, well worth sending for. A club stamp is available at £3 (US), as are both a club roster and a 2" high mouse with cheese. I have one of these and it is super!

News from the Sea Dragon QSL Club of Norfolk to the effect that their club stamp (a big one, too) has now been reduced in price to £2.50, post paid in the UK. Also club Poma cards and club patches will be available any time now. (SASE for details and prices please). Membership is for 5 cards and a SASE, a very worthwhile package comes back to you.

Some more names now, then I can start the New Year off afresh (So, if you'd like a mention send your's in!).

**Geranium (Roger)**  
DELTA-TANGO  
DX GROUP 005\*

P/O Box 156  
Wolverhampton  
West Midlands  
WV6-9DX U.K.



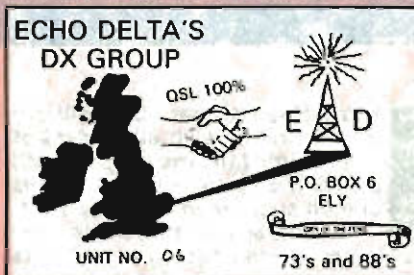
Tim (SV 241) of Devon writes asking for a QSL or 3, Arthur (The Marshall) of Ely writes with news of a new local breakers/DX group. (SASE if interested to Arthur). A super bundle of mixed cards from Bill (Tackle Man) of Halifax, well worth a QSL! John (10 VP 082) of Suffolk who QSL's with a set of club cards, a set of seven come to hand from members of the Dirty Dozen:- Mark, Ron, Ken, Bob, Peter, Sue and Bob, and Roger. John and June of Desford send a set of Ensigns, Tom of Wakefield (Hoplite) sends a nice descriptive set of cards and details of yet another change of address for the Wakefield DX Group, from P O Box 50 to P O Box 71.

Philip Johnson (Rembrandt) of Leicester writes with QSLs, both club & personal and he is interested in people who put a little personal info on the back of their cards to QSL to him. John Sinkinson (1 ER 13) of Cumbria sends out a nice pack including HC colour cards, Rose (Legion Lady) of Clwyd sends in some personal cards and looks forward to hearing from you.

Paul (1 RM 16) of P O Box 26, Ballymena was a little upset to see his name in a recent column with a printers error in the address, so if you sent him a QSL to P O Box 25, Paul asks if you could try again please, this time to the correct address, P O Box 26. Thanks. News in from Don (Tapestry Man) of Redditch that he has started a club for disabled and aged QSLers. The aims of the club, which goes under the title of Delta Romeo Int DX-71 Group (no connection to any other DR Club) are to help bring a little more happiness to them and, if needed, give a helping hand. For details of how to

join, or to offer help, drop a line to Don with a SASE for return of the info please. A bit of info now on the Liberty Sideband Club of Maryland, USA. If you have applied to join this club and are still waiting for your package, please do bear with Larry (LSB 1). He is genuine but he is a Green Beret and gets transferred from time to time. The club is still going, but the mail does get behind occasionally. There is no charge for membership, but \$1 (US) would be appreciated to cover mailing costs. A certificate is available for \$1 (US), and a rubber stamp at \$3.25 (call it \$4 to include postage to the UK).

A letter from Ann MacArthur of Stornoway who is the charity organiser for the RDX. Please do send her your spare used postage stamps (and foreign coins), which will all go to help the RNLI and can I ask you to save your Christmas cards and send them to Ann. After Christmas of course!



These cards will be donated to the Guide Dog for the Blind Appeal for which Ann also collects. Thanks, who knows, perhaps there will be a guide dog called "CB"???

Details now of a few competitions for QSLers. Two are organised by UK clubs, the third by a German club. The German one is organised by the

excellent Berliner Bear QSL-DX Club (Membership £3 + 10 cards for mini pack, or £8 + 30 cards for big, and I mean BIG, pack). It runs until April 1985 and has three classes, Class 1: colour QSL cards, Class 2: coloured QSLs and Class 3: Black and White/Red/Blue whatever QSLs. In all cases they must be personal cards, not club cards. The prizes in each class are (1) club T-shirt, (2) photography set, (3) 50 club cards, (4) 1 45rpm single, (5) lighter and (6-50) records, stickers, pens etc. Send your entries to Knut (BB 001) not to me please.

One of the UK competitions is organised by John (JR - ABC 001) of the Atlantic Breakers Club and runs until the end of December. The aim is to find the most beautiful hand coloured QSL card and there is an entry fee of 25 pence per card. This money will be donated to charity as chosen by the winner. The cards, after judging, will be forwarded to the Ghost Rider Appeal to help raise funds for leukaemia research so it's all in a good cause. The prizes are (1) £10, (2) £5, (3) £2 and are all in Premium Bonds. Membership of the ABC (not connected to any other ABC, by the way) is for £6 + 10 QSL cards, for which you can expect your ABC no, ID card, certificate, stamp, 10 club cards, etc.

The last competition at present is the GBDQC 83/84 QSL Awards, which have just finished. The top two prizes of 1000 QSL cards printed free by Des Currie of Consett went to:- 1) Andrew (The Goalie) of Storchley and 2) Gordon (Disco Three) of Brighouse, for collecting 200 different Currie cards. Seven second prizes of a free



### QSL Addresses:-

- Chris & Maureen (Pizza Man & Lady)
- Steve (Mystic Minstrel)
- Don Grant (Lion Heart)
- June (Twinkle Toes)
- John Cole (Firefly)
- Chris Palmer (WDX 01)
- Peter Law (Big Daddy)
- Joyce (Sherry Brandy)
- Marc (1 UK 1862)
- Ken (The Forrester)
- Alan (Red Monkey)
- Tim (SV 241)
- Arthur (The Marshall)
- Bill (Tackle Man)
- John (10 VP 082)

- 11A The Broadway, Preston Road, Wembley, Middx.
- 56 Main St, Shildon, Co Durham, DL4 1AQ, UK.
- 36 Cedar Dr, Hullbridge, Hockley, Essex, SS5 6JE
- Hannah Dairy, Cummertrees, Annan, DG12 5QA, Scotland
- 15 Park Rise, Petworth, Sussex, GU28 0HU, UK.
- P O Box 159, Cardiff, CF8 2JX, Wales, UK
- 27 St Cuthberts Ave. Blackhill, Consett, Co Durham
- 6 Fernbank Drive, Leeds, LS13 1BY, West Yorkshire
- P O Box 109, Chippenham, Wiltshire, UK.
- P O Box 16, Redditch, Worcs, B96 6LT, UK.
- 51 Elm Grove, Clacton-On-Sea, Essex, UK
- Foxenhole Farm, Dittisham, Nr Dartmouth, Devon
- TQ6 0HP, UK
- P O Box 6, Ely, Cambs, CB6 3DF, UK.
- 185 Mixenden Rd, Mixenden, Halifax, W Yorks, HX2 8RB, UK
- P O Box 8, Kedington,

- Dirty Dozen:-
- Roger (Geranium)
- Peter (Concorde II)
- Ron (Natural Gas)
- Sue & Bob (Silver Dollar)
- John & June (Desford Duck)
- Tom (Hoplite)
- Philip Johnson (Rembrandt)
- John Sinkinson (Quadman/1ER13)
- Rose (Legion Lady)
- Paul (1 RM 16)
- Ann MacArthur (Devil Woman)
- Andrew (The Goalie)

- Suffolk, CB9 7PU, UK
- c/o P O Box 9, Brighton, Sussex, BN2 5HA, UK.
- P O Box 156, Wolverhampton, West Midlands, WV6 9DX
- P O Box 1, Tow Law, Co Durham, DL13 4EX
- H V Hoomoss, R Laphthorn & Co Ltd, Butter Crock Wharfe, Hoo, St Werburgh, Kent, ME3 9QL, UK
- P O Box 27, Southport, Merseyside, PR9 0AA, UK
- 59 Manor Road, Desford, Leics, UK.
- P O Box 71, Wakefield, W Yorks, WF2 0UX, UK
- 10 Dorothy Road, North Evington, Leicester, LE5 5DP.
- 20 Causeway Rd, Seaton, Workington, Cumbria, CA14 1PJ, UK.
- 48 Alyn Rd, Buckley, Cleyd, CH7 2JZ, Wales, UK
- P O Box 26, Ballymena, Northern Ireland.
- 26 Gravir, Stornoway, Isle of Lewis, Scotland.
- 95 Greenoak Cres, Storchley, Birmingham, B30 2TD



Log Book have been awarded to date for collecting 100 different Currie cards to:- Martin (Barnabee Bear) of Ireland, Jean (Super Star) of Norwich, John (Jumbo Jet) of Tyne & Wear, Andrew (The Goalie), Dougie (RDX 001) of Glasgow, Tony (Runner Bean) of Farnborough and Melvyn (Kestrel) of Swindon. Whilst mentioning Currie Cards, Metro City gloss red and gold club cards are now available. SASE to Metro City for prices please, membership of the MC is available for



a SASE and 5 personal QSL cards.

News in from the Freightliner QSL Club (membership £2 + 10 QSLs for an excellent pack), of a club printer who can do QSL cards at reasonable prices (around £25 per 1000), SASE to Freightliner One for details, or quote if interested.

The last two names for this month, then into the votes for the last time. An amusing card from Philip (Zorro) of Glos who wishes to QSL you if you'll QSL to him. Finally, Dave (D J Biggles) of Bolton, who has some newly re-designed cards, wants a mention. Okay, the club poll for this month, and after this one I'll give it a rest but please keep your votes coming in and I'll do an occasional one. Overseas

Club is the St. Toreador (details above). The top three in the UK, in reverse order with last months positions in brackets, are 3) Freightliners of Essex (-), details above, 2) The Cutty Sark of London (3), membership available for 5 cards and a SASE. A well run Club and super package comes back. Top again this month, that old faithful of the UK QSL clubs, the Zulu Whiskey International QSL of Brighouse (1). Membership, large SASE (18p minimum stamp) & 5 personal QSL cards.

In place of the votes, I'll try to include a 'forthcoming events' bit but I need some info from you! Will any club, QSL/DX/local/SSB or whatever, which is either organising or knows of such an event please let me have full details as soon as possible. By event I don't mean the weekly eyeball but something like the annual POMA meets and such like. But anything that will be of interest to QSLers in general throughout the UK would be ideal. What I would like to see would be date, time(s), venue, organising body, entry fees, charities benefiting (if any) but the main thing is that I need to know about three months before. There are many such meets held each year throughout the UK but they so often suffer from poor attendances because of little or no advance publicity. If your meet would benefit from inclusion in such a list, then drop me a line, in good time and we will see what can be done. One such meet that has had a lot of publicity, but it's in a very good cause so I make no excuse for mentioning it here, is the Ghost Rider Appeal auction and disco. The venue is the Miner's Hall, South Moor, Stanley, Co

Durham and the date and time is Saturday, January 26th 1985, in the evening. All are welcome and after the auction there will be a disco. The appeal is supported by many QSL & CB clubs nationally, including the GBQDC & Currie Card printers.

If you want a mention or have any praises or moans, then drop me a line. If you want a reply, then a SASE would be appreciated. Just a couple of points to close on. Some people have been asking me how to tell which country some of the European QSLs come from, as so many of them do not have a full address printed on. If the card is from Holland, the post code should have a 'NL-' in front of the number, eg: NL-4009... or from Germany, 'D.', from Austria, 'A-', from Denmark, its 'DK-' and so on.

Finally, seeing that it's nearly Christmas, I have some special edition Currie Christmas QSL's for members of the Dragonrider QSL Club. They come in three colours on gloss white card and if I say so myself (and I'm biased!) they're not bad! Costs? £1.50 for 50, or £2.50 per 100, post paid UK. Overseas please add 50p per unit ordered, or for samples, a couple of first class stamps will suffice but please quote your DR unit number when ordering. Thanks, take care, stay lucky and have a great Christmas!

Ah well, just as I was putting the Tippex away for another month, a note arrived from the Warrior DX & QSL Club to let me know that their new address is:- 22 Oaklands, Langley Common Road, Barkham, Wokingham, Berkshire. Okay, that's definitely it for this month, Dragonrider One down & gone!



## QSL Addresses

Martin (Barnabee Bear)

Jean (Superstar)

John (Jumbo Jet)

Dougie (RDX 001)

Tony (Runner Bean)

Melvyn (Kestrel)

Philip (Zorro)

Dave (D J Biggles)

Atlantic Breakers Club

Berliner Bear DX Group

Cheese Eaters QSL Club

Colour Postcard Express

Cutty Sark QSL Club

Delta Romeo -71 Group

Freightliner DX-QSL Club

27 Manse Rd, Carrowdore,  
Co. Down, BT22 2EZ, N Ireland

P O Box 27, Norwich,  
Norfolk, NR6 7HU, UK

11 Scotts Tce, Hatton-le-Hole,  
Tyne & Wear, DH5 9HZ, UK

10 Wallace Street, Rutherglen,  
Glasgow, Scotland, G73 2SA

P O Box 20, Farnborough,  
Hants, GU14 9AJ, UK.

P O Box 143, Swindon,  
Wilts, UK

Paynes Cottage, Popes Hill,  
Newnham, Glos, GL14 1LD, UK

P O Box 17, Bolton, Lancs,  
BL1XY, UK.

14 Priory Rd, Bowdon,  
WA14 3BP, Cheshire, UK

Postbox 2923, D-6750  
Kaiserslautern, West Germany

3514 Peronne Avenue, Norfolk  
Virginia 23509, USA.

P O Box 141945, D-4100  
Duisberg 14, West Germany

47 Gurdon Rd, Charlton,  
London, SE7 7RP, UK

P O Box 16, Redditch,  
Worcs, B96 8LY, UK.

P O Box 314, Braintree.

Great British QSL DX Club

Gray Moors QSL &  
DX Club

Liberty Sidebanders Club

Metro City QSL Club

Sea Dragon QSL Club

St Toreador QSL Club

Wakefield DX Club

Whisky Delta X-ray

Whiskey Hotel

Zulu Whiskey Int

Dragonrider QSL Club

Curries, Printers

Essex, CM7 7ND, UK

P O Box 5, Consett, Co  
Durham, DH8 8NG, UK

4 Park View, Waunlwyd, Ebbw  
Vale, Gwent, NP3 6UB, Wales

P O Box 284, Fort Meade,  
Maryland 20755, USA.

P O Box 311, Birmingham  
B30 2TZ, UK

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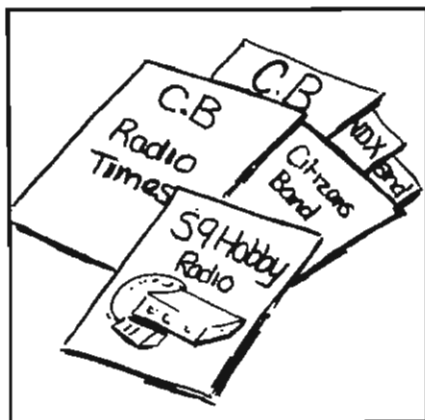
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**David Lazell reflects on the hobby of collecting CB magazines and the writers who shaped some fine ideas**

A few weeks ago, I did something even crazier than erecting a twenty-foot antenna in a thunderstorm near the neighbourhood power line. Know what I did? I gave away a stack of vintage CB magazines, worth their weight in gold dust. Hardly had they left my shack, as a gift to a gent with a rig but no job, than I realized the truth. I had given him the most valuable thing in the house, apart from the 1950 radiogram in the corner.

Already, early issues of CB magazines, i.e. those published from the late 1960s, are becoming real collectors' items. Of course, they are also a good read, seeing that you can trace the great campaigns of past years in their pages - and not merely those in Britain either. They also give plenty of food for discussion on the air, and in some ways may even anticipate the shape of CB to come. For example, the 'CB Action' Magazines from Australia neatly traced the campaign, and disappointments associated with their 997 MHz UHF system. Anyone planning on using 900 MHz UHF frequencies in Britain could learn a great deal from those reports.

One disadvantage though, from taking so many magazines, as far as I was concerned, was that of losing out, cash-wise. I subscribed to a now

almost twenty years before CB became honest and legal here in Britain. Among its special contributions to the use of CB (on 28 MHz AM there, remember) was its pioneering interest in 'neighbourhood watch', or 'crime watch' programmes, in which honest citizens would use mobile rigs to check up on the property in town. Of course, these schemes related to the ideals of REACT and other volunteer emergency and information CB services. But sometimes, even this worthy magazine became a little exasperated and stirred things up a little, as in November 1976, when it ran a feature, 'Should We Dump Channel 9?' Earnest debate on the value of the emergency channel followed, and, on the whole, Channel 9 won.

Business was good seven or eight years ago, with plenty of colour adverts for new CB products. The March 1977 issue - promoting the new 40 channel rigs (from the original 23 channel system) - had 136 pages, and promised advent of a new trade journal. Even now, looking through those pages, one gets the impression that Utopia actually came to town, but that we just missed it.

'Tomcatting with Tomcat', the meditations and reports of the diligent Tom

# WISE WORDS ON THE WIRE

defunct US CB magazine, which soon lost interest in sending me copies. Indeed, it took them months to even acknowledge that they had received my bankers' draft for eighteen dollars. Another two overseas CB magazines also closed owing me a little cash or kind and without mentioning their imminent demise to me personally. Still, any optimist would say that all added to the excitement, and showed how much better we Brits manage things. Magazine-wise, at least.

## Magazines in the USA

As you might expect, that great trans-Atlantic truckers' paradise has had its share of solid CB magazines. 'Solid' is certainly the right word, as some of those I have seen were almost as heavy as telephone directories. 'S9 Hobby Radio Magazine', once known as 'CB Radio/S9', claimed to be America's Oldest and Largest CB Magazine. It was founded in 1962,

Knieta, Editor, remain good reading too. Mr Knieta was, and probably remains, well-known as an expert on sideband operation. 'S9 Hobby Radio', as its title suggests, was always keen on sideband, and perhaps for that reason tended to be more technically-oriented than its competitors. However, among the best reading for any foreigner was the selection of cases brought to the FCC Justices of the Peace for their chastisement of folks abusing the medium. Cases of fines and losses of licences were covered, with names and licence numbers of offenders given. It was pretty close to the stocks in terms of public humiliation, and we never had anything quite like it in old England. In its latter issues, 'S9 Hobby Radio' covered a wide variety of topics, from in-car radar to short-wave communication other than CB. 'Judy' wrote a truly excellent column on rigs from the old days, with slices of history on how models came to be made, and maybe



why. You ought to be able to sit a GCE in that sort of thing. At least the magazine went out on a high note, about eighteen months back.

A more modest magazine of US origin, but very worthwhile, was 'CB Radio Times' which was no relation to any other 'Radio Times' known to the human race. Originally known as 'CB Magazine', it had started in 1961, as 'CB DX-ing Horizons' and came from an era in which several small-circulation CB magazines, some published by local or state CB organizations, were being passed around. One of the most impressive series appearing in 'CB Magazine' was 'HELP', based on real-life and often life-saving situations involving CB use. Some of the stories were truly of the 'believe it or not' variety, like that of a shrimp boat thirty miles off Louisiana, hit by a storm and getting help via its inadvertent skip signal landing hundreds of miles away. Some of those stories were certainly good ammunition for anyone trying to show the more positive side of CB activity. Naturally, the publications of REACT had the same aim in mind, and these culminated in a useful broadsheet called 'The REACTer'. Problems with US CB magazines, like those elsewhere, were linked with distribution and therefore with advertising. In Britain, we are unusually fortunate in having such a spread of consumer magazines, for all

tastes, in local newsagents. In many countries, including the USA, sending off the mail order subscription is often the only way of securing a favourite hobby magazine. Both 'S9 Hobby Radio' and 'CB Radio Times' closed because of the problems of securing sufficient advertising, which related inevitably to subscriptions. Interest in radio continues apace, though, with magazines like 'FRENEX' giving information to shortwave and scanner users.

## The Oz End of CB Journalism

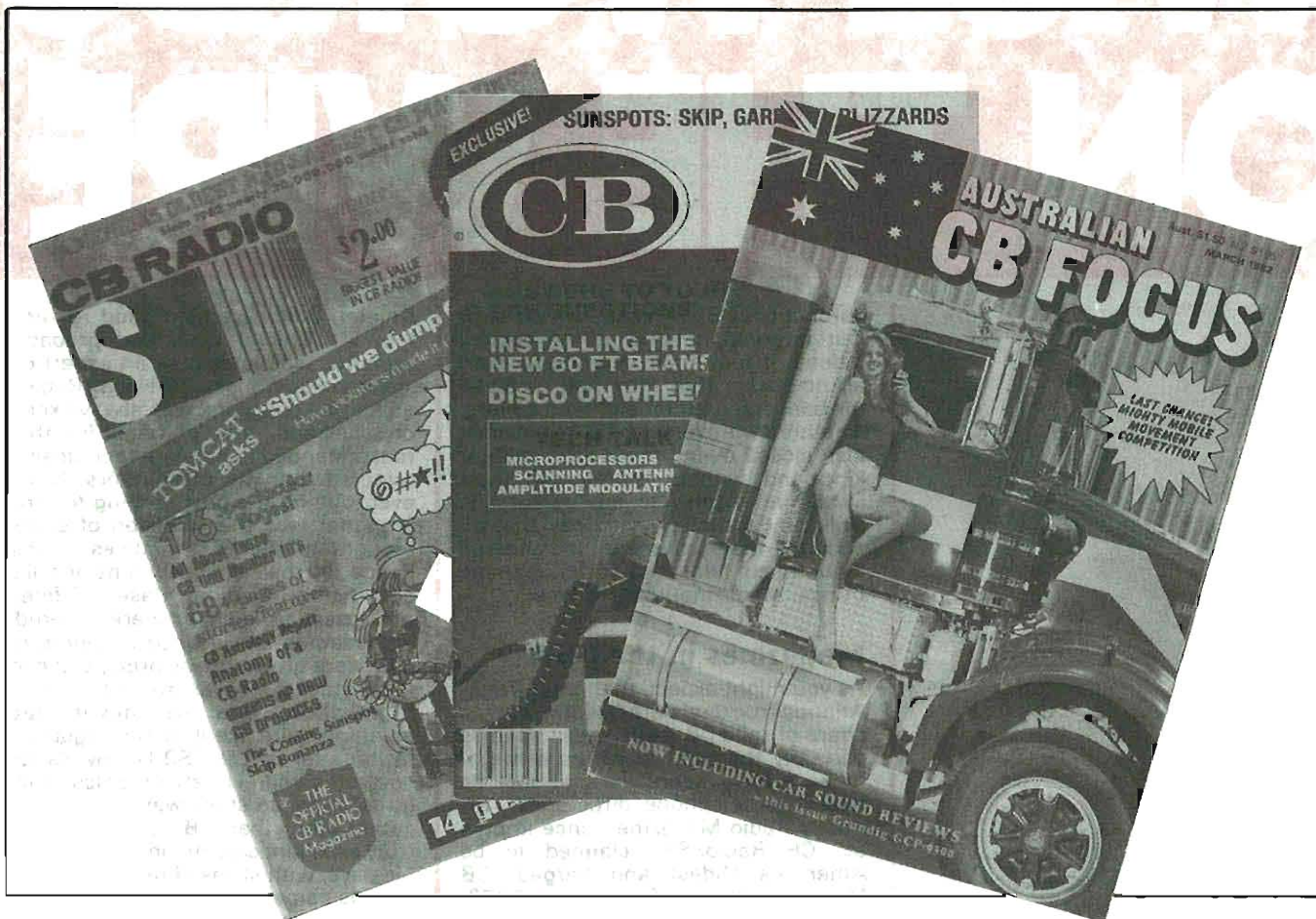
Seeing that the mighty land of Australia opted for 27 MHz AM, though originally for a mere 16 channels (Can you believe it?) and then went in for a new 977 MHz UHF system after moving up to 40 channels AM, you might think that Australia had more breakers than Emus. Trouble there, in essence, was that a large slice of CB users, usually the kids, got CB from a corner grocery or chemist store, or other non-specialist outlet and made themselves a thorough nuisance without bothering to buy a licence. Thus, the more serious users, getting decent rigs, refused to buy

their licences until the government department got the situation cleaned up. Meanwhile, with only a third of CB users buying a licence, the Department of Communication (DOC) had no money to do anything. Presuming it had the will. Still, there was, and presumably is, a lot of excellent work going on down under, via CB in all its manifestations.

I recall a genial Australian CB user relating at length the trials and tribulations afflicting any CB equipped fellow. He ended his chat by assuring me that he would never go far out of town with his car unless he had a mobile on board. In case of emergency it was usually handy and the folks outside the cities were respectable and friendly on channel, too.

One of Australia's best-known publishing houses, Age Publications, issued 'CB Action', a handsome monthly, for some fifty issues. Given a re-launch as 'CB Action International' from Issue 50, it survived several months more, before giving up the ghost. As 'Amateur Radio Action', also from Age, continued splendidly. It could be that more and more serious people were moving to more heady stuff. After all, CB in its early days was taken up by US ham operators, before other folks took an interest. 'CB Action' was very useful for any UK reader, as it carried reports from various states and cities across the continent, giving a good idea of local

A few sadly-missed CB magazines from overseas: (left to right) CB Radio S9 (USA); CB Magazine (USA); CB Focus (Australia)





use of CB both on the sometimes abused 27MHz AM, and the new 977 MHz systems. Paul Richards, one of the best writers for the magazine, used to write regularly, referring to the 'nets', a sort of mini-broadcasting initiative, developed on the new UHF system, otherwise known as the Community Radio Service. There was also a pretty young lady on the cover of the magazine, another good reason for its purchase.

Following the demise of 'CB Action' a similar format magazine, 'Australian CB Focus', was launched, but lasted a mere six issues. I wish I had kept my collection but, as Ma is always reminding us, you cannot keep everything you'd like to keep.

### Other CB Specialities

There were reports (in 'S9 Hobby Radio') of a new CB magazine being launched in Canada, but although I sent four dollars for the sub., I never received a single issue. I gained the impression that the hopeful editor had been hospitalized and had really been trying to do the magazine single-

handed. New Zealand has had a small circulation of CB magazines, whilst the Continent has also seen some lively CB titles. It must be remembered that France, and to some extent Holland, has been alive with the noise of alternative radio, otherwise known as pirate radio, with which CB operation has been sometimes associated. As the Dutch also have their pirate cable TV operators, you may observe it was all rather exciting stuff. An English language CB magazine was launched in West Germany, but closed down. (It never did pay me for a piece I wrote for them, which was published, but that kind of thing has happened from time to time). Britain has had a very good record in such publications, with no lack in tying up any loose ends, but what a spread of magazines we have seen - a treasure trove for collectors of CB magazines and ephemera. I cannot remember them all, but the monthlies included 'CB Radio', probably the most technical of them all; 'Breaker on The Side', later called 'On The Side', a pocket sized magazine; 'CB World', which was later amalgamated with 'Citizens Band'; and 'CB News', most memorable for its tales of 'The Radiogram Kid', relating to life on the road with Frank Baldetti, an FCC Engineer in the USA. He was to CB legends what Charlie Loudenboomer

was to shortwave journalism in the USA. I should explain that lively yarns from a fictitious Loudenboomer appeared in the 'FRIENDX' magazine published by the North American Short Wave Association (NASWA).

In addition to all these, a worthy attempt to produce a CB Club Newspaper, 'CB Gazette' gave some issues of interesting reading. But most of these have now gone, leaving 'Citizens Band' to keep the cause alive. So, as you develop your interest in acquiring CB magazines of recent times, do not forget to place a regular order for this one!

You could perhaps advertise in specialist collectors' magazines like 'Book and Magazine Collector', 'Exchange and Mart', etc. or check around with members, past and present of CB Clubs. An advert in this magazine could possible help, too.

Looking over the modest selection I have retained, after giving away many treasures from the sideboard, I can say that CB has had many moments of value to the human race, despite all the bad publicity. On the whole, the CB magazines exercised as much beneficial influence as you might find in the Sunday School... Not that I ever went to Sunday School myself. I was always at home, sitting in the bathroom, reading my collection of CB magazines.



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# Mack Chat

## Mack looks back over four years of CB radio

**T**he acting editor phoned me the other evening, (Keith Townsend) and it really was a pleasure to hear from him. 'The fourth birthday issue is coming up soon', he told me. 'And I want you to write about how CB has changed over the last four years'.

Let's start with CB mags. Bandstand, CB Radio, CB World, Breaker, CB Gazette and On the Side have all passed into history. I suppose it was to do with finance, or not enough of it, yet those mags seemed to be doing well; one month they were on the newsagents' shelves and when one went the following month to buy these publications they were gone. Only this magazine has survived, which is more than I can say of its editors. By the time you read this, number 7 will be in charge. Rumour has it that it is me that drives them away, they even moved to Hemel to get away from me.

The biggest change in rigs was when breakers went from AM to FM, but after the first few months there were very few new designed rigs on the market. Although you can still purchase new rigs from your local CB shop, it now seems to be the trend to purchase secondhand rigs from over the channels. I have heard of good rigs such as Fidelity 2001s going for as little as £15 with antenna and power supply. GPA 1/2-wave antennas sell for a fiver a time, secondhand of course, and the odd power supply for a couple of quid. In some areas, particular makes of rigs are unobtainable such as the Uniace 200, a much sought-after rig. I'm told that you can't even get them new in some towns. The recent change in antenna restrictions has started a new boom in the sale and manufacture of antennas. But I should imagine that the sale of antennas is constant due to the vulnerability of them by theft or destruction by vandals or other objects such as low tree branches and low garage roofs.

Our other CB system, 934MHz, has changed little over the last four years — not that there was much to change. It's only recently that there has been any significant changes. The people on this system in most cases do so because they have had enough of 27 and the chaos that haunts the band. Also, many of them are experimenters and, on 934, there is scope for new ideas on propagation methods. I hope that I don't upset the 934 users when I say that many of them try to play amateur radio, or rather use the methods of ham radio but don't have the time or can't be bothered to go through the ritual needed for the amateur licence. But then most of the 934 users are quite serious about their frequency staying sane and 'wally-free'. Having spent £300 or more, they are entitled to be anxious. The people that wanted to get involved in 934 have, in the past, had little choice, there was only the Reftec. It's no secret that many owners of Reftec rigs had problems with their equipment and, at first, the service was poor. Fortunately a few rig-doctor type dealers learnt the secrets of the workings of this rig, and now one is able to



get satisfaction if the rigs do naughty things. When the Grandstand transverter appeared on the scene late last year, I believed that it could have given the Reftec a bit of competition, but the higher price (£100 more) and its other disadvantages helped it slip by the wayside. A few other manufacturers had dreams of producing 934 rigs and spread many rumours, but the only one that materialised is Telecomms' Cybernet. Although, at the time of writing, only the prototypes have been seen and tried, it looks promising.

About two years ago, if I wanted, I could have visited a different CB club every evening of the week and all within a couple of miles from my home. Now, I think that only one is still operating and that meets once a fortnight at a local pub. Many of these clubs were interesting not only just for the eyeballs but in the other activities that were organised. Shops that sold CB equipment over the last few years have gone into other trades and, of the few that remain, they have had to stock other lines to survive.

Even the CB language has fallen by the wayside. Many would say that this is a good thing as it really was unnecessary. In the early days of AM CB, the language was all part of the game if you wanted to be 'with it'. Then you had to know the Slanguage as it was sometimes called. It did, of course, serve another useful purpose. The coded terms were used in the belief that if the authorities were on the prowl they would not identify the locations or intentions of the radio pirates. When it all became legal, the slanguage slowly fell out of use and, nowadays, if anyone comes on channel uttering some incoherent CB talk they are classed as nutters. The one thing that has remained in use is the handles that people use, although many use first personal names over the channels.

Finally let's see how the users of CB have changed over the last four years. During the time that we were in the process of becoming legal, a group of breakers used to meet on channel 29 each morning on the way in to work. At first it was a small net of two or three people, but the numbers grew with more people coming on to the scene. It was a very friendly channel and, even today, the friendship that was formed in those early days still exists. The object of making that normally slow crawl to work in the early rush hour a pleasure worked, and one hardly noticed the traffic. As time passed, a few of the 29 net took and passed the RAE and continued their morning waffles on 2 metres, and many others caught the amateur plague until the 29 lost most of its members. The rest that remained tried to continue the net, but the 'wally' syndrome had started and the 29 got its share of abuse. I'm sure that this tale or one similar is common all around the country where many went on to the Ham scene and the rest just got fed up with the idiots that plagued CB and spoil it for so many. It was a good cheap communication system and, in places, as I am sure you are aware, CB does work, but it's a pity that so many fine people have now deserted the band forever.



# Gift Guide

## Bremi Products

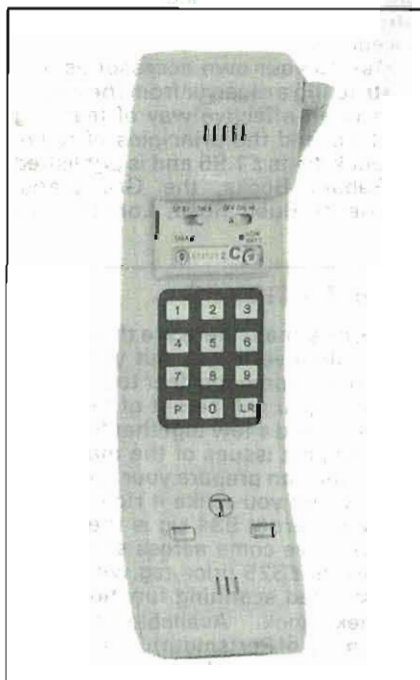
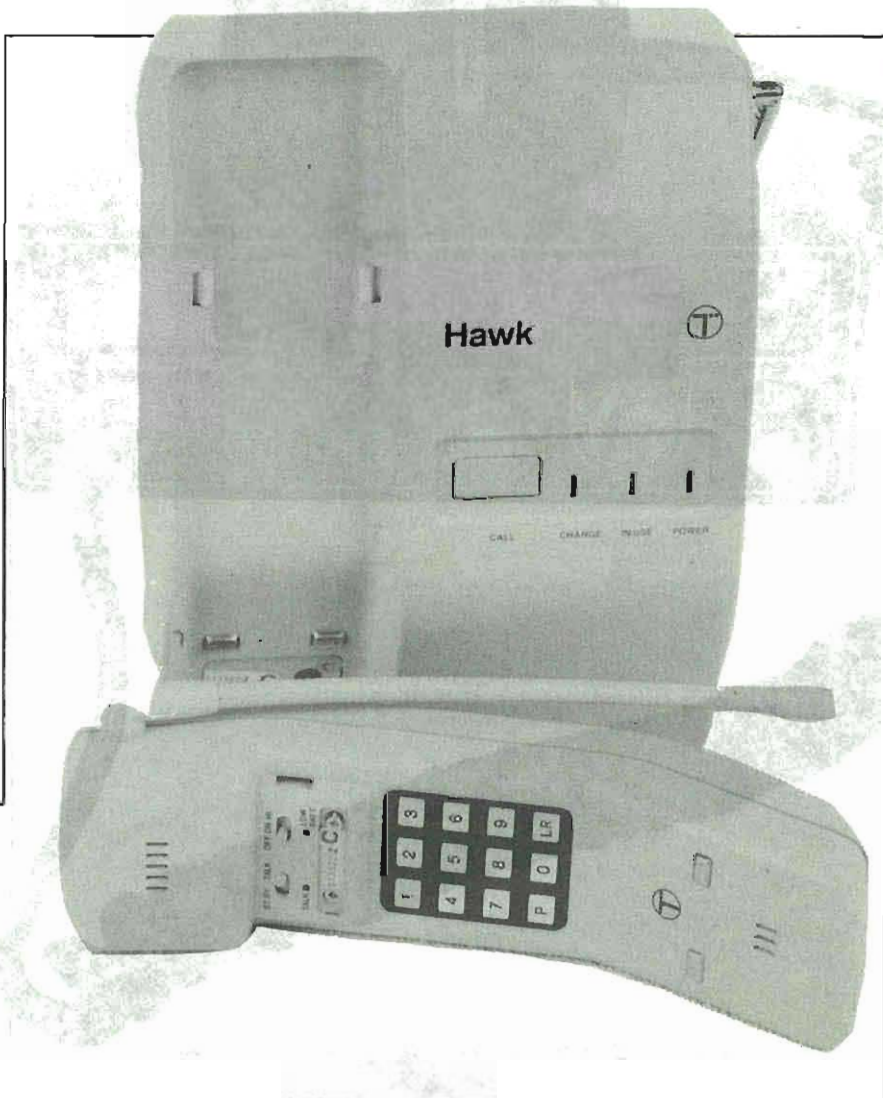
Bremi (UK) Ltd have just introduced some new items to their range including their Transmatch, which is a combined SWR and watt meter with built-in antenna matcher and antenna switch. Thus, the operator is able to run two antennas and switch between the two. The unit is capable of handling up to 1000 watts.

Also new to their range is a Power Attenuator, which will reduce the output power from a transceiver. Reduction can be in stages from 25 watts down to  $\frac{1}{2}$  watt. Very useful for avoiding TVI, it incorporates a meter which shows output power.

Bremi are also introducing a 27MHz FM Pre-amplifier, which will also work in the sideband mode. It is claimed by Bremi to be the first and, to the best of their knowledge, only FM pre-amp.

Bremi's Combined SWR and Power Meter is an extremely accurate SWR meter, capable of measuring up to 1000 watts.

At the time of going to press, no price details were available. We advise you to check Bremi's appointed dealers or ring them direct on 082-77-2147.



## Hawk Cordless Phone

It has to be said that out of all the cordless phones we have tried in this office, the British Telecomm Hawk has been the best. And for anyone looking for a truly useful gift the Hawk would fit the bill — even though it's not a cheap present!

Cordless phones make themselves indispensable once you have one and the Hawk has some nice features. Like many of the new technology phones, it has last number redial for re-dialling engaged numbers and a scratch pad

facility for storing numbers to be dialled. There is a hi/lo volume setting and the ringing tone and call tone start off quietly and increase in volume if not answered. The call facility is an 'alert' button between the handset and base for calling the handset user.

The Hawk is available in stone grey (with no other colour options) and costs around £155 from BT and telephone shops. Please check on the telephone facilities of the person you want to buy the phone for as it plugs into a socket and there are restrictions on its use.



## Maxcom 30E

This set is good value and suitable for 'present-giving' for several reasons. Firstly, it has a lot of facilities on a relatively inexpensive set; RF gain, microphone gain, antenna warning light, local/DX switch, filter switch and front panel attenuator, in addition to the usual controls.

Secondly, Maxcom have taken to heart some of the comments made by breakers on CB equipment, and fitted a crystal filter to deal with the eternal

problem of bleedover. This immediately lifts the set out of the average.

Maxcom have also been offering a two-year warranty on their equipment, double that you would expect to find on most consumer electronics.

It's a stylish looking rig and would make a good 'update' for someone looking to improve basic equipment. We have a typical price of £65 listed, but it's worth shopping around, as prices can vary.



## CB Projects

This is one for the CBER itching to have a go at building his own accessories. Written by one of the UK's leading technical authors, R.A. Penfold, it includes, amongst others, projects for a speech processor, cordless microphone, high pass filter and field strength meter as well as references to CB regulations and a chart for identifying semi-conductor leadouts and pinouts.

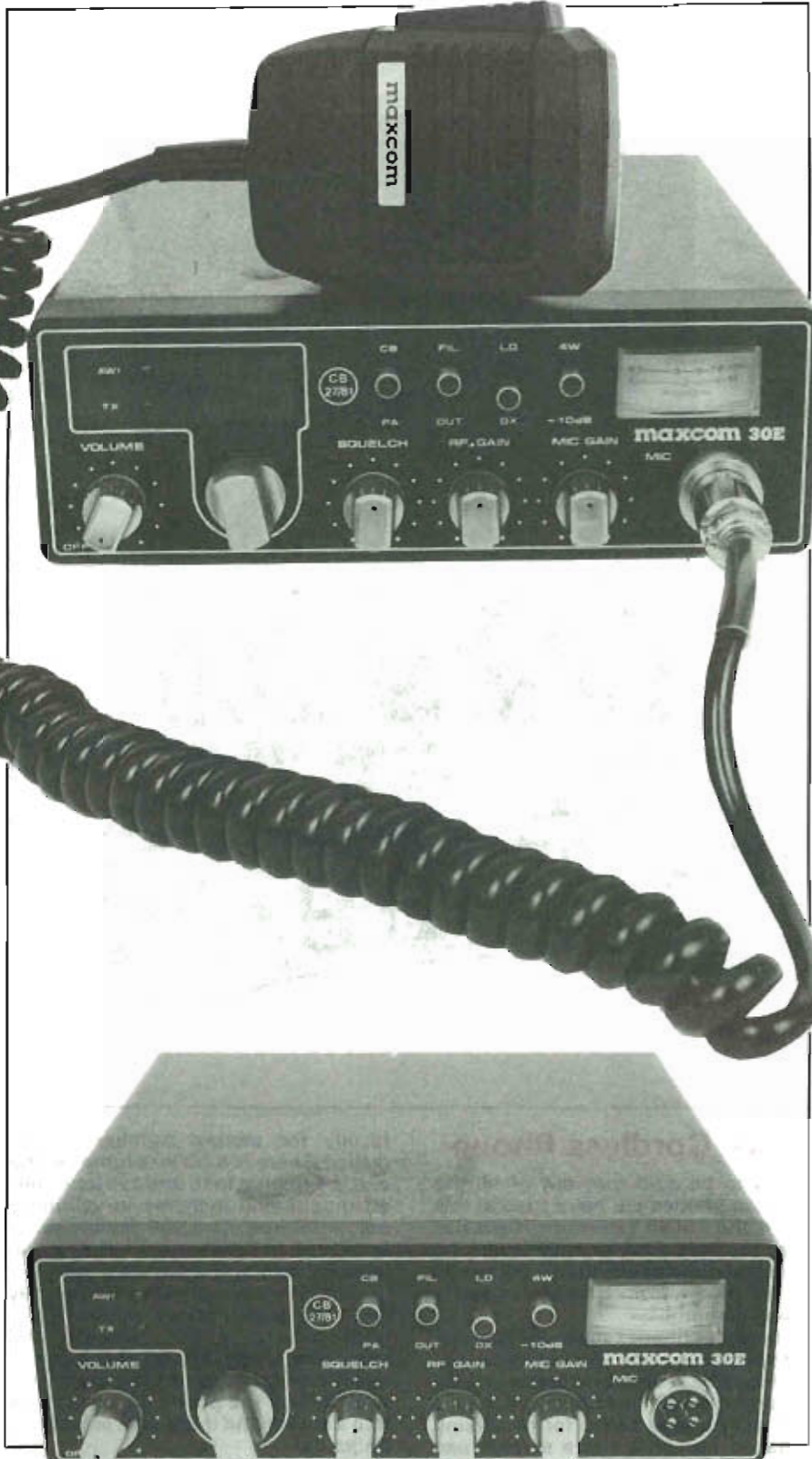
All the designs are suitable for constructors of limited experience as stripboard layouts and wiring diagrams are provided, along with notes on construction and setting up procedures.

Making your own accessories and constructing a receiver from the circuit given is an effective way of learning about CB and the principles of radio. The book costs £1.95 and is published by Babani Books, the Grampians, Shepherds Bush Road, London, W6 7NF.

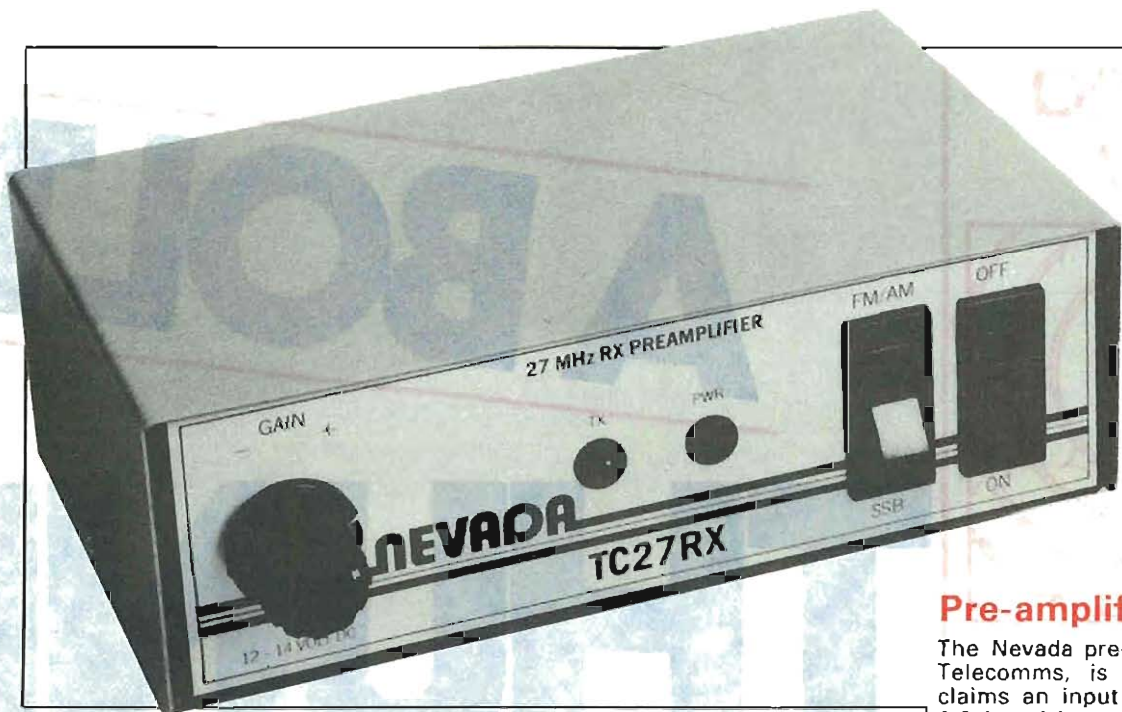
## Nice to haves...

Every Christmas, there are things that you would love to get, but you know that, unless someone dear to you wins the pools, you will be out of luck! We have collected a few together from our files and past issues of the magazine so that you can prepare your shopping list for when you strike it rich...

The Cybernet 934 rig is the nicest that we have come across so far and justifies its £325 price tag with some sophisticated scanning functions and a sleek look. Available through Telecomms of Portsmouth, we wonder if this is the shape of things to come in







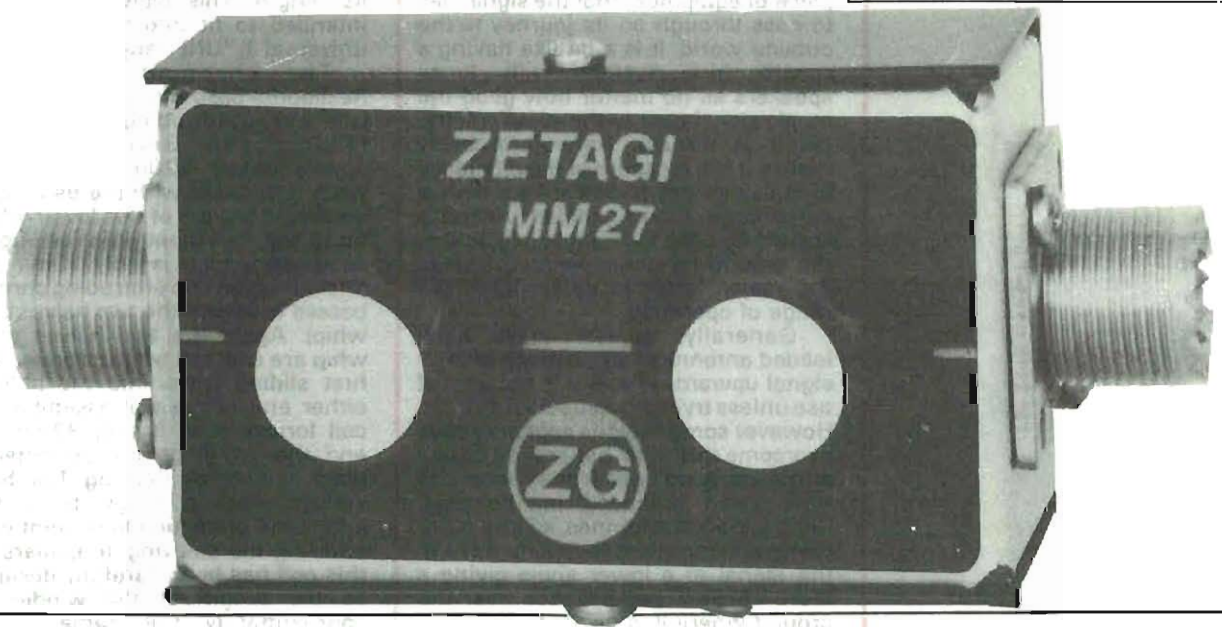
### Pre-amplifier

The Nevada pre-amplifier, new from Telecomms, is a neat unit which claims an input SWR of better than 1.2:1 and features a gain control, TX indicator light, power-on indicator, and an FM/AM — SSB control. It has been designed and made in Britain, and covers a frequency range of 26MHz to 30MHz. The TC27RX comes with a one-year guarantee and costs £18.95.

### Antenna Matcher

The Zetagi MM27 matcher is a neat little unit (105 x 45 x 43 mm) that will take a 100w loading in operation. It matches the impedance of the

antenna to that of the set and is very useful if you are having trouble getting that SWR down as far as you would like. Figures claim an insertion loss of 0.2dB and it covers a frequency range of 26MHz to 28MHz. The MM27 costs £8.61.



the 934 field.

We were all envious of Andy Giles when he got the chance to review the AR2001 scanner. A piece of Japanese wizardry, it scans from 25-550MHz, without any of those frustrating gaps that other scanners have, and is compact and well-designed. It has a membrane key pad similar to that on Sinclair computers and can be programmed to scan, lock out particular individual frequencies, delay for disappearing signals and keep a memo of notes for certain frequencies. It will ultimately link up with a computer for monitor displays of its functions. Regrettably, it also

costs £345.

After some time and perhaps a few delays due to unforeseen circumstances, Uniace 934 sets are beginning to find their way onto the market. The dual bander seems to offer many possibilities and costs...

Fancy keeping in contact all the time? Cellular radio seems to have the answer but could be a mixed blessing — do you really want to be in touch all the time with your boss/mother-in-law/brother who always wants to borrow a fiver? If you do, then the Racal Vodaphone cellular radio system is the answer. Expect to pay £2,500.

# Antenna Review



Brian Wright looks at a new antenna from Les Wallen Manufacturing — the Super Thunderbolt

# A BOLT

# THUNDER

We have said before, it is no use having a superb rig if the antenna is mediocre, as the antenna is the final piece of equipment that the signal has to pass through on its journey to the outside world. It is a bit like having a superb hi-fi system with lousy speakers as no matter how good the music signal sent to the speakers, the result is terrible. As you probably realise it is a measure of the efficiency of the antenna to radiate as high a percentage of the signal fed to it and to radiate it at the best angle (e.g. low to the ground for direct contact). This is the major factor in determining the range of operation.

Generally, quarter wave base loaded antennas radiate much of their signal upwards where it is not a lot of use unless trying to contact an aircraft. However some designs appear to have overcome this 'loss' better than others and some good base loaded antennas have been produced in the past. Centre loaded antennas, on the other hand, are supposed to radiate more of the signal at a lower angle giving a more efficient performance near the ground where it is needed.

## Compact Size

The other major factor that is usually quite significant is size and generally the larger the antenna the better it works, but this is not always true. Height is not really applicable to a mobile unit apart from the fact that roof mounting is obviously a little better than boot or bumper mounting. A new antenna that is suitable for roof, boot or wing mounting due to its compact size is the latest centre loaded offering from Les Wallen Manufacturing — the Super Thunderbolt.

The Super Thunderbolt is a very

neat looking antenna and although we have called it centre loaded, its loading coil is only about a third of the way up its length. This type of antenna is intended to fit into the now almost universal  $\frac{3}{8}$ " UNF range of mounts.

The chromed 30mm long hexagonal base fitting has a male  $\frac{3}{8}$ " UNF thread protruding from it. Into this fitting the 3mm diameter, approximately 320mm long, lower whip is secured with the usual grub-screw. At the top of this lower whip is fitted the very neat little loading coil assembly which is only 70mm long (including the two protruding chromed bosses to accept the two halves of the whip). Again the two halves of the whip are secured by grubscrews after first sliding them into the holes in either end of the coil assembly. The coil former itself is only 37mm long and the windings are protected by black heatshrink sleeving. Two bright yellow sealing rings then form additional protection to prevent water entering the sleeving. It appears that this coil has been carefully designed, as the length of the windings is approximately the same as the diameter which is about 19mm, thus producing a very efficient coil. The 2.5mm diameter, 800mm long top half of the whip is trimmed with a black plastic tip.

Fitting the Super Thunderbolt is simple enough if you already have a suitable mounting fitted or a magmount! If not, one of the standard range of  $\frac{3}{8}$ " UNF mountings must be purchased separately and fitted as is common with many antennas. The antenna simply screws into these mounts.

## SWR Adjustment

When tested with all of the whip



# OF

# DER

joints slid fully home into their seatings the SWR was around 1.5:1 on 40 and just over 2:1 on 1, indicating that the antenna was too short. A useful feature of centre loaded antennas of this type is that there are three whip joints that allow some adjustment and indeed it was necessary to extend all of these a little to obtain a good SWR. Our final SWR on the test sample ranged between 1.2:1 and 1.5:1 across the whole 40 channels after adjustment.

Setting out on test we didn't know what to expect as this antenna is only 1.16 metres long when assembled, only of medium length. It soon became evident that we were going to be surprised as the signal only went down to S3 at two points on our test route and these were outside the normal range of the test map. In fact signals were well up on most of the mobile antennas that we normally test. In positions where we usually get around S9 we were getting 10dB over 9 or more. Listening to the rig the quality of the copy was like a local homebase to homebase copy with a complete absence of background noise except at the S3 points mentioned above.

In conclusion we consider the Super Thunderbolt to be a marvellous little antenna with a superb performance, good construction and is quite pleasing to look at. The coil being small and low down prevents the antenna from being top heavy, unlike many centre loaded units and therefore does not overstress the mounting. Priced at around £7.35 it represents very good value for money.

Our thanks to Les Wallen Manufacturing for supplying the test sample.

## ANTENNA REVIEW DATA PANEL

### SPECIFICATIONS

Model Super Thunderbolt

Type Centre Loaded Mobile

Length 1.16 metres

Frequency Range 27MHz

Max Power Handling —

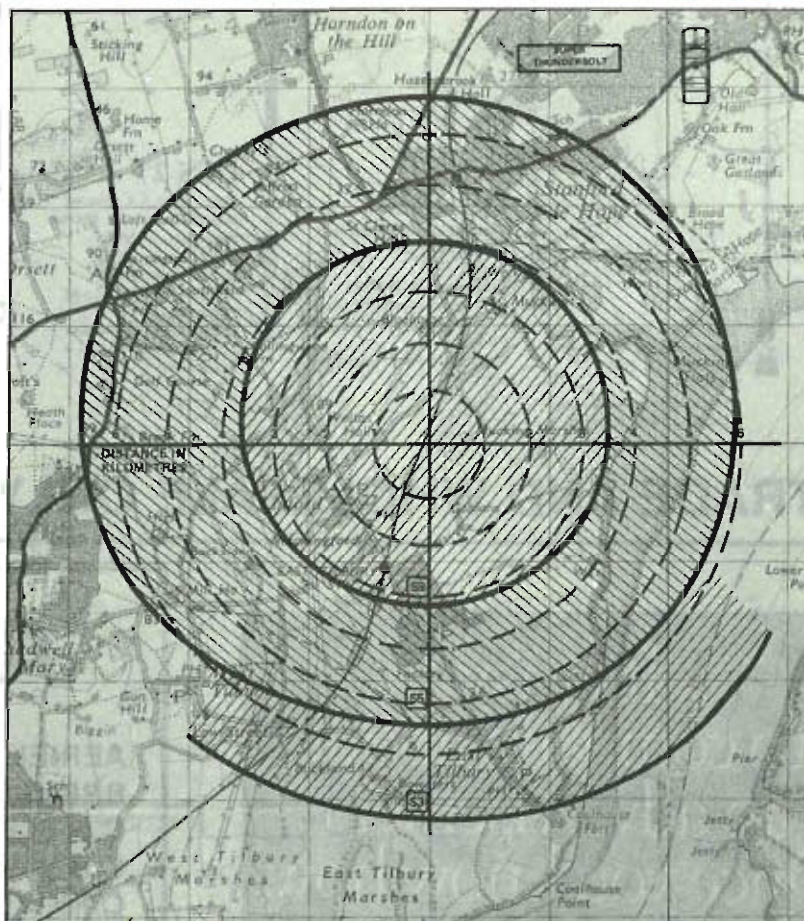
Impedance 50 ohm

Cable Supplied None

Mounting Details  $\frac{3}{8}$  UNF

Supplier Les Wallen Manufacturing

Typical Price £7.35



### REVIEW VERDICT

Performance XXXXX  
SWR Adjustment XXXX  
Construction XXXX

Installation XXXX  
Instructions XXX  
Value XXXX

We rate our samples on a scale of one to five. Five crosses is the highest rating, three and four stars are average to good and one and two crosses mean it's not doing so well.

#### The Tests

We have used our standard test procedure to assess the efficiency of this antenna. Just to bring new readers up to date this involves two tests; one static and one mobile. Our test sample is fitted to a stationary mobile and a second mobile follows a pre-arranged route that orbits the stationary test vehicle, sending and receiving signal reports at measured intervals. This is then repeated with the test antenna on the mobile test vehicle and the signals are sent and received between a stationary vehicle. A standard rig and antenna is used in all the tests. With the results obtained we are able to draw up the radiation pattern shown here. This is simplified to make the results more easily understood. The antenna is also subjected to a series of 'lab' tests to assess their durability, quality and construction, etc and finally we hand it over to a panel of Cbers for comment.





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### SE 250

Type:  $5/8 \lambda$  helical antenna  
 Impedance: approx. 50 Ohm  
 Frequency: 27 MHz  
 SWR: 1:1.2  
 Length: approx. 1320 mm  
 Mounting Hole: 8 mm  $\phi$



### DV 27 U

Type: whip  $1/2 \lambda$  tunable with centre spring and base loaded  
 Frequency: 26-28 MHz  
 Impedance: approx. 50 Ohm  
 Length: approx. 660 mm  
 SWR: < 1.3  
 Mounting hole: 13 mm  $\phi$   
 Foot: N



### CTS 27

Type: Whip  $1/2 \lambda$  reduced  
 Impedance: approx. 50 Ohm  
 Frequency: 27 MHz  
 SWR: < 1.3  
 Polarisation: vertical  
 Whip: steel with coil and feeder  
 Length: approx. 700 mm  
 Mounting hole: 17 mm  $\phi$   
 Foot: UHF



### DV 27 WRN 2 AM/FM

Whip: Helical  $5/8$  reduced with tunable spring  
 Length: approx. 1100 mm  
 Gain: 3.5 dB



### DV 27 S

Type: Whip  $1/2 \lambda$  reduced  
 Impedance: approx. 50 Ohm  
 Frequency: 26-28 MHz  
 SWR: < 1.2  
 Polarisation: vertical  
 Whip: fibreglass  
 Length: approx. 1400 mm  
 Mounting hole: 13 mm  $\phi$   
 Foot: N

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## Filly tries to catch a thief — but loses a twig

# LADY BREAKERS

**T**here's a twig thief about. Well, there are probably lots of twig thieves about — while car antennae are so easy to pinch, especially mag mounts, it's a real problem. But what I mean is, there's a twig thief in our area! Yes, our quiet country retreat where crime is hardly known to rear its ugly head, save perhaps for the odd spot of drunk and disorderliness on Saturday night.

So who could it be? A local? One of our own? Unthinkable! A stranger in the area? We didn't know of any. It had to be some thug, swooping in at night from the town and making off with our cherished aerials, probably unshaven, dressed top to toe in black leather, riding a 500cc gleaming chrome Yamaha...You must excuse us our little prejudices, we're a bit cut off from the world!

Anyway, we put our heads together and a patter began to emerge. The twigs seemed to be disappearing from cars parked in certain parts of the village at certain times, either on the common outside one of the remote outlying pubs, or in (what passes for) our High Street, in the lull between lunchtime shopping and schools and offices closing. "Aha," we thought. "We'll keep a watch."

Don't get me wrong, this was no vigilante force. Let's face it, apart from me, there was Clawhammer (inoffensive local electrician), Red Riding Hood (inoffensive wife of inoffensive local butcher), Mr Crawford (a local councillor who despises handles), Rosetta Stone (young intellectual studying to go to Oxford)...you get the picture, anyway. Not quite the Devil's Hole Gang.

My first watch came in the middle of the afternoon in the deserted High Street. My mini, needles to say, was the bait in the trap — there it sat, poor little thing, mag mount glinting seductively in the autumn sunlight. No one, I told myself grimly, was going to take *my* mag mount, oh no. If anyone laid a finger on it, I would be over there like a shot — so long as he wasn't too fierce-looking...

The first problem was where to position myself so that I could see the car, be near enough to foil a kidnap attempt, and not be seen by the thief. It was freezing cold, so I checked out the nearby shops and premises. The library? A bit too far away, and the old

ladies reading in the window would stare at me. The supermarket? I'd probably be arrested for loitering with intent to shoplift, knowing my luck. The newsagent, then. The owner knew me well and would let me lurk in a corner by the window.

An hour passed, and I began to get bored. This was a stupid idea, anyway — naturally no one in their right mind was going to walk up a High Street in broad daylight to steal an aerial. I began to wonder why all my male co-conspirators had opted to lie in wait on the common at night — so they could pop into the Old Shepherd or The Fox for a quick one, of course!

Bored, I glanced idly along the magazines, bright and colourful on their shelves. Amazing the variety of hobbies these days. Hi-fi, photography, cars, steam trains, stamps, science fiction, gardening.

Half an hour later, I suddenly remembered what I was supposed to be doing and rushed hastily to the window. The mini was still there, antenna secure. I heaved a sigh of heartfelt relief and wondered out to it, my spell of duty up. There was another car parked next to it with a young couple inside, engaged in what seemed like a passionate embrace. How romantic, I thought, and wondered off to the library to avoid embarrassing them.

I emerged ten minutes later, clutching a book about winter shrubs that I didn't really want, and made for the car, having pretty well wasted a perfectly good Tuesday afternoon. The other car and its entwined occupants had gone, and so had something else. My mag mount!

All right, so I'm a naive idiot, but of course the game was up. I remembered enough about the car ("it was sort of small and blue, officer...") and the couple to enable the police to put a stop to the thefts, and I even got my mag mount back, eventually.

I have to say, though, that it's taught me a lesson. I was two weeks without my antenna and very frustrating it was too. There seems to be nothing for it but to take the wretched twig apart every time I want to leave the car and lock it inside. If anyone out there ever manages to invent a mount that's vandalproof and crookproof, they know where they can find their first customer...





## Gismo reports on the Donnington Park truck Grand Prix, and wonders about those high voices on channel

**F**rom the moment we arrived, we felt welcome. It was just like an average lorry park or transport cafe park in the middle of December — sticky, clay-type mud. I felt sorry for the ladies and children who came in fashionable shoes when they really should have worn wellies.

The Donnington Park circuit is ideal for truck racing. It's a sort of diamond-shaped circle on a slope, with downhill and uphill bends, two short straights and a chicane past the pits ending in a 90 degree right-hander. You'd be hard put to find a spot where you could not see at least a quarter of the circuit. For the most of the time, you could see half.

The actual truck racing made car and motorbike racing look tame. The sight of three tractor units coming round a sharp right-hander at 60 mph, three abreast, is implanted firmly in my memory for eternity. Inevitably, the odd ERF did not make it and spun off into the sand bunker which surrounded the circuit.

### 57 mph Average!

The trucks were raced in groups according to their power ratings, the fastest of each getting into the actual Grand Prix. That accounted for the first 12 places on the grid. The other four were the first four from a consolation race (Barry Sheene was fourth in this, narrowly scraping a place in the final race). There were three types of finalists: racing men from other fields, such as stock car, motorbike etc, professional truck racers with specialised trucks and lots of experience, and real, everyday truckers, who had brought a loaded trailer with them and had dropped it outside in the car park. The winner, an Italian, fell into this category. His boss

and his mates had flown over to the airport next door and cheered him on to victory in his F12. Second was a Leyland roadtrain from a night trunk. According to the commentator, he dropped his trailer outside on the Friday, did a couple of circuits and went home. He then checked it over, changed the tyres and brought it back on Saturday. He started almost at the back of the grid but was chasing the leader for the last laps. The roadtrain was a 265L Rolls Royce diesel, which was nearly 80 brake horsepower less than the leader.

### Gripping Stuff

Excitement was in abundance — three trucks trying to get through the chicane together, overtaking on the grass (if you couldn't find another way through!), the smell of burning Michelin, fried Ferodo, burning Borg and Beck and clouds of black diesel fumes. A Mercedes even had a front tyre blow out, knocked a 2800 Dutch customised DAF off the track, and went off the track itself.

There were very different styles of driving around the circuit. An ERF from Siikolene took it steady and was applauded at the end of the race; we had the usual heavy-footed mob, flat out all the while; some were cheeky, slipping up the inside as another took the corner too fast or too wide.

### 14 Mile Queue

The success of the truck Grand Prix can be measured by the fact that, at 11 am, shortly after the start of the first race on Sunday, the local radio station announced that the place was 'chokka', and that there was a queue 14 miles long. The place was brimming over with celebrities — they even had a race for them in roadrunner box vans. The two-wheel joker from the Roadrunner TV advertisement drove all the way around the circuit on two wheels.

The Swedish Road Haulage Association chairman was interviewed over the PA and, when asked what he thought about the fact that there were no accidents or injuries, replied that the trucker was a real professional, even when racing. One wonders what Freddie Plaskett of the RHA would have said. The RHA aren't exactly noted for promoting the image of the trucker.

By the time you read this, you will probably have seen the 'Top Gear' programme on BBC 2, or may have bought the video from Sealink who provided free passage for foreign competitors. My advice to you truckers is this: have a go now, while it is still new in this country, before the manufacturers get organised and have works entries — and before the big money comes into truck racing. The Donnington Park Grand Prix expected 10 to 1,500, but got 50,000. Next time, they can expect 500,000 once the word has got around that truck racing is fantastic, and here to stay.

### Bent Big Wheelers?

A year or so ago, Squeakys were all the rage. Back in the old Aunty Mary days, there was a brilliant one somewhere off the North Circular. The latest rave on the one nine can best be explained by listing a few of their handles. How does Gay Lord, Naughty Norman, Floppy Chopper and Big Scrubber grab you?

Even if you haven't heard any of them in action, you're probably wondering whether or not they're gay. The answer is probably not. They use a false, effeminate voice with lots of innuendos. I once ran up the A1 alongside Big Scrubber, who actually pushes a white Mercedes shoebox for a company that sells industrial cleaning equipment, hence the handle. He had me in fits of laughter and I was glad to eventually turn off the Roman road into Wetherby as my sides were aching so much. Most drivers wind him up, some take umbrage, others just switch off completely.

Big Scrubber was particularly good, in that he left a gap after every transmission and gave out smokey reports. I took my XYL with me on a trip the other day, and she heard Floppy Chopper using the words 'love' or 'darling' after every modulation. Whether these people are liked or disliked, they certainly brighten up the airwaves and take the boredom out of a journey. I don't come across these breakers very often — if I did, I might not be quite so keen on this latest type of chicken box entertainment. Makes you wonder what it's gonna be next!

May the blue light never shine on you. 10-10, Gismo.



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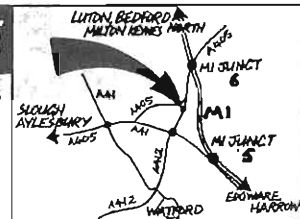
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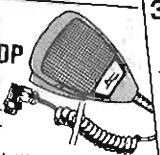


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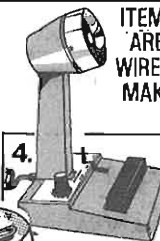


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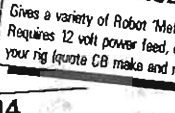
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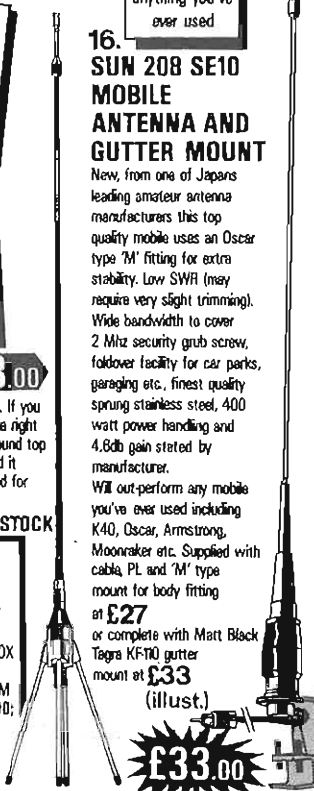
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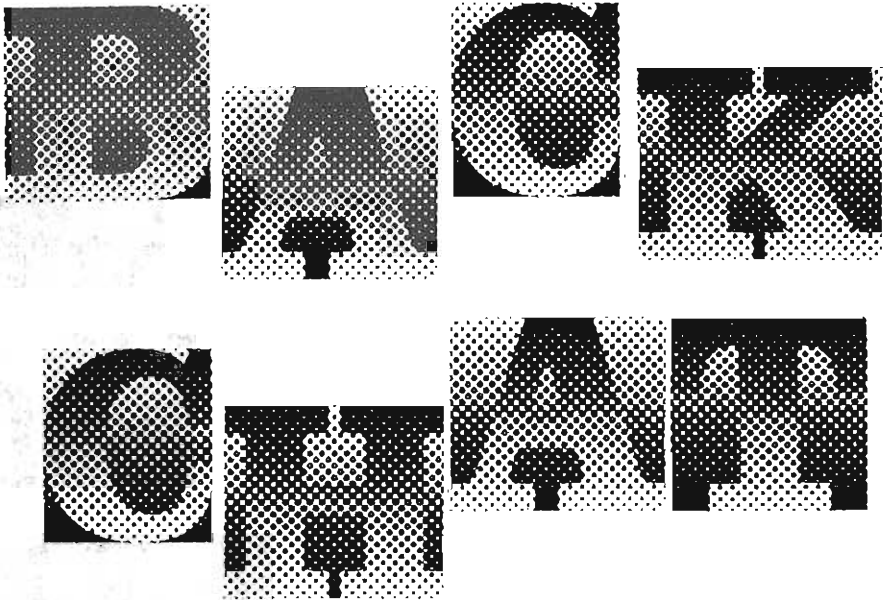
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**Our monthly dip into the postbag with its usual selection of views, opinions and disillusioned breakers.**



### End Result?

*Albatross from Birmingham has been fed up with CB and is looking elsewhere...*

With reference to the letter from Ketchup Kid in Calne, Wiltshire (Sept. '84) I could not agree more with his comments! I have been a dedicated breaker for over five years, first breaking the air in late 1979. Then, at least, it was worth the risk of getting busted to have so many decent breakers to copy. But then like so many others I switched to FM a couple of weeks after L day. I've had many rigs and twigs in this time, probably about £800 worth, and what is there to show for it now?

A channel full of morons spoiling things for everyone else!

FM was originally designed to give British industry a large piece of the market. That's a laugh! There are more Japanese rigs in the market now than in the good old AM days. To top it all

the RRD have led us to believe that the present frequency will in time be abolished. Will anyone running UK FM now eventually have to call it a day and start all over again once more?

I'm only too glad that I chucked it all in a few months ago and am now saving for a Bearcat scanner. Thank goodness it doesn't cover 27MHz. — I hope! It's a great shame, but what can be done? I'm sure British Telecom and other bodies alike have got better things to do than chase bucket mouthed breakers all day.

To the handful of good breakers in my area who eyeball once a week in the local telephone box — all the 73s and 88s from me and to Mack the Hack — I may work you on class B ham radio early next year!

*Although the illegal rigs were American branded, 99.9% were manufactured in the Far East, so in that respect the situation hasn't changed over the years!*

Are there more Japanese rigs in the market now than in the good old (AM) days?





## Midnight Oil

*A long letter from Mr. M. Pugh, or Crusader 802, that we have had to prune a lot to get in...*

I have just finished reading the September issue of Citizens' Band and in particular the article on scanning. Both my wife and myself have been active CBers for some years and we have both held a very active interest in all forms of radio communication; SWL, scanner monitoring, CB in all its forms etc. My own interest started whilst serving in the RAF and using the various radio then in use. After I was demobbed we continued and burnt much midnight oil with the early Trio communications receivers and ex W.D. modified receivers.

You may be wondering why we are so much into radio. The answer is simple. We are both disabled and more or less housebound, so radio is our way of keeping in touch with the outside world. We are still active on CB. Our handles are Nimrod and Silver Bell or November Indian 50 and Sierra Bravo 50. I have also used Tango Foxtrot 461 and UKI 881.

We both belong to the International Crusaders Association (numbers 802 and 312) and we would be pleased to hear from any Crusader members either by letter or tape (cassette) — it's easier for us than writing — all contacts answered worldwide. Our address is available through this magazine.



## Way down south

*J. Heritage wants a pen pal, or CB pal at least, and needs some help...*

Please can you or your readers help?

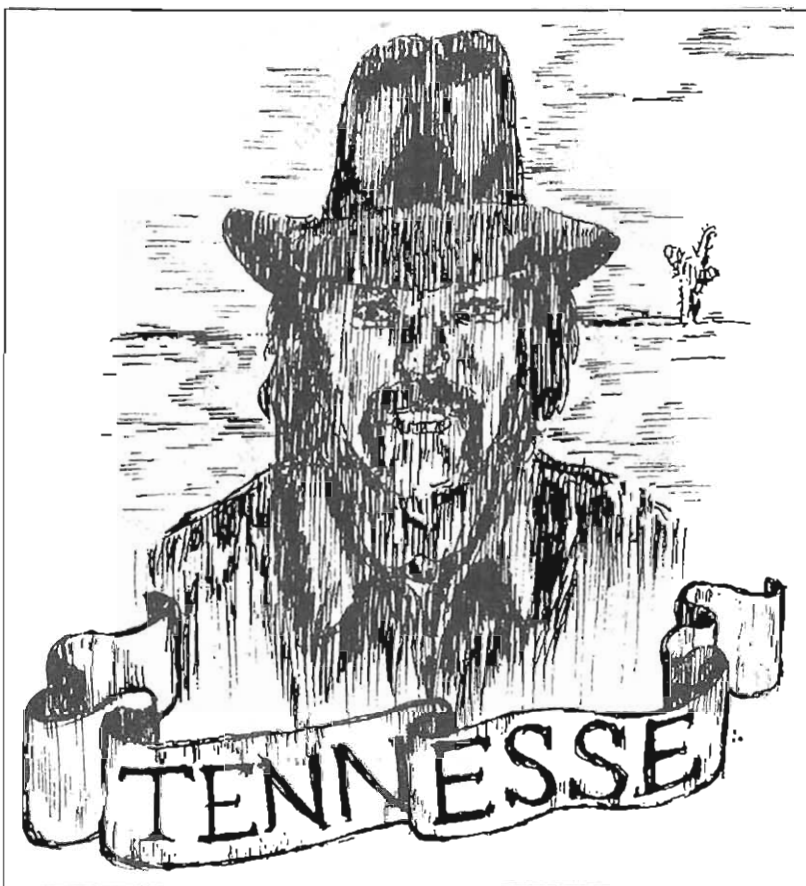
As you can see from my QSL card my handle is Tennessee and I would like to contact a breaker in Tennessee for the exchange of news, views and so on. The trouble is I don't know how to go about this. Can anyone help?

*I don't know of anyone personally, J. Heritage, but I suspect that some of the QSL clubs that have overseas members might be able to supply some names. You could also try writing to the editor of CB Voice in America, as I am sure Dwight Allen could publish a request. His address is CB Voice, R R 2, Oregon, Illinois. 61061. USA.*

## EMUS on channel

May I, through your columns, introduce the Emergency Monitoring Unit Service (EMUS) known as Echo Base.

The station is situated on the sea front at Whitstable, Kent and covers



09 and 19 channels on the CB radio bands on a twelve hour shift to help any marine mobiles in the Thames estuary who may need a 999 call.

The station monitors the sea as far as Clacton and invite any marine mobiles to send for details. If they send their own QSL cards and craft information, these will be logged base H.Q. The base return QSLs 100%.

If any marine breakers are in our area, please call in for a cup of tea with us.

In winter months the base team of volunteers help the aged, disabled and housebound in bad weather and flooding conditions. We are looking for sponsors to keep the service going as most of the group are unemployed. The base can fly a flag on the behalf of the sponsor.

*Enquiries should be addressed to the Secretary, EMUS, The Studio, Beach Walk, Whitstable, Kent.*

## Bored?

*A long and obviously deeply felt letter from someone who neglected to add his name...*

I just had to comment after reading September 1984's issue where John writes about the abuse of legal FM CB.

It is true that UK CB is abused by wallies and idiots, probably because overcrowding on channel leads to boredom.

The blame should not be put on breakers who use AM SSB and multi-mode rigs — most are sensible breakers who use these sets to enjoy DX and to get away from the chaos of legal CB. Although some of these

CBers use high power, beams, rotators etc, they usually stay away from the FM channels.

New laws and codes of practice should be introduced including a basic test before you can obtain a CB licence and a minimum age limit enforced.

I blame the chaos on the following;

- boredom on channel,
- overcrowding,
- the 934MHz. alternative is too expensive and not widely available,
- the absence of a test to gauge the competence of a CB operator.

If we had AM, FM and SSB and less restrictions, this would discourage the breaker from breaking the law. Decent antennas transmit and receive further and remove the need to use a linear amp. AM, FM and SSB, 120 channels over 26-28MHz. would mean more room and less wallying about, less boredom and less overcrowding.

*The writer is voicing many of the points and the opinions that we regularly receive in the CB office and although I can sympathise with some of our unidentified writer's views, I do think that the argument isn't fully thought out. 28MHz. would put you in the amateur band — what happens to them? More channels and all modes are fine in theory, but there is no getting away from the increased chance of interference.*

*I would particularly like to hear from readers who agree or disagree with the suggestion about a test. Let me know your views, and if we get enough letters, I will publish a Back Chat special on the subject.*

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### BACK NUMBERS

Due to the popularity of back numbers of this magazine, the Back Numbers department have informed us that the following back numbers only are available at the moment; September, October and November 1983 and February 1984. It is hoped over the next months to build up a stock of back numbers for the previous year's issues i.e. the eleven months preceding the magazine currently available and we will keep you informed of the situation. To order a magazine, fill out the form below (photocopies and handwritten orders are acceptable). The form and your cheque or postal order should be sent to Citizens' Band, Infonet Ltd., Times House, 179 The Marlowes, Hemel Hempstead, Herts HP1 1BB

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It is assumed that letters we receive are intended for publication unless they say otherwise. Letters for particular features like Back Chat, Q & A and Club News should have that marked on the envelope and the correspondent's full name and address, although this will not be published if requested. Readers who are hoping for publicity for events, competitions and 'other happenings' should bear in mind that the magazine goes to press at least two weeks before the magazine appears in the shops, and editorial copydates are usually a month before the 'press' date. Please remember this when sending any information in.

### Writing for CB

We welcome readers contributions, especially if they cover a new aspect of CB or are D.I.Y. projects. Unless you are experienced in contributing to magazines you may not be aware of how work should be presented — if in doubt write for advice!

### Telephoning

It is very difficult to deal with telephone queries, especially technical ones, as most of our energy has to go into putting the magazine together. If you can deal with it by letter, please do.

### Back Numbers and Binders

See left for details of back numbers available and the ordering details. Binders for Citizens' Band magazine are also available from the same address at a price of £4.25, inclusive of postage and packing.

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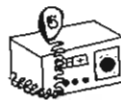
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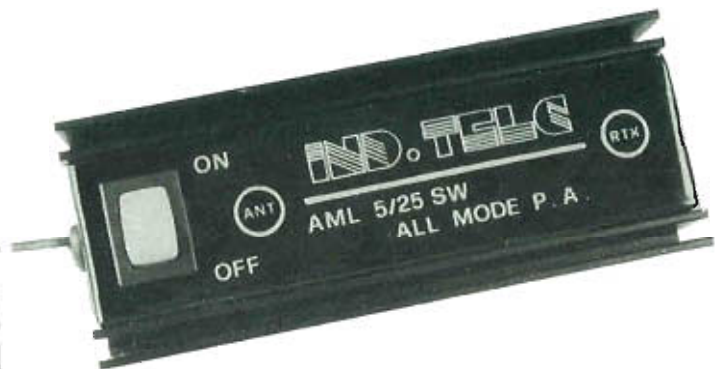
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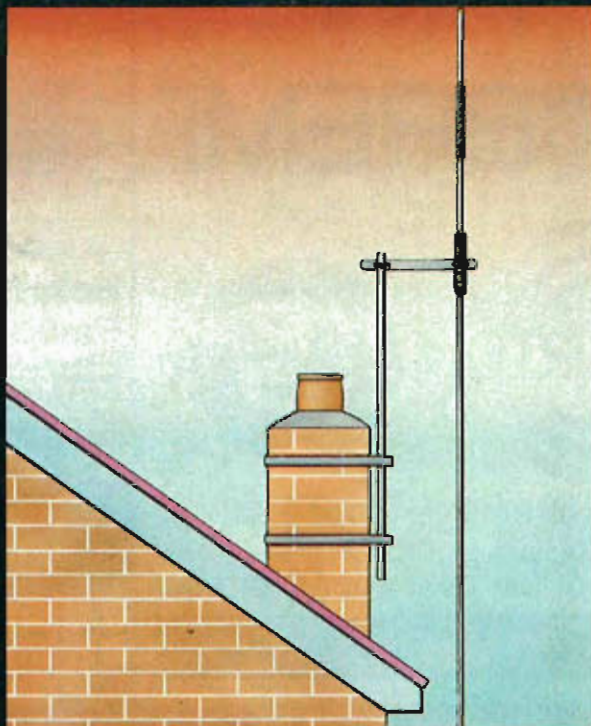
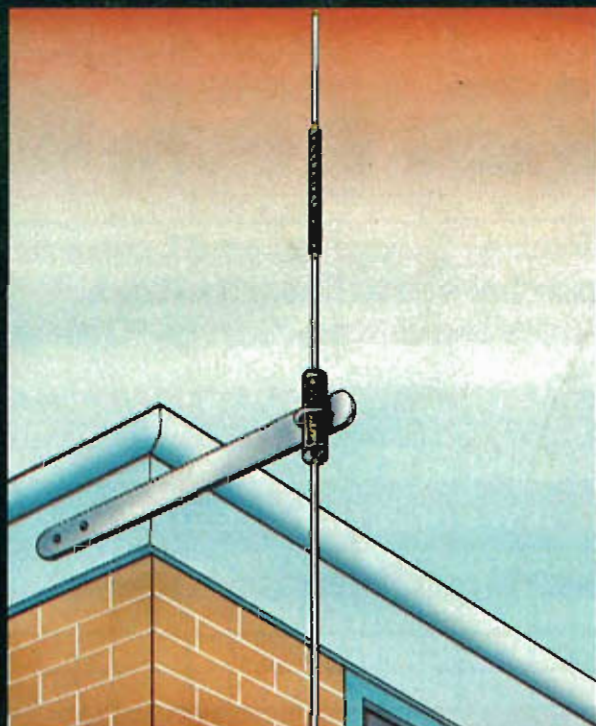
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